

California High-Speed Rail Authority

Bakersfield to Palmdale

Project Section

Draft Project Environmental Impact Report/Environmental Impact Statement

Appendix 6-B: PEPD Draft Capital Cost
Estimate Report

January 2020



The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

APPENDIX 6-B PEPD DRAFT CAPITAL COST ESTIMATE REPORT

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California High Speed Rail Authority

Bakersfield to Palmdale *Project Section*

PEPD Draft Capital Cost Estimate Report

January 2019

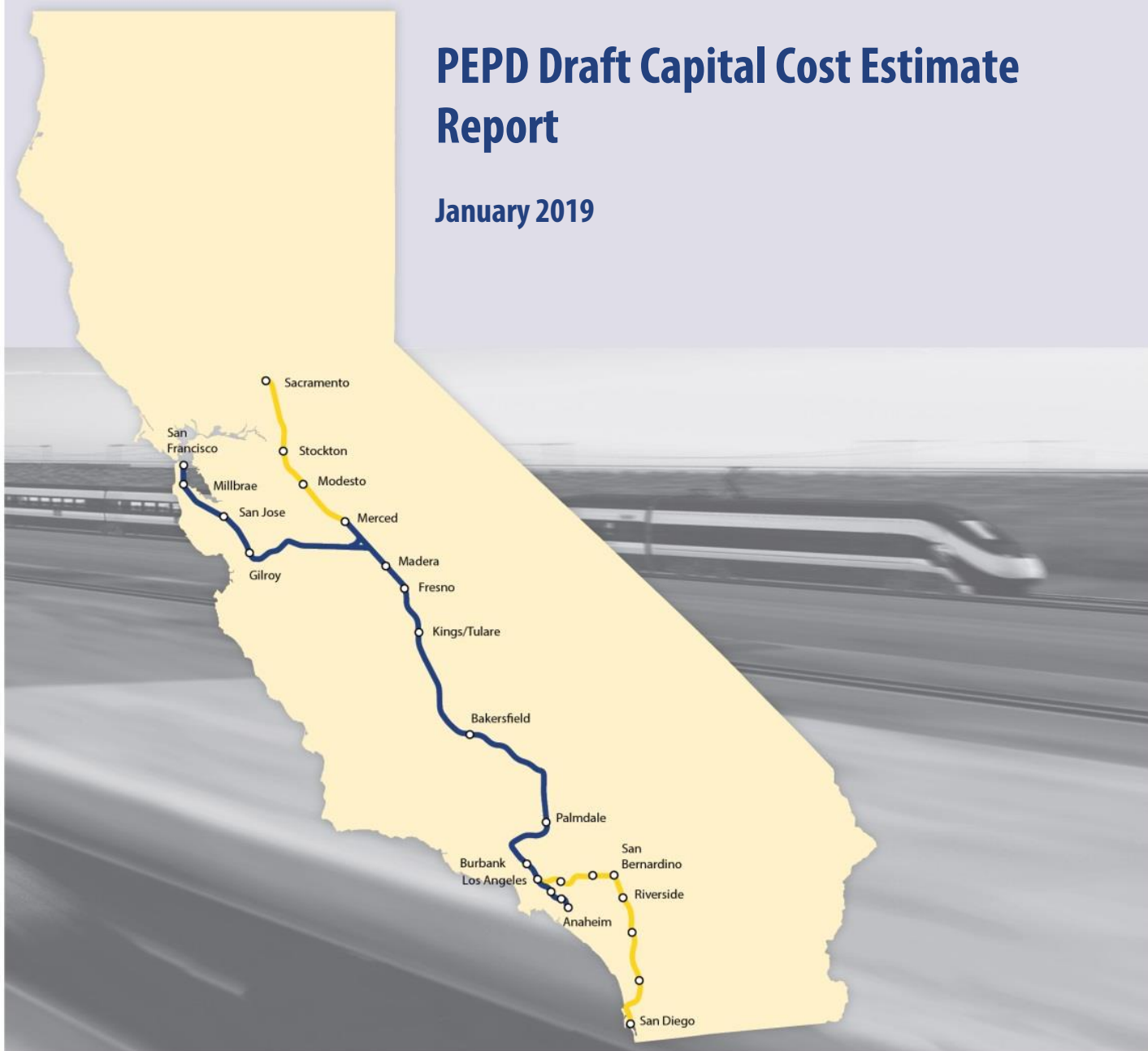


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1.0 INTRODUCTION

1.1 Purpose and Scope

The purpose of this report is to present the Capital Cost Estimating Methodology (CCEM) in the preparation of reasonably reliable and accurate capital cost estimates for the PEPD Design level.

This document describes the methodology for preparation of estimated capital cost for the California High-Speed Rail Project (CHSRP) Bakersfield to Palmdale PEPD document. In addition, it presents the summary of Capital Cost Estimates along with detailed FRA Standard Cost Categories (SCC) and sub-categories or cost elements. Refinement of these cost estimates will be on-going during the advancement of engineering during subsequent project development phases.

The primary objectives of this report are:

- Identify the methods and processes used to develop the capital cost estimate during PEPD Design Level Phase;
- Identify the source documents and/or methodology used for pricing work;
- Specify how estimating assumptions have been documented during the course of the estimate development;
- Describe Unit Price Elements;
- Define the approach and methodology with respect to FRA Standard Cost Categories (SCC);
- Present estimates have been developed for each complete alignment alternative for the Bakersfield to Palmdale Project Section.

The estimating approach has been done in a manner that (1) allows consistent application to each alternative to facilitate comparisons; (2) provides the proper foundation for more detailed estimates as selected alternative(s) are further evaluated; and (3) provides the basis for subsequent construction package procurement level estimates with additional guidelines for a more detailed capital cost estimate.

Considering CHSRP's size, complexity, phased design, and number of participants, it is important that the CCEM is flexible enough to be applied at each point in the project development process to appropriately support the tracking, monitoring and control of cost changes through each of the program's design and implementation phases. This document addresses only the capital cost estimating requirements for the PEPD Design level. Additional guidelines have been developed for the preparation of capital cost estimates for subsequent phases of the CHSRP.

1.2 Statement of Technical Issue

The document is intended to address the preparation of a program cost estimate, including construction, acquisition of right-of-way, vehicles, and professional services during execution of the project.

The CCEM is intended to provide guidelines for accurately and consistently estimating the costs of capital infrastructure and systems for the PEPD Design level. It also provides a framework for defining the scope and technical basis for the estimates, the roles and responsibilities for specific estimating tasks among the project participations, and the structure, organization, and format for reporting capital costs for all geographic sections of CHSRP.

1.3 General Information

1.3.1 Definition of Terms

Technical terms, acronyms, or other cost estimating terminology specifically used for capital cost estimating purposes, unless otherwise indicated, will follow the standard definition of terms published by the Association for the Advancement of Cost Engineering (AACE) International in their Recommend Practice No. 10S-90 – Cost Engineering Terminology.

The following acronyms used in this document have specific connotations with regard to California High Speed Rail system.

Acronyms

AACE	Association for the Advancement of Cost Engineering
CCEM	Capital Cost Estimating Methodology
Authority	California High-Speed Rail Authority
CHSRP	California High-Speed Rail Project
ENR	Engineering News Record
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HST	High Speed Train
LCCA	Life Cycle Cost Analysis
O&M	Operating and Maintenance
PMT	Program Management Team
RC	Regional Consultant(s)
SCC	Standard Cost Categories
TM	Technical Memorandum
WBS	Work Breakdown Structure

1.3.2 Units

The California High-Speed Rail Project is based on U.S. Customary Units consistent with guidelines prepared by the California Department of Transportation and defined by the National Institute of Standards and Technology (NIST). U.S. Customary Units are officially used in the United States and are also known in the US as “English” or “Imperial” units. In order to avoid confusion, all formal references to units of measure shall be made in terms of U.S. Customary Units.

Guidance for units of measure terminology, values, and conversions can be found in the Caltrans Metric Program Transitional Plan, Appendice B U.S. Customary General Primer (<http://www.dot.ca.gov/hq/oppd/metric/TransitionPlan/Appendice-B-US-Customary-General-Primer.pdf>). Caltrans Metric Program Transitional Plan, Appendice B can also be found as an attachment to the CHSRP Mapping and Survey Technical Memorandum.

2.0 CAPITAL COST ESTIMATING METHODOLOGY

Estimating methodologies are not static and must be flexible enough to adjust to the needs of the project's stage in the development process. The development process is described by the overall level of engineering design associated with the major development stages defined for the CHSRP:

Development Stage	Engineering Design Completion			
Programmatic EIR/S	0% - 5%			
Project EIR/S	5% - 15%			
PEPD Design Level	15% - 30%			
Procurement Level	30% - 90%			
Design-Build	90% - 100%			
	0	15%	30%	90% 100%

Each development stage is represented by a range of engineering design completion and influenced by ongoing updates to the ridership demand forecast and associated revisions to estimated system capacity, service design and operating plans. Because of this variability, the appropriate estimating methods or procedures at a given milestone will be based on the actual levels of project engineering and scope definition present at that time. Because the program will be designed in multiple segments, the level of engineering design completed for major high-speed rail system elements will be at different levels at any point in time. The goal of using established estimating methodologies is to assure that project estimates are prepared in a consistent and uniform manner, organized and standardized in methods, and formatted in order to facilitate estimate review and reporting.

2.1 Estimating Format

A consistent format is developed for the reporting, estimating, and managing of the project's capital costs. This document recommends using standard cost categories (SCC) established by the Federal Railroad Administration (FRA) as part of American Recovery and Reinvestment Act (ARRA) grant application requirements. Preparation of capital costs in SCC format is adopted throughout the PEPD Design phase.

2.2 Estimating Software

Commercially available database software systems are used depending on the type of work elements. For example, Timberline is used for surface heavy construction work elements and HCSS is used for underground work elements. However, in order to provide uniformity between numerous work elements and sections of the corridor and to provide consistent platform for reporting and analysis requirements, the cost data are exported to Microsoft Excel. This will better enable the review, edit consolidation and reporting of estimate components over the course and provide more flexibility to make adjustments.

2.3 FRA Standard Cost Category (SCC)

The methodology used for generating capital cost estimates has been consistent with FRA guidelines for estimating capital costs. The heart of the FRA guidance is the SCC, which enables FRA-funded projects to develop budget baselines that summarize to the SCC. This cost structure is used for capital cost detail and summary sheets and is described below. Where the level of design does not support quantity measurements, parametric estimating techniques were utilized.

2.3.1 Work Breakdown Structure (WBS)

This involves the development of the Work Breakdown Structure (WBS) that is applied to cost estimating and cost reporting. The WBS for estimating includes a coding system that is used for estimating elements. The WBS for reporting includes the development of a coding system that allows the cost estimates to be sorted and presented by categories and subcategories as prescribed by the FRA.

The WBS for capital cost estimates for the PEPD Design level is based upon the FRA Standard Cost Categories is presented in Appendix A.

The primary WBS for quantities and unit prices are Unit Price Element's (UPE's). UPE's were originally developed as an estimating tool to assist in the development of conceptual level cost estimates and provide a method for translating typical construction items into a unit-based unit of measurement. The scope and definition of UPE's are developed by the Regional Consultant based on the unique design present in their project section.

2.3.2 Estimated Unit Costs

The development of construction unit costs for each of the construction activities that is identified and quantified from the design documents. The development of individual or composite estimated unit costs is accomplished through the use of historical bid data and by unit cost analysis, as appropriate, using labor, equipment and material rates. Unit costs are expressed in current year dollars and are adjusted to reflect any regional variations.

These methods are used either individually or in combination. For the PEPD Design level, when limited engineering details are available, the historical bid price method is typically used.

2.3.2.1 Historical Bid Price Method

Historical bid prices are typically used to develop costs for common construction elements. When using this method, the time of bid and conditions of the historical project used for pricing is considered and factors applied as needed:

- Adjust bid prices where the bid date is older than 12 months from the current date by using an appropriate escalation factor
- Adjust bid prices to reflect conditions of the project, such as type of terrain, geographical location, soil, traffic and other related factors. For location factor adjustments, the City Cost Index as published by RS Means is used.

Sources for historical bid prices that are used may come from local, regional, statewide and national levels, as well as from international high-speed rail projects with unique high-speed elements. Historical unit prices that are used for the CHSRP will be verified for appropriateness and documented as to their source as well as any adjustments for site, escalation or location factors.

2.3.2.2 Unit Cost Analysis Method

The estimated unit cost analysis method is typically used to develop costs for complex construction elements including but not limited to viaducts, retained earth systems, tunneling and underground structures. This method allows for unit costs to be developed based on current local construction and market conditions, such as changes which might affect productivity or the cost of labor or materials. The following steps are required in order to develop a unit price using this method:

- Analyze the proposed construction conditions
- Estimate production rates where applicable
- Obtain materials prices using local available sources
- Determine labor and equipment rates where applicable
- Calculate direct unit price using the above factors

The following sources are used to obtain basic cost data that is input into the database estimating program in order to develop any needed construction unit prices:

- Labor Rates – RS Means national wages adjusted by City Cost Index factor, Federal Davis-Bacon Wage Determination and/or California Department of Industrial Relations Prevailing Wage Determinations.
- Equipment Rates – RS Means and/or Corp of Engineers Construction Equipment Ownership and Operating Expense Schedule, Region VII.
- Material Prices - Material and supply prices for locally available material are obtained from local supplier quotes, if possible. Secondary sources of material cost data may be taken from RS Means, Engineering News-Report (ENR) or other published resource.

A list of prototypical work elements and the units of measure are estimated for PEPD Design level with corresponding estimated unit cost. Appendix A presents the list of variable cost elements within each FRA SCC 10's to 60's series. When required, additional project-specific work elements reflecting unique site conditions and configurations are identified and their estimated costs are developed in addition to prototypical unit costs. Examples of these project-specific unit costs include very high and/or long span iconic bridge structures, grade separations, specific roadway improvements, unique utility relocations, staged construction to accommodate existing rail or vehicular traffic, or restrictive site access conditions in urban areas.

2.3.3 Quantity Takeoffs

The task of quantity takeoffs involves preparation of estimated quantities either by direct measurement and calculation of construction elements that are shown in design drawings, sketches, electronically calculated from CADD files or established as an allowance quantity based on professional experience and judgment. Quantity take-offs have been prepared by the Regional Consultant and are presented in the Bakersfield to Palmdale PEPD quantities document "BP_TYLI_DrPEPD_BOQ_Report_2016-09-07 "

2.3.4 Allocated and Unallocated Contingencies

Contingency, in the statistical sense, is the estimated percentage by which a calculated value may differ from its true or final value and is typically included in an estimate as an allowance for the level of engineering design completion or to address imperfections in the estimating methods used at the various project development stages. Contingency is typically added to a particular item or group of items by the use of percentage multipliers. Contingency is generally greatest for the early stage of project development and decreases with advancement in the level of engineering design and pricing detail. During the preliminary design of the high-speed rail project, the limited level of design information that is available requires the use of contingency allowances that are allocated against specific construction or procurement cost categories. The percentage selected for a given cost category are generally based on level of definition of the scope of work involved and substantiated by professional judgment and experience relative to level of uncertainty and historical cost variability typically seen for work within a particular cost category. For the purposes of this estimating program, contingency is assigned into two major categories – allocated and unallocated.

Allocated contingency is added to each cost category based on an assessment of the quality of design information; means and methods; and site accessibility available for individual items of work. This contingency typically falls in a range of 10% to 25%. The exact percentage selected for each cost category is based on professional judgment and experience related to the cost variability typically seen for items of work within a particular cost category. The contingency is generally higher for underground elements reflecting the additional exposure for unknowns as well as the construction complexity. It is also higher for stations, terminals, storage yard facilities and utilities since their design progress is still in the conceptual level and identification of all the utilities are not determined. The percentages shown in Table 2-1 are the values that are normally used; however, slightly higher or lower values are used if a project-specific condition warrant.

Unallocated contingency is typically included to address uncertainties that are more global in nature like schedule delays, changes in contracting environment, or other such issues that are not associated with individual construction activities. Unallocated contingencies will be estimated at 5 percent of the total construction costs.

Table 2-1 Allocated Contingency Percentages by Cost Category

Cost Category No.	Description	Allocated Contingency Percentage
10 Track Structures and Track		
10.01	Track structure: Viaduct	15%
10.02	Track structure: Major/Movable bridges	15%
10.03	Track structure: Under grade bridges	15%
10.04	Track structure: Culverts and drainage structures	15%
10.05	Track structure: Cut and Fill (> 4' height/depth)	20%
10.06	Track structure: At-grade (grading and subgrade stabilization)	10%
10.07	Track structure: Tunnel	25%
10.08	Track structure: Retaining walls and systems	15%
10.09	Track new construction: Conventional ballasted	15%
10.10	Track new construction: Non-ballasted	15%
10.11	Track rehabilitation: Ballast and surfacing	15%
10.12	Track rehabilitation: Ditching and drainage	15%
10.13	Track rehabilitation: Component replacement (rail, ties, etc)	15%
10.14	Track: Special track work (switches, turnouts, insulated joints)	15%
10.15	Track: Major interlocking	15%
10.16	Track: Switch heaters (with power and control)	15%
10.17	Track: Vibration and noise dampening	15%
10.18	Other linear structures including fencing, sound walls	15%
20 Stations, Terminals, Intermodal		25%
30 Support Facilities: Yards, Shops, Admin. Bldgs		25%
40 Sitework, Right of Way, Land, Existing Improvements		
40.01	Demolition, clearing, site preparation	25%
40.02	Site utilities, utility relocation	25%
40.03	Hazardous material, contaminated soil removal/mitigation, ground water treatments	15%
40.04	Environmental mitigation: wetlands, historic/archeology, parks	20%
40.05	Site structures including retaining walls, sound walls	25%
40.06	Temporary facilities and other indirect costs during construction	10%

40.07	Purchase or lease of real estate	20%
40.08	Highway/pedestrian overpass/grade separations	20%
40.09	Relocation of existing households and businesses	0%
50 Communications & Signaling		15%
60 Electric Traction		15%
70 Vehicles		0%
80 Professional Services		0%

2.3.5 Environmental Mitigation

An allowance to account for the cost of environmental mitigation that relates to hydrology and water resources; wetland impact; hazardous material and waste; historic/archeology; safety and security; noise, vibration and air quality during construction and permanent aesthetic is included in the total capital cost. This allowance is based on 3% of the total cost of track structures, track work, station buildings, roadway modification and highway grade separation.

2.3.6 Right-of-Way Cost Estimate

This involves preparing estimated quantities of impacted properties, either permanent takes or temporary easements, which result from construction, operation, and maintenance of proposed high-speed rail alignment alternatives. In order to arrive at the estimated cost, professional experience and judgment in the area of property valuation, business damages, and legal and administrative issues as they relate to the estimation of right-of-way costs have been applied. The values used in the cost estimate were developed by the Regional consultant to reflect the design changes "BP_TYLI_DrPEPD_ROWRequirementsRpt_WBS_4.9.6_2016-09-07."

2.3.7 Vehicle Estimate

The costs for the Bakersfield to Palmdale section do not include acquisition of high-speed train vehicles. Acquisition of trainsets is considered to be a system-wide procurement and is not associated with construction of individual sections of the CHSRP System. Consistent with the Revised 2016 Business Plan, the cost of vehicles was determined by using publicly available data regarding recent sales of comparable equipment to other CHSRP projects around the world and by informal consultations with the manufacturers.

2.3.8 Program Implementation/Professional Services Add-ons

Program Implementation costs are included to represent the costs of engineering, project and construction management, contract administration, permits and fees, training/start-up/testing and any force account work. These add-on costs are calculated as a percentage of construction costs only (applied individually and not cumulatively and excluding vehicle procurement and right-of-way costs) and presented under Professional Services cost category in the estimate. The management and administration cost associated with right-of-way and rolling stock are included with the respective items.

Preliminary Engineering	2.0%
Program Management	3.0%
Final Design	6.0%
Construction Management	4.0%
Agency Costs	0.5%
Total	15.5%

In addition, an allowance for system start-up and pre-revenue testing is added to the Professional Services cost category in the amount of 6% of the Train Controls, Communications and Electrification construction costs.

2.3.9 Escalation

Estimates are prepared in Base Year dollars with the Base Year defined as the current calendar year. Unit costs are updated annually or as required. For cost estimates with a base year that is older than the current calendar by one or more years, actual historical construction cost index values are used to calculate the escalation rate to be applied to bring a cost from the period in question to the present.

2.3.10 Finance Charge

Finance charges are not included in the capital cost estimates.

2.4 Estimate Validation

Following preparation of the PEPD Design level estimates, cost estimates are subjected to a validation process including reviews by subject matter experts in the areas of engineering and construction.

2.5 Estimate Reconciliation

Reconciliations are made between current cost estimates and cost estimates that were developed in previous design phases. The goal of reconciliation is to identify and document significant changes that may have occurred since the preparation of the prior capital cost estimate. Significant changes are identified in the reconciliation under one of three categories that best reflects the cause for the change: Quantity, Unit Price, or Scope, as applicable.

2.6 Estimate Assumption and Exclusions

- All costs are in 2016\$ Q4.
- Allocated Contingency is included in the costs.
- ROW costs are included for Alternatives (1,2,3, and 5). It is assumed there is no add to ROW costs for the CCNM Design Option.
- Clear Right of Way has been obtained and out of sequence work not anticipated.
- Utility Company Relocation Agreements have been obtained and out of sequence work not anticipated.

- Cesar Chavez National Monument (CCNM) Design Option: This option is a net add to each alternative as it occurs at a section common to all alternatives (1,2,3, and 5). Costs are included in the total alternative cost.

APPENDIX A WORK BREAKDOWN STRUCTURE (WBS)

WORK BREAKDOWN STRUCTURE (FRA STANDARD COST CATEGORIES)

10 TRACK STRUCTURES & TRACK	
10.01	Track structure: Viaduct
10.02	Track structure: Major/Movable bridge
10.03	Track structure: Under grade Bridges
10.04	Track structure: Culverts and drainage structures
10.05	Track structure: Cut and Fill (> 4' height/depth)
10.06	Track structure: At-grade (grading and subgrade stabilization)
10.07	Track structure: Tunnel
10.08	Track structure: Retaining walls and systems
10.09	Track new construction: Conventional ballasted
10.10	Track new construction: Non-ballasted
10.11	Track rehabilitation: Ballast and surfacing
10.12	Track rehabilitation: Ditching and drainage
10.13	Track rehabilitation: Component replacement (rail, ties, etc)
10.14	Track: Special track work (switches, turnouts, insulated joints)
10.15	Track: Major interlockings
10.16	Track: Switch heaters (with power and control)
10.17	Track: Vibration and noise dampening
10.18	Other linear structures including fencing, sound walls
20 STATIONS, TERMINALS, INTERMODAL	
20.01	Station buildings: Intercity passenger rail only
20.02	Station buildings: Joint use (commuter rail, intercity bus)
20.03	Platforms
20.04	Elevators, escalators
20.05	Joint commercial development
20.06	Pedestrian / bike access and accommodation, landscaping, parking lots
20.07	Automobile, bus, van accessways including roads
20.08	Fare collection systems and equipment
20.09	Station security

30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS

30.01	Administration building: Office, sales, storage, revenue counting
30.02	Light maintenance facility
30.03	Heavy maintenance facility
30.04	Storage or maintenance-of-way building/bases
30.05	Yard and yard track

40 SITEWORK, RIGHT OF WAY, LAND, EXISTING IMPROVEMENTS

40.01	Demolition, clearing, site preparation
40.02	Site utilities, utility relocation
40.03	Hazardous material, contaminated soil removal/mitigation, ground water treatments
40.04	Environmental mitigation: wetlands, historic/archeology, parks
40.05	Site structures including retaining walls, sound walls
40.06	Temporary facilities and other indirect costs during construction
40.07	Purchase or lease of real estate
40.08	Highway/pedestrian overpass/grade separations
40.09	Relocation of existing households and businesses

50 COMMUNICATIONS & SIGNALING

50.01	Wayside signaling equipment
50.02	Signal power access and distribution
50.03	On-board signaling equipment
50.04	Traffic control and dispatching systems
50.05	Communications
50.06	Grade crossing protection
50.07	Hazard detectors: dragging equipment high water, slide, etc.
50.08	Station train approach warning system

60 ELECTRIC TRACTION

60.01	Traction power transmission: High voltage
60.02	Traction power supply: Substations
60.03	Traction power distribution: Catenary and third rail
60.04	Traction power control

70 VEHICLES

70.00	Vehicle acquisition: Electric locomotive
70.01	Vehicle acquisition: Non-electric locomotive

70.02	Vehicle acquisition: Electric multiple unit
70.03	Vehicle acquisition: Diesel multiple unit
70.04	Vehicle acquisition: Loco-hauled passenger cars w/ ticketed space
70.05	Vehicle acquisition: Loco-hauled passenger cars w/o ticketed space
70.06	Vehicle acquisition: Maintenance of way vehicles
70.07	Vehicle acquisition: Non-railroad support vehicles
70.08	Vehicle refurbishment: Electric locomotive
70.09	Vehicle refurbishment: Non-electric locomotive
70.10	Vehicle refurbishment: Electric multiple unit
70.11	Vehicle refurbishment: Diesel multiple unit
70.12	Vehicle refurbished: Passenger loco-hauled car w/ ticketed space
70.13	Vehicle refurbished: Non-passenger loco-hauled car w/o ticketed space
70.14	Vehicle refurbishment: Maintenance of way vehicles
70.15	Spare parts

80 PROFESSIONAL SERVICES (applies to Cats. 10-60)

80.01	Service Development Plan/Service Environmental
80.02	Preliminary Engineering/Project Environmental
80.03	Final design
80.04	Project management for design and construction
80.05	Construction administration & management
80.06	Professional liability and other non-construction insurance
80.07	Legal; Permits; Review Fees by other agencies, cities, etc.
80.08	Surveys, testing, investigation
80.09	Engineering inspection
80.10	Start up

90 UNALLOCATED CONTINGENCY

100 FINANCE CHARGES

APPENDIX B TYPICAL UNIT COST ELEMENTS

No.	DESCRIPTION	UNIT
10.01	Track structure: Viaduct	
10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht)	Route Mile
10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht)	Route Mile
10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	Route Mile
10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht)	Route Mile
10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht)	Route Mile
10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht)	Route Mile
10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	Route Mile
10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht)	Route Mile
10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	Route Mile
10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht)	Route Mile
10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	Route Mile
10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht)	Route Mile
10.01.242	Elevated Structure - 4 Track (20' Avg. Pier Ht)	Route Mile
10.01.243	Elevated Structure - 4 Track (30' Avg. Pier Ht)	Route Mile
10.01.244	Elevated Structure - 4 Track (40' Avg. Pier Ht)	Route Mile
10.01.245	Elevated Structure - 4 Track (50' Avg. Pier Ht)	Route Mile
10.01.246	Elevated Structure - 4 Track (60' Avg. Pier Ht)	Route Mile
10.01.247	Elevated Structure - 4 Track (70' Avg. Pier Ht)	Route Mile
10.01.322	Elevated Structure (LS) - 1 Track (20' Avg. Pier Ht)	Route Mile
10.01.323	Elevated Structure (LS) - 1 Track (30' Avg. Pier Ht)	Route Mile
10.01.324	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht)	Route Mile
10.01.325	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht)	Route Mile
10.01.326	Elevated Structure (LS) - 1 Track (60' Avg. Pier Ht)	Route Mile
10.01.327	Elevated Structure (LS) - 1 Track (70' Avg. Pier Ht)	Route Mile
10.01.422	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht)	Route Mile
10.01.423	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht)	Route Mile
10.01.424	Elevated Structure (LS) - 2 Track (40' Avg. Pier Ht)	Route Mile
10.01.425	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht)	Route Mile
10.01.426	Elevated Structure (LS) - 2 Track (60' Avg. Pier Ht)	Route Mile
10.01.427	Elevated Structure (LS) - 2 Track (70' Avg. Pier Ht)	Route Mile
10.01.431	Elevated Structure (LS-Tall) - 2-Single Tracks (110' Avg. Pier Ht)	Route Mile

No.	DESCRIPTION	UNIT
10.01.432	Elevated Structure (LS-Tall) - 2-Single Tracks (120' Avg. Pier Ht)	Route Mile
10.01.512	Elevated Structure Straddle over 2 RR - 1 Track (20' Avg. Pier Ht)	Route Mile
10.01.513	Elevated Structure Straddle over 2 RR - 1 Track (30' Avg. Pier Ht)	Route Mile
10.01.514	Elevated Structure Straddle over 2 RR - 1 Track (40' Avg. Pier Ht)	Route Mile
10.01.515	Elevated Structure Straddle over 2 RR - 1 Track (50' Avg. Pier Ht)	Route Mile
10.01.522	Elevated Structure Straddle over 2 RR - 2 Track (20' Avg. Pier Ht)	Route Mile
10.01.523	Elevated Structure Straddle over 2 RR - 2 Track (30' Avg. Pier Ht)	Route Mile
10.01.524	Elevated Structure Straddle over 2 RR - 2 Track (40' Avg. Pier Ht)	Route Mile
10.01.525	Elevated Structure Straddle over 2 RR - 2 Track (50' Avg. Pier Ht)	Route Mile
10.01.612	Elevated Structure Straddle over 4 RR - 1 Track (20' Avg. Pier Ht)	Route Mile
10.01.613	Elevated Structure Straddle over 4 RR - 1 Track (30' Avg. Pier Ht)	Route Mile
10.01.614	Elevated Structure Straddle over 4 RR - 1 Track (40' Avg. Pier Ht)	Route Mile
10.01.615	Elevated Structure Straddle over 4 RR - 1 Track (50' Avg. Pier Ht)	Route Mile
10.01.622	Elevated Structure Straddle over 4 RR - 2 Track (20' Avg. Pier Ht)	Route Mile
10.01.623	Elevated Structure Straddle over 4 RR - 2 Track (30' Avg. Pier Ht)	Route Mile
10.01.624	Elevated Structure Straddle over 4 RR - 2 Track (40' Avg. Pier Ht)	Route Mile
10.01.625	Elevated Structure Straddle over 4 RR - 2 Track (50' Avg. Pier Ht)	Route Mile
10.01.944	Elevated Structure - 2 Track w/ 2 Single Trenches	Route Mile
10.02	Track structure: Major/Movable bridge	
10.02.013	Bridge Structure - 3 span with 1 Track	Route Mile
10.02.023	Bridge Structure - 3 span with 2 Track	Route Mile
10.02.043	Bridge Structure - 3 span with 4 Track	Route Mile
10.05	Track structure: Cut and Fill (> 4' height/depth)	
10.05.111	At-Grade Track-bed in Cut - 1 Track (5' Avg. Exc Depth)	Route Mile

No.	DESCRIPTION	UNIT
10.05.112	At-Grade Track-bed in Cut - 1 Track (10' Avg. Exc Depth)	Route Mile
10.05.113	At-Grade Track-bed in Cut - 1 Track (15' Avg. Exc Depth)	Route Mile
10.05.114	At-Grade Track-bed in Cut - 1 Track (20' Avg. Exc Depth)	Route Mile
10.05.121	At-Grade Track-bed in Cut - 2 Track (5' Avg. Exc Depth)	Route Mile
10.05.122	At-Grade Track-bed in Cut - 2 Track (10' Avg. Exc Depth)	Route Mile
10.05.123	At-Grade Track-bed in Cut - 2 Track (15' Avg. Exc Depth)	Route Mile
10.05.124	At-Grade Track-bed in Cut - 2 Track (20' Avg. Exc Depth)	Route Mile
10.05.126	At-Grade Track-bed in Cut - 2 Track (40' Avg. Exc Depth)	Route Mile
10.05.128	At-Grade Track-bed in Cut - 2 Track (60' Avg. Exc Depth)	Route Mile
10.05.130	At-Grade Track-bed in Cut - 2 Track (80' Avg. Exc Depth)	Route Mile
10.05.132	At-Grade Track-bed in Cut - 2 Track (100' Avg. Exc Depth)	Route Mile
10.05.211	At-Grade Track-bed in Fill - 1 Track (5' Avg. Fill Ht)	Route Mile
10.05.212	At-Grade Track-bed in Fill - 1 Track (10' Avg. Fill Ht)	Route Mile
10.05.213	At-Grade Track-bed in Fill - 1 Track (15' Avg. Fill Ht)	Route Mile
10.05.214	At-Grade Track-bed in Fill - 1 Track (20' Avg. Fill Ht)	Route Mile
10.05.221	At-Grade Track-bed in Fill - 2 Track (5' Avg. Fill Ht)	Route Mile
10.05.222	At-Grade Track-bed in Fill - 2 Track (10' Avg. Fill Ht)	Route Mile
10.05.223	At-Grade Track-bed in Fill - 2 Track (15' Avg. Fill Ht)	Route Mile
10.05.224	At-Grade Track-bed in Fill - 2 Track (20' Avg. Fill Ht)	Route Mile
10.05.226	At-Grade Track-bed in Fill - 2 Track (40' Avg. Fill Ht)	Route Mile
10.05.228	At-Grade Track-bed in Fill - 2 Track (60' Avg. Fill Ht)	Route Mile
10.05.230	At-Grade Track-bed in Fill - 2 Track (80' Avg. Fill Ht)	Route Mile
10.05.232	At-Grade Track-bed in Fill - 2 Track (100' Avg. Fill Ht)	Route Mile
10.06	Track structure: At-grade (grading and subgrade stabilization)	
10.06.210	At-Grade Track-bed with Closed Drainage - 1 Track	Route Mile
10.06.220	At-Grade Track-bed with Closed Drainage - 2 Track	Route Mile
10.06.230	At-Grade Track-bed with Closed Drainage - 3 Track	Route Mile
10.06.240	At-Grade Track-bed with Closed Drainage - 4 Track	Route Mile
10.07	Track structure: Tunnel	
10.07.101	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock	Route Mile
10.07.102	TBM Single Track Twin Tunnel 30ft ID Slurry TBM in hard rock	Route Mile
10.07.103	TBM Single Track Twin Tunnel 30ft ID in soft ground	Route Mile
10.07.104	TBM Double Track Tunnel 50ft ID in soft ground	Route Mile

No.	DESCRIPTION	UNIT
10.07.105	TBM Double Track Tunnel 40ft ID in soft ground	Route Mile
10.07.201	D&B Single Track Twin Tunnel 30ft ID in hard rock	Route Mile
10.07.202	D&B Single Track Twin Tunnel 30ft ID in rock	Route Mile
10.07.203	D&B Double Track Tunnel 40ft ID in hard rock	Route Mile
10.07.204	D&B Double Track Tunnel 40ft ID in rock	Route Mile
10.07.205	D&B Double Track Tunnel 50ft ID in hard rock	Route Mile
10.07.206	D&B Double Track Tunnel 50ft ID in rock	Route Mile
10.07.301	SEM Single Track Twin Tunnel 30ft ID in soft ground	Route Mile
10.07.302	SEM Single Track Twin Tunnel 30ft ID in soft ground	Route Mile
10.07.303	SEM Double Track Tunnel 40ft ID in soft ground	Route Mile
10.07.304	SEM Double Track Tunnel 40ft ID in soft ground	Route Mile
10.07.305	SEM Double Track Tunnel 50ft ID in soft ground	Route Mile
10.07.306	SEM Double Track Tunnel 50ft ID in soft ground	Route Mile
10.07.401	RH Single Track Twin Tunnel 30ft ID in soft rock	Route Mile
10.07.402	RH Single Track Twin Tunnel 30ft ID in soft rock	Route Mile
10.07.403	RH Double Track Tunnel 40ft ID in soft rock	Route Mile
10.07.404	RH Double Track Tunnel 40ft ID in soft rock	Route Mile
10.07.405	RH Double Track Tunnel 50ft ID in soft rock	Route Mile
10.07.406	RH Double Track Tunnel 50ft ID in soft rock	Route Mile
10.07.207	D&B Cross Passage conservative cost in rock	Linear Feet
10.07.407	RH Cross Passage conservative cost in soft rock	Linear Feet
10.07.501	Cross Passage in Soft Ground	Linear Feet
10.07.502	Cross Passage in Soft Ground, including jet grout	Linear Feet
10.07.114	Cut & Cover Box - 1 Track/ 1 Box (40' Avg. Exc Depth)	Route Mile
10.07.115	Cut & Cover Box - 1 Track/ 1 Box (50' Avg. Exc Depth)	Route Mile
10.07.116	Cut & Cover Box - 1 Track/ 1 Box (60' Avg. Exc Depth)	Route Mile
10.07.214	Cut & Cover Box - 2 Track / 1 Box (40' Avg. Exc Depth)	Route Mile
10.07.215	Cut & Cover Box - 2 Track / 1 Box (50' Avg. Exc Depth)	Route Mile
10.07.216	Cut & Cover Box - 2 Track / 1 Box (60' Avg. Exc Depth)	Route Mile
10.07.224	Cut & Cover Box - 2 Track/ 2 Box (40' Avg. Exc Depth)	Route Mile
10.07.225	Cut & Cover Box - 2 Track / 2 Box (50' Avg. Exc Depth)	Route Mile
10.07.226	Cut & Cover Box - 2 Track / 2 Box (60' Avg. Exc Depth)	Route Mile
10.07.414	Cut & Cover Box - 4 Track / 1 Box (40' Avg. Exc Depth)	Route Mile
10.07.415	Cut & Cover Box - 4 Track / 1 Box (50' Avg. Exc Depth)	Route Mile
10.07.416	Cut & Cover Box - 4 Track / 1 Box (60' Avg. Exc Depth)	Route Mile

No.	DESCRIPTION	UNIT
10.07.801	Ventilation Shaft	VF
10.07.802	Mid-Line Ventilation Structure	LS
10.07.803	Tunnel Portal Structure	LS
10.07.805	Emergency Access Shaft	VF
10.07.850	Pumping Station	EA
10.07.901	Mechanical & Electrical Allowance for Underground (Single)	Route Mile
10.07.902	Mechanical & Electrical Allowance for Underground (Double)	Route Mile
10.07.920	Ventilation Equipment Allowance	EA
10.07.922	Double Deck - 2 Track Trench on Top of 2 Track C&C Box	Route Mile
10.07.950	Allowance for Construction Monitoring	Route Mile
10.08	Track structure: Retaining walls and systems	
10.08.211	Retained Cut, Trench - 1 Track (10' Avg. Exc Depth)	Route Mile
10.08.212	Retained Cut, Trench - 1 Track (20' Avg. Exc Depth)	Route Mile
10.08.213	Retained Cut, Trench - 1 Track (30' Avg. Exc Depth)	Route Mile
10.08.221	Retained Cut, Trench - 2 Track (10' Avg. Exc Depth)	Route Mile
10.08.222	Retained Cut, Trench - 2 Track (20' Avg. Exc Depth)	Route Mile
10.08.223	Retained Cut, Trench - 2 Track (30' Avg. Exc Depth)	Route Mile
10.08.241	Retained Cut, Trench - 4 Track (10' Avg. Exc Depth)	Route Mile
10.08.242	Retained Cut, Trench - 4 Track (20' Avg. Exc Depth)	Route Mile
10.08.243	Retained Cut, Trench - 4 Track (30' Avg. Exc Depth)	Route Mile
10.08.344	Retained Cut, Staged Trench - 4 Track (40' Avg. Exc Depth)	Route Mile
10.08.346	Retained Cut, Staged Trench - 4 Track (60' Avg. Exc Depth)	Route Mile
10.08.411	Retained Fill, Walls Both Sides - 1 Tracks (10' Avg. Wall Ht)	Route Mile
10.08.412	Retained Fill, Walls Both Sides - 1 Tracks (20' Avg. Wall Ht)	Route Mile
10.08.413	Retained Fill, Walls Both Sides - 1 Tracks (30' Avg. Wall Ht)	Route Mile
10.08.421	Retained Fill, Walls Both Sides - 2 Tracks (10' Avg. Wall Ht)	Route Mile
10.08.422	Retained Fill, Walls Both Sides - 2 Tracks (20' Avg. Wall Ht)	Route Mile
10.08.423	Retained Fill, Walls Both Sides - 2 Tracks (30' Avg. Wall Ht)	Route Mile
10.09	Track new construction: Conventional ballasted	
10.09.110	Ballasted Track - 1 Track	Route Mile
10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	Route Mile
10.09.120	Ballasted Track - 2 Track	Route Mile
10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	Route Mile
10.09.240	Ballasted Track - 2 Track (Station Track)	Route Mile
10.09.810	Ballasted Freight Track - 1 Track	Route Mile

No.	DESCRIPTION	UNIT
10.09.820	Ballasted Freight Track - 2 Track	Route Mile
10.09.910	Ballasted Track Relocation - 1 Track (Temporary)	Route Mile
10.09.920	Ballasted Track Relocation - 1 Track (Permanent)	Route Mile
10.10	Track new construction: Non-ballasted	
10.10.110	Direct Fixation Track - 1 Track	Route Mile
10.10.120	Direct Fixation Track - 2 Track	Route Mile
10.10.140	Direct Fixation Track - 4 Track	Route Mile
10.10.210	Independent Dual Block Track - 1 Track	Route Mile
10.10.220	Independent Dual Block Track - 2 Track	Route Mile
10.10.240	Independent Dual Block Track - 4 Track	Route Mile
10.14	Track: Special track work (switches, turnouts, insulated joints)	
10.14.100	Direct Fixation Turnout (60 MPH)	EA
10.14.105	Direct Fixation Turnout (80 MPH)	EA
10.14.110	Direct Fixation Turnout (110 MPH)	EA
10.14.115	Direct Fixation Turnout (150 MPH)	EA
10.14.130	Direct Fixation Crossover (60 MPH)	EA
10.14.135	Direct Fixation Crossover (80 MPH)	EA
10.14.140	Direct Fixation Crossover (110 MPH)	EA
10.14.145	Direct Fixation Crossover (150 MPH)	EA
10.14.200	Ballasted Turnout (60 MPH)	EA
10.14.205	Ballasted Turnout (80 MPH)	EA
10.14.210	Ballasted Turnout (110 MPH)	EA
10.14.215	Ballasted Turnout (150 MPH)	EA
10.14.300	Ballasted Crossover (60 MPH)	EA
10.14.305	Ballasted Crossover (80 MPH)	EA
10.14.310	Ballasted Crossover (110 MPH)	EA
10.14.315	Ballasted Crossover (150 MPH)	EA
10.14.400	Terminal - Bumping Post	
20.01	Station buildings: Intercity passenger rail only	
20.01.105	Millbrae Station	LS
20.01.105	Millbrae Station - Site Elements	LS
20.02.200	Redwood/Palo Alto Station	LS
20.02.201	Redwood/Palo Alto Station - Site Elements	LS
20.02.215	Gilroy Station	LS

No.	DESCRIPTION	UNIT
20.02.216	Gilroy Station - Site Elements	LS
20.02.225	San Jose Station	LS
20.02.226	San Jose Station-Site Elements	LS
20.01.100	Artic Station	LS
20.01.110	LA Union Station	LS
20.02.205	Norwalk Station	LS
20.02.206	Norwalk Station - Site Elements	LS
20.02.210	Tulare Station	LS
20.02.211	Tulare Station - Site Elements	LS
20.02.220	Burbank Station	LS
20.02.221	Burbank Station - Site Elements	LS
20.02.230	Merced Station	LS
20.02.231	Merced Station - Site Elements	LS
20.02.235	Fresno Station	LS
20.02.236	Fresno Station - Site Elements	LS
20.02.240	Bakersfield Station	LS
20.02.241	Bakersfield Station - Site Elements	LS
20.02.245	Palmdale Station	LS
20.02.246	Palmdale Station - Site Elements	LS
20.02.250	Sylmar Station	LS
20.02.251	Sylmar Station - Site Elements	LS
20.06	Pedestrian / bike access and accommodation, landscaping, parking lots	
20.06.120	Pedestrian Access (Cut & Cover)	LF
20.06.140	Pedestrian Plaza	SF
20.06.160	Pedestrian Access, Vertical Structure, 30' Height	EA
20.06.210	Parking - At Grade	STL
20.06.250	Parking - Structured (Above Grade)	STL
20.06.800	Landscaping Allowance	SF
20.06.810	Landscaping Allowance, Guideway	Route Mile
20.07	Automobile, bus, van accessways including roads	
20.07.010	Roadway Modification, New AC Paving	SF
20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	SF
20.07.710	Permanent Service/Emergency Access Road (20' Wide)	Route Mile

No.	DESCRIPTION	UNIT
20.07.715	Access Road Entrance Point	EA
20.07.800	Streetscaping Allowance	ESF
30.02	Light maintenance facility	
30.02.010	Light Maintenance Facility (LMF)	EA
30.03	Heavy maintenance facility	
30.03.010	Heavy Maintenance Facility (HMF)	EA
30.04	Storage or maintenance-of-way building/bases	
30.04.010	Maintenance of Way Facility (MOWF)	EA
30.05	Yard and yard track	
30.05.110	Ballasted Track - Yard Track	Route Mile
30.05.200	Ballasted Turnout, No. 15	EA
30.05.210	Ballasted Diamond Crossover, No. 15	EA
30.05.250	Heavy Duty Rubber Grade Crossing	TF
40.01	Demolition, clearing, site preparation	
40.01.010	Demolition Allowance, Bridge	SF
40.01.050	Demolition Allowance, Building (1 Story)	SF
40.01.060	Demolition Allowance, Building (2 Story)	SF
40.01.110	Demolition Allowance, Asphalt Pavement	SY
40.01.140	Demolition Allowance, Concrete Curb	LF
40.01.150	Demolition Allowance, Concrete Sidewalk	SY
40.01.810	Demolition Allowance, Remove Railroad Track	Route Mile
40.01.900	Miscellaneous Excavation & Support Items	LS
40.02	Site utilities, utility relocation	
40.02.001	Utility Relocation Allowance, Level 1	Route Mile
40.02.002	Utility Relocation Allowance, Level 2	Route Mile
40.02.003	Utility Relocation Allowance, Level 3	Route Mile
40.02.004	Utility Relocation Allowance, Level 4	Route Mile
40.02.005	Utility Relocation Allowance, Level 5	Route Mile
40.02.050	Site Utility Allowance	Route Mile
40.03	Hazardous material, contaminated soil removal/mitigation, ground water treatments	
40.03.100	Hazardous Material Removal Allowance, Light	Route Mile
40.03.105	Hazardous Material Removal Allowance, Medium	Route Mile
40.03.110	Hazardous Material Removal Allowance, Heavy	Route Mile
40.03.150	Removal of Contaminated Soil	CF

No.	DESCRIPTION	UNIT
40.04	Environmental mitigation: wetlands, historic/archeology, parks	
40.04.100	Environmental Mitigation Allowance, Light	Route Mile
40.04.105	Environmental Mitigation Allowance, Medium	Route Mile
40.04.110	Environmental Mitigation Allowance, Heavy	Route Mile
40.05	Site structures including retaining walls, sound walls	
40.05.012	Retaining Wall - 1 Wall (12' Avg. Height)	LF
40.05.111	Containment (Crash) Wall - 1 Wall (6' Avg. Height Above Rail)	LF
40.05.120	Blast Wall (At Stations) - 1 Wall (20' Avg. Height Above Platform)	LF
40.05.211	Sound Wall - 1 Wall (8' Avg. Height)	LF
40.05.310	Intrusion Protection Berm	LF
40.06	Temporary facilities and other indirect costs during construction	
40.07	Purchase or lease of real estate	
	Right-of-Way Required for Segment	
40.07.100	Dense Urban	Acre
40.07.101	Urban	Acre
40.07.102	Dense Suburban	Acre
40.07.103	Suburban	Acre
40.07.104	Farmland	Acre
40.07.105	Undeveloped	Acre
	Right-of-Way Required for Stations and Maintenance Facilities	
40.07.200	Dense Urban	Acre
40.07.201	Urban	Acre
40.07.202	Dense Suburban	Acre
40.07.203	Suburban	Acre
40.07.204	Undeveloped	Acre
40.08	Highway/pedestrian overpass/grade separations	
40.08.322	Roadway Overcrossing HSR - 2 lane retained fill roadway over 2 tracks	EA
40.08.324	Roadway Overcrossing HSR - 4 lane retained fill roadway over 2 tracks	EA
40.08.326	Roadway Overcrossing HSR - 6 lane retained fill roadway over 2 tracks	EA

No.	DESCRIPTION	UNIT
40.08.342	Roadway Overcrossing HSR - 2 lane retained fill roadway over 4 tracks	EA
40.08.344	Roadway Overcrossing HSR - 4 lane retained fill roadway over 4 tracks	EA
40.08.346	Roadway Overcrossing HSR - 6 lane retained fill roadway over 4 tracks	EA
40.08.422	Roadway Overcrossing HSR - 2 lane roadway on embankment over 2 tracks	EA
40.08.424	Roadway Overcrossing HSR - 4 lane roadway on embankment over 2 tracks	EA
40.08.426	Roadway Overcrossing HSR - 6 lane roadway on embankment over 2 tracks	EA
50.01	Wayside signaling equipment	
50.01.010	Train Controls (ATC)	Route Mile
50.01.020	Wayside Protection System	Route Mile
50.01.030	Train Control, Wayside Facility Site Work	EA
50.05	Communications	
50.05.010	Communications (w/Fiber Optic Backbone)	Route Mile
60.02	Traction power supply: Substations	
60.02.100	Traction Power Supply	Route Mile
60.02.010	Traction Power, Supply Station Site Work	EA
60.02.020	Traction Power, Switching Station Site Work	EA
60.02.030	Traction Power, Paralleling Station Site Work	EA
60.03	Traction power distribution: Catenary and third rail	
60.03.100	Traction Power Distribution	Route Mile

APPENDIX C DETAILED COST BUDGET

Detail Cost Budget Data

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
01			Alternative 01					
	01-A		Bakersfield to Oswell					
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	0.18	RM	69,300,999.94	RM	12,196,976
		10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht)	0.73	RM	68,784,738.00	RM	50,212,859
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	2.69	RM	82,010,860.80	RM	220,609,216
		10.01.249A	Elevated Structure - 3 Track at Station - 3 Columns (40' Avg. Pier Ht)	0.07	RM	154,427,156.06	RM	10,192,192
		10.01.250A	Elevated Structure - 4 Track at Station - 2 Columns (40' Avg. Pier Ht)	0.32	RM	170,900,904.59	RM	54,688,289
		10.01.255	Elevated Structure - 4 Track at Station 4 Columns (40' Avg. Pier Ht)	0.06	RM	216,262,920.67	RM	12,975,775
		10.01.255A	Elevated Structure - 4 Track at Station - 4 Columns (50' Avg. Pier Ht)	0.20	RM	223,732,872.00	RM	44,746,574
		10.01.255B	Elevated Structure - 5 Track at Station - 3 Columns (40' Avg. Pier Ht)	0.11	RM	261,992,719.06	RM	27,771,228
		10.01.255C	Elevated Structure - 5 Track at Station - 3 Columns (50' Avg. Pier Ht)	0.38	RM	261,943,867.91	RM	99,014,782
		10.01.424	Elevated Structure (LS) - 2 Track (40' Avg. Pier Ht)	0.09	RM	63,570,367.96	RM	5,912,044
		10.01.425	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht)	0.39	RM	68,540,332.56	RM	26,730,730
		10.01.426	Elevated Structure (LS) - 2 Track (60' Avg. Pier Ht)	0.15	RM	76,266,168.00	RM	11,439,925
		10.01.825	Elevated Structure - 2 Track Straddle (50' Avg. Pier Ht)	0.19	RM	112,210,468.47	RM	21,319,989
		10.10.110	Direct Fixation Track - 1 Track	0.19	RM	2,499,572.05	RM	474,919
		10.10.120	Direct Fixation Track - 2 Track	4.78	RM	4,998,544.25	RM	23,893,042
		10.10.140	Direct Fixation Track - 4 Track	0.29	RM	10,071,007.55	RM	2,920,592
		10.10.145	Direct Fixation Track - 5 Track	0.59	RM	12,595,135.39	RM	7,431,130
		10.14.105	Direct Fixation Turnout (80 MPH)	2.00	EA	850,000.00	EA	1,700,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.14.110	Direct Fixation Turnout (110 MPH)	2.00	EA	1,000,000.00	EA	2,000,000
		10.14.140	Direct Fixation Crossover (110 MPH)	3.00	EA	2,000,000.00	EA	6,000,000
		10.14.199	Ballasted Turnout (25 MPH)	12.00	EA	210,000.00	EA	2,520,000
		10.14.400	Terminal - Bumping Post	2.00	EA	35,000.00	EA	70,000
		20.02.240A	Bakersfield Station - F St	1.00	LS	120,656,500.00	LS	120,656,500
		20.02.241A	Bakersfield Station - Site Elements - F St	1.00	LS	34,640,392.27	LS	34,640,392
		20.02.249A	Bakersfield Station Parking Structures - F St	1.00	LS	114,400,000.00	LS	114,400,000
		20.07.010	Roadway Modification, New AC Paving	10,790.00	Tons	210.30	Tons	2,269,122
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	36,797.90	Tons	262.04	Tons	9,642,438
		30.04.010	Maintenance of Infrastructure Facility (MOIF)	1.00	EA	20,163,776.00	EA	20,163,776
		40.01.110	Demolition Allowance, Asphalt Pavement	95,100.00	SY	55.25	SY	5,254,275
		40.01.140	Demolition Allowance, Concrete Curb	11,200.00	If	16.85	If	188,720
		40.01.150	Demolition Allowance, Sidewalk and Raised Medians	7,600.00	sy	58.47	sy	444,372
		40.02.005	Utility Relocation Allowance, Level 5 Urban	939,629.00	LF	211.37	LF	198,606,207
		40.02.060	Major Utility Relocation, Aerial Transmission Line	0.39	RM	8,600,000.00	RM	3,354,000
		40.03.105	Hazardous Material Removal Allowance, Medium	5.66	RM	471,866.22	RM	2,670,763
		40.04.115	Contractor Environmental Mitigation Allowance, Urban Aerial	1.00	LS	43,270,978.00	LS	43,270,978
		40.04.200	Retention Basins	52,989.29	cy	43.36	cy	2,297,504
		40.05.006A	Retaining Wall - 1 Wall (6' Avg. Height)	190.00	If	1,710.44	If	324,983
		40.06	Temp Facilities	1.00	LS	52,886,751.00	LS	52,886,751
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	120,000,000.00	LS	120,000,000
		40.08.425A-00	Roadway Overcrossing HSR - SR204/F St Interchange	1.00	Ea	23,102,012.62	Ea	23,102,013
		40.08.425A-00a	F Street	1.00	Ea	7,985,815.65	Ea	7,985,816

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.425A-00b	Chester South	1.00	Ea	1,457,198.74	Ea	1,457,199
		40.08.425A-00c	Chester North	1.00	Ea	982,715.88	Ea	982,716
		40.08.425A-00d	Carrier Canal Bridge (Widen)	1.00	Ea	1,971,162.55	Ea	1,971,163
		40.08.425A-00e	Pedestrian Bridge Over SR 204	1.00	Ea	1,523,843.33	Ea	1,523,843
		40.08.435A	Roadway Overcrossing HSR - Pedestrian Overcrossing - Carrier Canal	1.00	Ea	273,487.79	Ea	273,488
		40.08.435B	Roadway Overcrossing HSR - Pedestrian Overcrossing - F St	1.00	Ea	1,298,034.20	Ea	1,298,034
		40.08.440A	Roadway Overcrossing, 2 lane - 34th St	1.00	Ea	8,113,264.29	Ea	8,113,264
		50.01.010	Train Controls (ATC) - 2 Track	5.66	RM	1,309,521.72	RM	7,411,893
		50.01.020	Wayside Protection - 2 Track	5.66	RM	125,346.40	RM	709,461
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	5.66	RM	300,982.45	RM	1,703,561
		60.02.100	Traction Power Supply - 2 Tracks	5.66	RM	2,814,552.02	RM	15,930,364
		60.03.100	Traction Power Distribution - 2 Tracks	5.66	RM	2,459,110.72	RM	13,918,567
		80.00.00	Professional Services	1.00	LS	170,312,731.00	LS	170,312,731
		90.00.00	Unallocated Contingency	1.00	LS	61,346,194.00	LS	61,346,194
	01-B		Oswell to Palmdale Subsection					
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.30	RM	83,573,695.35	/RM	25,322,830
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.05	RM	140,047,638.22	/RM	6,302,144
		10.01.222A	Elevated Structure - 2 Track (20' Avg. Pier Ht) CIP Box Girder	0.05	RM	139,703,896.89	/RM	6,286,675
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	0.06	RM	144,698,605.83	/RM	8,681,916
		10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht)	0.06	RM	141,978,593.83	/RM	8,518,716
		10.01.227A	Elevated Structure - 2 Track (120' Avg. Pier Ht)	0.11	RM	186,145,800.82	/RM	20,476,038
		10.01.322A	Elevated Structure (LS) - 1 Track (20' Avg. Pier Ht) CIP Box Girder	0.23	RM	97,083,438.02	/RM	22,037,940

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.323A	Elevated Structure (LS) - 1 Track (30' Avg. Pier Ht) CIP Box Girder	0.38	RM	93,892,144.64	/RM	35,585,123
		10.01.324A	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP Box Girder	0.36	RM	68,700,047.88	/RM	25,006,817
		10.01.324B	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP and PC Box G	0.59	RM	22,609,041.17	/RM	13,316,725
		10.01.324C	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP and PC Box G	0.72	RM	26,048,882.35	/RM	18,755,195
		10.01.325A	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP Box Girder	0.17	RM	66,288,707.85	/RM	11,401,658
		10.01.325B	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP and PC Box G	0.47	RM	50,680,775.29	/RM	23,972,007
		10.01.325C	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP and PC Box G	0.25	RM	26,717,248.94	/RM	6,572,443
		10.01.422A	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht) CIP Box Girder	1.10	RM	79,163,501.71	/RM	86,921,525
		10.01.422B	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht) CIP and PC Box G	0.29	RM	42,972,552.12	/RM	12,547,985
		10.01.423A	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht)	0.08	RM	120,344,059.74	/RM	9,146,149
		10.01.423B	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht) CIP Box Girder	0.17	RM	119,552,364.00	/RM	20,323,902
		10.01.425B	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht) CIP and PC Box G	3.50	RM	40,732,713.53	/RM	142,564,497
		10.01.428A	Elevated Structure (LS) - 2 Track (120' Avg. Pier Ht) CIP and PC Box	1.38	RM	159,656,533.98	/RM	219,527,734
		10.01.429A	Elevated Structure (LS) - 2 Track (140' Avg. Pier Ht) CIP and PC Box	0.28	RM	181,638,600.56	/RM	51,585,363
		10.01.430A	Elevated Structure (LS) - 2 Track (200' Avg. Pier Ht) CIP and PC Box	0.58	RM	296,308,847.78	/RM	172,451,749
		10.02.060B	Bridge Structure (LS) - 1 Track Single Span CIP Box Girder	0.11	RM	137,327,008.00	/RM	15,105,971
		10.02.060C	Bridge Structure (LS) - 2 Track Single Span CIP Box Girder	0.12	RM	158,133,131.22	/RM	18,185,310
		10.05.100	At-Grade Track Bed - 2 Track (Varying Heights) - Alt1	51.15	RM	34,305,732.20	/RM	1,754,738,202
		10.07.101	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock	1.21	RM	250,289,800.62	/RM	302,850,659
		10.07.101A	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock -	4.16	RM	250,289,800.78	/RM	1,041,205,571

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.07.202	D&B Single Track Twin Tunnel 30ft ID in rock	0.01	RM	140,940,750.00	/RM	1,409,408
		10.07.202A	D&B Single Track Twin Tunnel 30ft ID in rock - Alt 1,2,5 (Tehachapi)	0.01	RM	140,940,750.00	/RM	1,409,408
		10.07.206	TBM Double Track Tunnel 40ft ID in soft ground	2.35	RM	405,400,859.04	/RM	952,692,019
		10.07.216	Cut & Cover Box - 2 Track / 1 Box (60' Avg. Exc Depth)	0.10	RM	257,500,000.00	/RM	25,750,000
		10.07.305	SEM Double Track Tunnel 50ft ID in soft ground	0.99	RM	355,000,000.00	/RM	351,450,000
		10.07.803	Tunnel Portal Structure	11.00	EA	10,250,000.00	/EA	112,750,000
		10.07.803A	Tunnel Portal Structure - Alt 3	4.00	EA	10,250,000.00	/EA	41,000,000
		10.07.901	Mechanical & Electrical Allowance for Underground (Single)	6.00	RM	9,430,000.00	/RM	56,580,000
		10.07.902	Mechanical & Electrical Allowance for Underground (Double)	3.00	RM	18,750,000.00	/RM	56,250,000
		10.09.110	Ballasted Track - 1 Track	11.50	RM	2,092,109.91	/RM	24,059,264
		10.09.120	Ballasted Track - 2 Track	51.21	RM	4,024,637.96	/RM	206,117,808
		10.09.122A	Ballasted Track (On Structure) - 2 Track	3.17	RM	3,553,652.68	/RM	11,265,079
		10.10.120	Direct Fixation Track - 2 Track	20.40	RM	4,421,638.10	/RM	90,214,682
		10.14.200	Ballasted Turnout (60 MPH)	4.00	EA	455,370.00	/EA	1,821,480
		10.14.211	Ballasted #11 Turnout	69.00	EA	150,000.00	/EA	10,350,000
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	841,044.00	/EA	1,682,088
		10.14.305	Ballasted Crossover (80 MPH)	7.00	EA	1,133,792.00	/EA	7,936,544
		10.14.311	Ballasted Scissor Crossover (60 MPH)	2.00	EA	967,200.00	/EA	1,934,400
		20.07.010	Roadway Modification, New AC Paving	4,453,188.00	SF	20.02	/SF	89,143,917
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	6,315,979.00	SF	14.80	/SF	93,463,857
		20.07.710	Permanent Service/Emergency Access Road (22' Wide)	27.95	RM	1,623,250.65	/RM	45,368,233
		30.02.010	Light Maintenance Facility (LMF)	1.00	EA	126,384,397.10	/EA	126,384,397
		30.04.011	Maintenance of Infrastructure Facility (MOIF)	1.00	EA	38,847,604.80	/EA	38,847,605
		30.04.012	Maintenance of Infrastructure Siding (MOIS)	2.00	EA	941,691.25	/EA	1,883,383

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		30.05.110	Ballasted Track - Yard Track	27.54	RM	2,092,155.66	/RM	57,611,690
		30.05.211	Ballasted Turnout, No. 20	5.00	EA	200,000.00	/EA	1,000,000
		40.01.010	Demolition Allowance, Bridge	102,929.32	SF	29.00	/SF	2,984,950
		40.01.050	Demolition Allowance, Building	2,351,890.00	SF	14.00	/SF	32,926,460
		40.01.110	Demolition Allowance, Asphalt Pavement	1,227,814.00	SY	36.00	/SY	44,201,304
		40.02.100	Groundwater Well	10.00	EA	100,000.00	/EA	1,000,000
		40.02.101	Irrigation Pump Station	2.00	EA	500,000.00	/EA	1,000,000
		40.02.102	Irrigation Reservoir	2.00	EA	200,000.00	/EA	400,000
		40.02.103	Irrigation Water Pipeline, 10" to 15" Dia.	4,100.00	LF	122.63	/LF	502,795
		40.02.104	Irrigation Water Pipeline, 18" to 24" Dia.	3,220.00	LF	176.93	/LF	569,724
		40.02.105	Irrigation Water Pipeline, 27" to 33" Dia.	7,000.00	LF	234.56	/LF	1,641,920
		40.02.106	Irrigation Water Pipeline, 36" to 48" Dia.	6,310.00	LF	363.27	/LF	2,292,259
		40.02.107	Natural Gas Pipeline, 3" to 8" Dia.	44,350.00	LF	113.96	/LF	5,053,993
		40.02.110	Natural Gas Pipeline, 30" to 42" Dia.	18,910.00	LF	290.11	/LF	5,486,037
		40.02.111	Oil Pipeline, 6" to 15" Dia.	2,060.00	LF	111.16	/LF	228,998
		40.02.116	Potable Water Pipeline, 10" to 16" Dia.	71,000.00	LF	118.71	/LF	8,428,197
		40.02.117	Potable Water Pipeline, 18" to 24" Dia.	700.00	LF	170.88	/LF	119,618
		40.02.118	Potable Water Pipeline, 27" to 33" Dia.	3,770.00	LF	238.39	/LF	898,723
		40.02.119	Potable Water Pipeline, 36" to 48" Dia.	6,490.00	LF	398.45	/LF	2,585,966
		40.02.121	Overhead Power Trans Facility (? 69kV)	54,180.00	LF	43.58	/LF	2,361,200
		40.02.124	Recycled Water Pipeline, 18" to 24" Dia.	13,500.00	LF	213.20	/LF	2,878,254
		40.02.127	Sewer, Gravity Pipeline, 10" tp 18" Dia.	19,950.00	LF	265.35	/LF	5,293,713
		40.02.128	Sewer, Gravity Pipeline, 21" to 30" Dia.	1,373.00	LF	1,323.86	/LF	1,817,656
		40.03.105	Hazardous Material Removal Allowance, Medium	74.77	RM	471,616.25	/RM	35,262,747
		40.04	Environmental Mitigation (% Calculation)	1.00	LS	266,860,502.00	/LS	266,860,502
		40.05.013A	Retaining Wall - 1 Wall (20' Avg. Height) Type 1 Reinforced Concrete R	10,967.00	LF	10,471.90	/LF	114,845,272
		40.05.013B	Retaining Wall - 1 Wall (20' Avg. Height) Mechanically Stabilized Emb	3,654.00	LF	1,971.60	/LF	7,204,230

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.05.013C	Retaining Wall - 1 Wall (20' Avg. Height) Soil Nail Wall	624.00	LF	1,955.58	/LF	1,220,279
		40.05.014A	Retaining Wall - 1 Wall (30' Avg. Height) Type 1 Reinforced Concrete R	2,546.00	LF	7,948.51	/LF	20,236,905
		40.05.014B	Retaining Wall - 1 Wall (30' Avg. Height) Mechanically Stabilized Emba	2,374.00	LF	3,345.23	/LF	7,941,564
		40.05.014C	Retaining Wall - 1 Wall (30' Avg. Height) Soil Nail Wall	150.00	LF	2,915.62	/LF	437,343
		40.05.015A	Retaining Wall - 1 Wall (40' Avg. Height) Type 1 Reinforced Concrete R	2,570.00	LF	4,711.83	/LF	12,109,395
		40.05.015B	Retaining Wall - 1 Wall (40' Avg. Height) Mechanically Stabilized Emba	500.00	LF	7,504.36	/LF	3,752,179
		40.05.016B	Retaining Wall - 1 Wall (50' Avg. Height) Mechanically Stabilized Emba	405.00	LF	7,088.13	/LF	2,870,693
		40.05.016C	Retaining Wall - 1 Wall (50' Avg. Height) Soil Nail Wall	1,475.00	LF	7,869.58	/LF	11,607,636
		40.05.017C	Retaining Wall - 1 Wall (60' Avg. Height) Soil Nail Wall	1,720.00	LF	8,902.72	/LF	15,312,677
		40.05.019	Retaining Wall - 1 Wall (80' Avg. Height) Soil Nail Wall	1,505.00	LF	13,242.20	/LF	19,929,510
		40.05.400	Proposed Box Culvert 10' x 10'	30,153.00	LF	1,986.50	/LF	59,898,935
		40.05.401	Proposed Box Culvert 8' x 4'	54,561.00	LF	803.80	/LF	43,856,132
		40.05.402	Proposed Pipe Culvert 72"	42,632.00	LF	800.00	/LF	34,105,600
		40.05.403	Proposed Pipe Culvert 48"	7,654.00	LF	650.00	/LF	4,975,100
		40.05.404	Proposed Box Culvert 8' x 8'	5,608.00	LF	1,292.15	/LF	7,246,377
		40.05.408	Proposed 10' x 4' Channel in Bridge Structure	615.00	LF	989.35	/LF	608,450
		40.06	Temp Facilities	1.00	LS	326,162,835.00	/LS	326,162,835
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	783,988,678.00	/LS	783,988,678
		40.08.342A	Roadway Overcrossing - 2 Lanes - Retained Fill	2.00	EA	3,295,898.45	/EA	6,591,797
		40.08.342B	Roadway Overcrossing - 2 Lanes - Embankment	10.00	EA	14,285,825.80	/EA	142,858,258
		40.08.342C	Roadway Overcrossing Track - 2 Lanes - Retained Fill	1.00	EA	2,398,688.10	/EA	2,398,688
		40.08.344A	Roadway Overcrossing HSR - 2 Lanes - Retained Fill	3.00	EA	10,853,305.58	/EA	32,559,917

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.344B	Roadway Overcrossing HSR - 2 Lanes - Embankment	3.00	EA	3,017,748.99	/EA	9,053,247
		40.08.424B	Roadway Overcrossing HSR - 4 Lanes - Embankment	1.00	EA	2,916,473.58	/EA	2,916,474
		40.08.426B	Roadway Overcrossing HSR - 6 Lanes - Retained Fill	2.00	EA	16,618,637.50	/EA	33,237,275
		40.08.426C	Roadway Overcrossing HSR - 6 Lanes - Embankment	3.00	EA	42,447,212.13	/EA	127,341,636
		40.08.426D	Roadway Overcrossing HSR - 8 Lanes - Retained Fill/Embankment	1.00	EA	10,355,028.00	/EA	10,355,028
		40.08.426E	Drainage Overcrossing HSR - Retained Fill/Embankment	1.00	EA	1,828,768.10	/EA	1,828,768
		40.08.426G	Roadway Overcrossing HSR - 4 Lanes - Retained Fill/Embankment	2.00	EA	14,895,862.00	/EA	29,791,724
		50.01.010	Train Controls (ATC) - 2 Track	74.79	RM	1,308,775.50	/RM	97,883,320
		50.01.012	Train Controls (ATC) - 6 Track	1.00	Ea	13,664,800.00	/Ea	13,664,800
		50.01.020	Wayside Protection - 2 Track	74.79	RM	125,280.00	/RM	9,369,691
		50.01.030	Train Control, Wayside Facility Work	89.00	EA	157,711.00	/EA	14,036,279
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	74.79	RM	300,823.00	/RM	22,498,552
		60.02.010	Traction Power, Supply Station Site Work	3.00	EA	895,432.00	/EA	2,686,296
		60.02.020	Traction Power, Switching Station Site Work	4.00	EA	338,822.00	/EA	1,355,288
		60.02.030	Traction Power, Parralleling Station Site Work	11.00	Ea	294,508.00	/Ea	3,239,588
		60.02.100	Traction Power Supply - 2 Tracks	74.79	RM	2,813,061.00	/RM	210,388,832
		60.03.100	Traction Power Distribution - 2 Tracks	74.79	RM	2,457,808.00	/RM	183,819,460
		60.03.200	Traction Power Distribution - Yard	39.00	RM	612,511.41	/RM	23,887,945
		80.00.00	Professional Services	1.00	LS	1,095,098,723.00	/LS	1,095,098,723
		90.00.00	Unallocated Contingency	1.00	LS	464,925,293.00	/LS	464,925,293
	01-C		Palmdale Subsection					
		10.01.AA1NB	Steel Truss HSR Viaduct, 1 Track sierra Hwy Northbound platform track	430.00	RF	21,414.67	RF	9,208,309
		10.01.AA1SB	Steel Truss HSR Viaduct, 1 Track sierra Hwy Southbound platform track	430.00	RF	21,414.67	RF	9,208,309

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.AA2	Steel Truss HSR viaduct, 2 tracks Sierra Hwy main tracks	430.00	RF	30,493.76	RF	13,112,315
		10.02.060A-1	Bridge Structure - Two Span Steel Plate Girder Struc w/ Trk for SCRRA	380.00	RF	11,605.09	RF	4,409,933
		10.02.060B-1	Brid Struc - 2 Span steel plate girder w/1 track & 1 future track for	372.00	RF	15,820.63	RF	5,885,276
		10.05.111	At-Grade Track Bed in cut - 1 Track (5'Avg ExcDepth)	0.68	RM	2,300,000.00	RM	1,564,000
		10.05.112	At-Grade Track Bed in cut - 1 Track (10'Avg ExcDepth)	0.78	RM	3,400,000.00	RM	2,652,000
		10.05.113	At-Grade Track Bed in cut - 1 Track (15'Avg ExcDepth)	0.08	RM	6,200,000.00	RM	496,000
		10.05.114	At-Grade Track Bed in cut - 1 Track (20'Avg ExcDepth)	0.25	RM	7,100,000.00	RM	1,775,000
		10.05.115	At-Grade Track Bed in cut - 1 Track (40'Avg ExcDepth)	0.31	RM	20,000,000.00	RM	6,200,000
		10.05.116	At-Grade Track Bed in cut - 1 Track (60'Avg ExcDepth)	0.20	RM	39,000,000.00	RM	7,800,000
		10.05.121	At-Grade Track Bed in cut - 2 Track (5'Avg ExcDepth)	0.66	RM	2,850,000.00	RM	1,881,000
		10.05.122	At-Grade Track Bed in cut - 2 Track (10'Avg ExcDepth)	0.63	RM	4,200,000.00	RM	2,646,000
		10.05.123	At-Grade Track Bed in cut - 2 Track (15'Avg ExcDepth)	0.07	RM	6,200,000.00	RM	434,000
		10.05.124	At-Grade Track Bed in cut - 2 Track (20'Avg ExcDepth)	0.12	RM	8,500,000.00	RM	1,020,000
		10.05.211	At-Grade Track Bed in Fill - 1 Track (5'Avg fill ht)	2.63	RM	1,400,000.00	RM	3,682,000
		10.05.212	At-Grade Track Bed in Fill - 1 Track (10'Avg fill ht)	0.76	RM	2,100,000.00	RM	1,596,000
		10.05.213	At-Grade Track Bed in Fill - 1 Track (15'Avg fill ht)	1.10	RM	3,000,000.00	RM	3,300,000
		10.05.221	At-Grade Track Bed in Fill - 2 Track (5'Avg fill ht)	1.64	RM	2,100,000.00	RM	3,444,000
		10.05.222	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.63	RM	2,900,000.00	RM	1,827,000
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	6.09	RM	1,600,000.00	RM	9,744,000
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	3.75	RM	2,500,000.00	RM	9,375,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.07.114A	Cut & cover LMF Crossing	1,080.00	LF	11,971.28	LF	12,928,982
		10.08.413	Retained Fill, Walls Both Sides - 1 Tracks (30'Avg Wall Ht)	0.85	RM	50,000,000.00	RM	42,500,000
		10.08.500	Retained Fill, Walls Sides - 1 Tracks (12'Avg Wall Ht)	2.25	RM	30,000,000.00	RM	67,500,000
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	6.09	RM	2,100,000.00	RM	12,789,000
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	3.75	RM	3,000,000.00	RM	11,250,000
		10.09.810	Ballasted Freight Track - 1 Track	7.39	RM	1,798,782.14	RM	13,293,000
		10.09.820	Ballasted Freight Track - 2 Track	0.86	RM	3,491,860.47	RM	3,003,000
		10.14.214	Ballasted Turnout No. 14	7.00	Ea	500,000.00	Ea	3,500,000
		10.14.220	Ballasted Turnout No. 20	3.00	Ea	600,000.00	Ea	1,800,000
		10.14.224	Ballasted Turnout No 24	1.00	Ea	700,000.00	Ea	700,000
		20.01.245	Palmdale Station	1.00	LS	59,000,000.00	LS	59,000,000
		20.01.246	Palmdale Station Site Elements	1.00	LS	26,000,000.00	LS	26,000,000
		20.06.140	Pedestrian Plaza	50,600.00	sf	38.00	sf	1,922,800
		20.06.160	Pedestrian Access, Vertical Structure, 30' Height	12.00	ea	340,000.00	ea	4,080,000
		20.06.210	Parking, at Grade	3,302.00	stl	3,850.00	stl	12,712,700
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	2,427,137.00	SF	8.96	SF	21,735,012
		20.07.020c	Roadway Modification, New Concrete Curb	42,718.00	lf	20.00	lf	854,360
		20.07.020d	Roadway Modification, New Curb and Gutter	80,498.00	lf	27.00	lf	2,173,446
		20.07.020e	Roadway Modification, Concrete Curb Ramps	109.00	ea	2,000.00	ea	218,000
		20.07.020f	Roadway Modification, New Concrete Sidewalk	857,798.00	sf	5.75	sf	4,932,339
		20.07.020g	Roadway Modification, New Raised Median	372,923.00	sf	12.00	sf	4,475,076
		20.07.020h	Roadway Modification, New Concrete Barrier	1,874.00	lf	125.00	lf	234,250
		20.07.020i	Roadway Modification, New Traffic Signal	11.00	ea	250,000.00	ea	2,750,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		20.07.020j	Roadway Modification, New Traffic Signal Modification	2.00	sf	125,000.00	sf	250,000
		20.07.020k	Roadway Modification, New Striping	50,057.00	sf	0.20	sf	10,011
		20.07.020l	Roadway Modification, Striping RPM's	2,870.00	ea	10.00	ea	28,700
		20.07.020m	Street Lighting	487.00	ea	3,000.00	ea	1,461,000
		20.07.020n	Roadway Excavation	2,742,295.00	cy	9.00	cy	24,680,655
		20.07.020o	Roadway Embankment	879,984.00	cy	16.00	cy	14,079,744
		40.01.050	Demolition Allowance, Building	1,420,330.00	SF	16.00	SF	22,725,280
		40.01.110	Demolition Allowance, Asphalt Pavement	281,803.00	SY	60.00	SY	16,908,180
		40.01.110a	Demolition Allowance, Concrete Pavement	3,465.00	sy	44.00	sy	152,460
		40.01.110b	Demolition Allowance, Bikeway AC Pavement	10,346.00	sy	30.00	sy	310,380
		40.01.140	Demolition Allowance, Concrete Curb	11,164.00	lf	13.00	lf	145,132
		40.01.140a	Demolition Allowance, Concrete Curb and Gutter	64,175.00	lf	18.00	lf	1,155,150
		40.01.150	Demolition Allowance, Sidewalk and Raised Medians	44,131.00	sy	50.00	sy	2,206,550
		40.01.810	Demolition Allowance, Remove Railroad Tracks	0.50	RM	195,000.00	RM	97,500
		40.02.106R	Removal of Potable Water Pipeline (10" to 16") 12", 16" Dia	21,300.00	lf	45.00	lf	958,500
		40.02.107R	Removal of Natural Gas Pipeline, 6" Dia	700.00	lf	50.00	lf	35,000
		40.02.107a	Natural Gas Pipeline, 6" Dia	750.00	LF	113.00	LF	84,750
		40.02.116a	Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	21,000.00	LF	120.00	LF	2,520,000
		40.02.117R	Removal of Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	993.00	LF	45.00	LF	44,685
		40.02.117a	Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	1,040.00	LF	170.00	LF	176,800
		40.02.121	Overhead Power Trans Facility (? 69kV)	9,375.00	LF	44.00	LF	412,500
		40.02.121R	Removal of Overhead Power Transmission Facility	8,600.00	LF	40.00	LF	344,000
		40.02.127AR	Removal of Sewer, Gravity Pipeline, (10" to 18" Dia)	17,000.00	LF	83.35	LF	1,417,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.127a	Sewer, Gravity Pipeline, (10" to 18" Dia) 8", 10", 12", 15" Dia	15,500.00	LF	265.00	LF	4,107,500
		40.02.128AR	Removal of Sewer, Gravity Pipeline, (21" to 42")	800.00	LF	93.75	LF	75,000
		40.02.128a	Sewer, Gravity Pipeline, (21" to 30" Dia.) 42" Dia	2,600.00	LF	1,300.00	LF	3,380,000
		40.02.XYZ	Misc Utilities	1.00	Is	4,347,080.00	Is	4,347,080
		40.02.XYZR	Remove Telephone Ductbank	4,230.00	If	51.52	If	217,950
		40.04.115	Contractor Environmental Mitigation Allowance, Urban Aerial	1.00	LS	22,101,023.00	LS	22,101,023
		40.05.11	Reinforce Concrete Retaining Wall Type 1 (24'Avg Height, for Roadways)	2,277.00	Is	5,500.00	Is	12,523,500
		40.05.408	Proposed 10' x 4' Channel in Bridge Structure	1,450.00	LF	650.00	LF	942,500
		40.05.XYZ	Misc. Site Structures	1.00	Is	21,140,218.30	Is	21,140,218
		40.06	Temp Facilities	1.00	LS	27,012,362.00	LS	27,012,362
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	232,490,125.20	LS	232,490,125
		40.08.425A	Roadway Crossing - 4 lane - 6 Spans	1.00	LS	20,299,824.46	LS	20,299,824
		40.08.425B	Roadway Overcrossing - 6 lane, 10 shoulders, 8' sidewalks - 5 spans	1.00	LS	37,032,273.42	LS	37,032,273
		40.08.425C	Roadway Overcrossing - 6 lane, 10' shoulders, 8' sidewalks - 1 span	1.00	LS	2,835,380.00	LS	2,835,380
		40.08.501	Pedestrian Overcrossing	3,054.00	If	1,702.69	If	5,200,000
		50.01.010	Train Controls (ATC) - 2 Track	3.75	RM	1,308,828.00	RM	4,908,105
		50.01.020	Wayside Protection - 2 Track	3.75	RM	125,280.00	RM	469,800
		50.01.030	Train Control, Wayside Facility Work	10.00	EA	157,711.00	EA	1,577,110
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	3.75	RM	300,823.00	RM	1,128,086
		60.02.030	Traction Power, Parralleling Station Site Work	1.00	Ea	294,508.00	Ea	294,508
		60.02.100	Traction Power Supply - 2 Tracks	3.75	RM	2,813,061.00	RM	10,548,979
		60.03.100	Traction Power Distribution - 2 Tracks	3.75	RM	2,457,808.00	RM	9,216,780
		80.00.00	Professional Services	1.00	LS	88,366,793.00	LS	88,366,793
		90.00.00	Unallocated Contingency	1.00	LS	40,660,809.00	LS	40,660,809

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
	CCNM		Cesar Chavez National Monument (CCNM)	1.00	LS	46,648,683.17	LS	46,648,683
			01 Alternative 01	83.41	RM	164,559,760.38	/RM	13,725,929,613
2			Alternative 02					
	02-A		Bakersfield to Oswell					
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	0.18	RM	69,300,999.94	RM	12,196,976
		10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht)	0.73	RM	68,784,738.00	RM	50,212,859
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	2.69	RM	82,010,860.80	RM	220,609,216
		10.01.249A	Elevated Structure - 3 Track at Station - 3 Columns (40' Avg. Pier Ht)	0.07	RM	154,427,156.06	RM	10,192,192
		10.01.250A	Elevated Structure - 4 Track at Station - 2 Columns (40' Avg. Pier Ht)	0.32	RM	170,900,904.59	RM	54,688,289
		10.01.255	Elevated Structure - 4 Track at Station 4 Columns (40' Avg. Pier Ht)	0.06	RM	216,262,920.67	RM	12,975,775
		10.01.255A	Elevated Structure - 4 Track at Station - 4 Columns (50' Avg. Pier Ht)	0.20	RM	223,732,872.00	RM	44,746,574
		10.01.255B	Elevated Structure - 5 Track at Station - 3 Columns (40' Avg. Pier Ht)	0.11	RM	261,992,719.06	RM	27,771,228
		10.01.255C	Elevated Structure - 5 Track at Station - 3 Columns (50' Avg. Pier Ht)	0.38	RM	261,943,867.91	RM	99,014,782
		10.01.424	Elevated Structure (LS) - 2 Track (40' Avg. Pier Ht)	0.09	RM	63,570,367.96	RM	5,912,044
		10.01.425	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht)	0.39	RM	68,540,332.56	RM	26,730,730
		10.01.426	Elevated Structure (LS) - 2 Track (60' Avg. Pier Ht)	0.15	RM	76,266,168.00	RM	11,439,925
		10.01.825	Elevated Structure - 2 Track Straddle (50' Avg. Pier Ht)	0.19	RM	112,210,468.47	RM	21,319,989
		10.10.110	Direct Fixation Track - 1 Track	0.19	RM	2,499,572.05	RM	474,919
		10.10.120	Direct Fixation Track - 2 Track	4.78	RM	4,998,544.25	RM	23,893,042
		10.10.140	Direct Fixation Track - 4 Track	0.29	RM	10,071,007.55	RM	2,920,592
		10.10.145	Direct Fixation Track - 5 Track	0.59	RM	12,595,135.39	RM	7,431,130
		10.14.105	Direct Fixation Turnout (80 MPH)	2.00	EA	850,000.00	EA	1,700,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.14.110	Direct Fixation Turnout (110 MPH)	2.00	EA	1,000,000.00	EA	2,000,000
		10.14.140	Direct Fixation Crossover (110 MPH)	3.00	EA	2,000,000.00	EA	6,000,000
		10.14.199	Ballasted Turnout (25 MPH)	12.00	EA	210,000.00	EA	2,520,000
		10.14.400	Terminal - Bumping Post	2.00	EA	35,000.00	EA	70,000
		20.02.240A	Bakersfield Station - F St	1.00	LS	120,656,500.00	LS	120,656,500
		20.02.241A	Bakersfield Station - Site Elements - F St	1.00	LS	34,640,392.27	LS	34,640,392
		20.02.249A	Bakersfield Station Parking Structures - F St	1.00	LS	114,400,000.00	LS	114,400,000
		20.07.010	Roadway Modification, New AC Paving	10,790.00	Tons	210.30	Tons	2,269,122
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	36,797.90	Tons	262.04	Tons	9,642,438
		30.04.010	Maintenance of Infrastructure Facility (MOIF)	1.00	EA	20,163,776.00	EA	20,163,776
		40.01.110	Demolition Allowance, Asphalt Pavement	95,100.00	SY	55.25	SY	5,254,275
		40.01.140	Demolition Allowance, Concrete Curb	11,200.00	If	16.85	If	188,720
		40.01.150	Demolition Allowance, Sidewalk and Raised Medians	7,600.00	sy	58.47	sy	444,372
		40.02.005	Utility Relocation Allowance, Level 5 Urban	939,629.00	LF	211.37	LF	198,606,207
		40.02.060	Major Utility Relocation, Aerial Transmission Line	0.39	RM	8,600,000.00	RM	3,354,000
		40.03.105	Hazardous Material Removal Allowance, Medium	5.66	RM	471,866.22	RM	2,670,763
		40.04.115	Contractor Environmental Mitigation Allowance, Urban Aerial	1.00	LS	43,270,978.00	LS	43,270,978
		40.04.200	Retention Basins	52,989.29	cy	43.36	cy	2,297,504
		40.05.006A	Retaining Wall - 1 Wall (6' Avg. Height)	190.00	If	1,710.44	If	324,983
		40.06	Temp Facilities	1.00	LS	52,886,751.00	LS	52,886,751
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	120,000,000.00	LS	120,000,000
		40.08.425A-00	Roadway Overcrossing HSR - SR204/F St Interchange	1.00	Ea	23,102,012.62	Ea	23,102,013
		40.08.425A-00a	F Street	1.00	Ea	7,985,815.65	Ea	7,985,816

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.425A-00b	Chester South	1.00	Ea	1,457,198.74	Ea	1,457,199
		40.08.425A-00c	Chester North	1.00	Ea	982,715.88	Ea	982,716
		40.08.425A-00d	Carrier Canal Bridge (Widen)	1.00	Ea	1,971,162.55	Ea	1,971,163
		40.08.425A-00e	Pedestrian Bridge Over SR 204	1.00	Ea	1,523,843.33	Ea	1,523,843
		40.08.435A	Roadway Overcrossing HSR - Pedestrian Overcrossing - Carrier Canal	1.00	Ea	273,487.79	Ea	273,488
		40.08.435B	Roadway Overcrossing HSR - Pedestrian Overcrossing - F St	1.00	Ea	1,298,034.20	Ea	1,298,034
		40.08.440A	Roadway Overcrossing, 2 lane - 34th St	1.00	Ea	8,113,264.29	Ea	8,113,264
		50.01.010	Train Controls (ATC) - 2 Track	5.66	RM	1,309,521.72	RM	7,411,893
		50.01.020	Wayside Protection - 2 Track	5.66	RM	125,346.40	RM	709,461
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	5.66	RM	300,982.45	RM	1,703,561
		60.02.100	Traction Power Supply - 2 Tracks	5.66	RM	2,814,552.02	RM	15,930,364
		60.03.100	Traction Power Distribution - 2 Tracks	5.66	RM	2,459,110.72	RM	13,918,567
		80.00.00	Professional Services	1.00	LS	170,312,731.00	LS	170,312,731
		90.00.00	Unallocated Contingency	1.00	LS	61,346,194.00	LS	61,346,194
	02-B		Oswell to Palmdale Subsection					
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.30	RM	83,573,695.35	/RM	25,322,830
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.05	RM	140,047,638.22	/RM	6,302,144
		10.01.222A	Elevated Structure - 2 Track (20' Avg. Pier Ht) CIP Box Girder	0.05	RM	139,703,896.89	/RM	6,286,675
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	0.06	RM	142,326,497.54	/RM	8,681,916
		10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht)	0.06	RM	139,651,075.90	/RM	8,518,716
		10.01.227A	Elevated Structure - 2 Track (120' Avg. Pier Ht)	0.11	RM	186,145,800.82	/RM	20,476,038
		10.01.322A	Elevated Structure (LS) - 1 Track (20' Avg. Pier Ht) CIP Box Girder	0.23	RM	97,083,438.02	/RM	22,037,940

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.323A	Elevated Structure (LS) - 1 Track (30' Avg. Pier Ht) CIP Box Girder	0.38	RM	93,892,144.64	/RM	35,585,123
		10.01.324A	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP Box Girder	0.36	RM	68,700,047.88	/RM	25,006,817
		10.01.324B	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP and PC Box G	0.59	RM	22,609,041.17	/RM	13,316,725
		10.01.324C	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP and PC Box G	0.72	RM	26,048,882.35	/RM	18,755,195
		10.01.325A	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP Box Girder	0.17	RM	66,288,707.85	/RM	11,401,658
		10.01.325B	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP and PC Box G	0.47	RM	50,680,775.29	/RM	23,972,007
		10.01.325C	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP and PC Box G	0.25	RM	26,717,248.94	/RM	6,572,443
		10.01.422A	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht) CIP Box Girder	0.93	RM	79,275,297.51	/RM	73,488,201
		10.01.422B	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht) CIP and PC Box G	0.29	RM	42,972,552.12	/RM	12,547,985
		10.01.423A	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht)	0.08	RM	120,344,059.74	/RM	9,146,149
		10.01.423B	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht) CIP Box Girder	0.13	RM	120,479,125.12	/RM	15,541,807
		10.01.423C	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht) CIP and PC Box G	0.24	RM	146,845,877.65	/RM	34,949,319
		10.01.425A	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht) CIP Box Girder	0.20	RM	71,432,619.90	/RM	13,929,361
		10.01.425B	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht) CIP and PC Box G	0.56	RM	40,515,664.14	/RM	22,810,319
		10.01.426A	Elevated Structure (LS) - 2 Track (60' Avg. Pier Ht) CIP and PC Box G	3.56	RM	104,735,895.02	/RM	372,755,050
		10.01.428A	Elevated Structure (LS) - 2 Track (120' Avg. Pier Ht) CIP and PC Box	1.38	RM	159,656,533.98	/RM	219,527,734
		10.01.429A	Elevated Structure (LS) - 2 Track (140' Avg. Pier Ht) CIP and PC Box	0.24	RM	182,710,861.74	/RM	44,216,029
		10.01.430A	Elevated Structure (LS) - 2 Track (200' Avg. Pier Ht) CIP and PC Box	0.59	RM	294,789,315.23	/RM	172,451,749
		10.02.060A	Bridge Structure - 2 Track Single Span	0.02	RM	169,421,234.35	/RM	3,896,688
		10.02.060B	Bridge Structure (LS) - 1 Track Single Span CIP Box Girder	0.11	RM	137,327,008.00	/RM	15,105,971

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.02.060C	Bridge Structure (LS) - 2 Track Single Span CIP Box Girder	0.06	RM	156,382,566.03	/RM	9,852,102
		10.05.100A	At-Grade Track Bed - 2 Track (Varying Heights) - Alt2	50.38	RM	37,374,033.19	/RM	1,882,829,044
		10.07.101	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock	1.21	RM	250,289,800.62	/RM	302,850,659
		10.07.101A	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock -	4.16	RM	250,289,800.78	/RM	1,041,205,571
		10.07.202	D&B Single Track Twin Tunnel 30ft ID in rock	0.01	RM	140,940,750.00	/RM	1,409,408
		10.07.202A	D&B Single Track Twin Tunnel 30ft ID in rock - Alt 1,2,5 (Tehachapi)	0.01	RM	140,940,750.00	/RM	1,409,408
		10.07.206	TBM Double Track Tunnel 40ft ID in soft ground	2.35	RM	405,400,859.04	/RM	952,692,019
		10.07.216	Cut & Cover Box - 2 Track / 1 Box (60' Avg. Exc Depth)	0.10	RM	257,500,000.00	/RM	25,750,000
		10.07.305	SEM Double Track Tunnel 50ft ID in soft ground	0.99	RM	355,000,000.00	/RM	351,450,000
		10.07.803	Tunnel Portal Structure	11.00	EA	10,250,000.00	/EA	112,750,000
		10.07.803A	Tunnel Portal Structure - Alt 3	4.00	EA	10,250,000.00	/EA	41,000,000
		10.07.901	Mechanical & Electrical Allowance for Underground (Single)	6.00	RM	9,430,000.00	/RM	56,580,000
		10.07.902	Mechanical & Electrical Allowance for Underground (Double)	3.00	RM	18,750,000.00	/RM	56,250,000
		10.09.110	Ballasted Track - 1 Track	11.48	RM	2,074,616.44	/RM	23,818,671
		10.09.120	Ballasted Track - 2 Track	50.19	RM	4,024,615.50	/RM	201,995,452
		10.09.122A	Ballasted Track (On Structure) - 2 Track	3.17	RM	3,553,652.68	/RM	11,265,079
		10.10.120	Direct Fixation Track - 2 Track	21.22	RM	4,421,663.11	/RM	93,823,269
		10.14.200	Ballasted Turnout (60 MPH)	4.00	EA	455,370.00	/EA	1,821,480
		10.14.211	Ballasted #11 Turnout	69.00	EA	150,000.00	/EA	10,350,000
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	841,044.00	/EA	1,682,088
		10.14.305	Ballasted Crossover (80 MPH)	7.00	EA	1,133,792.00	/EA	7,936,544
		10.14.311	Ballasted Scissor Crossover (60 MPH)	2.00	EA	967,200.00	/EA	1,934,400
		20.07.010	Roadway Modification, New AC Paving	1,185,263.00	SF	20.02	/SF	23,726,595

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	6,315,979.00	SF	14.80	/SF	93,463,857
		20.07.710	Permanent Service/Emergency Access Road (22' Wide)	29.01	RM	1,623,265.04	/RM	47,084,426
		30.02.010	Light Maintenance Facility (LMF)	1.00	EA	126,384,397.10	/EA	126,384,397
		30.04.011	Maintenance of Infrastructure Facility (MOIF)	1.00	EA	38,847,604.80	/EA	38,847,605
		30.04.012	Maintenance of Infrastructure Siding (MOIS)	2.00	EA	941,691.25	/EA	1,883,383
		30.05.110	Ballasted Track - Yard Track	27.54	RM	2,092,155.66	/RM	57,611,690
		30.05.211	Ballasted Turnout, No. 20	5.00	EA	200,000.00	/EA	1,000,000
		40.01.050	Demolition Allowance, Building	2,349,288.00	SF	14.00	/SF	32,890,032
		40.01.110	Demolition Allowance, Asphalt Pavement	851,804.00	SY	36.00	/SY	30,664,944
		40.02.100	Groundwater Well	10.00	EA	100,000.00	/EA	1,000,000
		40.02.101	Irrigation Pump Station	2.00	EA	500,000.00	/EA	1,000,000
		40.02.102	Irrigation Reservoir	2.00	EA	200,000.00	/EA	400,000
		40.02.103	Irrigation Water Pipeline, 10" to 15" Dia.	2,080.00	LF	122.63	/LF	255,077
		40.02.104	Irrigation Water Pipeline, 18" to 24" Dia.	1,130.00	LF	176.93	/LF	199,934
		40.02.105	Irrigation Water Pipeline, 27" to 33" Dia.	6,660.00	LF	234.56	/LF	1,562,170
		40.02.106	Irrigation Water Pipeline, 36" to 48" Dia.	6,860.00	LF	363.27	/LF	2,492,060
		40.02.107	Natural Gas Pipeline, 3" to 8" Dia.	42,240.00	LF	113.96	/LF	4,813,544
		40.02.110	Natural Gas Pipeline, 30" to 42" Dia.	18,890.00	LF	290.11	/LF	5,480,235
		40.02.116	Potable Water Pipeline, 10" to 16" Dia.	70,970.00	LF	118.71	/LF	8,424,636
		40.02.117	Potable Water Pipeline, 18" to 24" Dia.	700.00	LF	170.88	/LF	119,618
		40.02.118	Potable Water Pipeline, 27" to 33" Dia.	3,770.00	LF	238.39	/LF	898,723
		40.02.119	Potable Water Pipeline, 36" to 48" Dia.	6,490.00	LF	398.45	/LF	2,585,966
		40.02.121	Overhead Power Trans Facility (? 69kV)	57,440.00	LF	43.45	/LF	2,495,600
		40.02.124	Recycled Water Pipeline, 18" to 24" Dia.	13,500.00	LF	213.20	/LF	2,878,254
		40.02.127	Sewer, Gravity Pipeline, 10" tp 18" Dia.	19,950.00	LF	265.35	/LF	5,293,713
		40.02.128	Sewer, Gravity Pipeline, 21" to 30" Dia.	770.00	LF	1,323.86	/LF	1,019,370

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.03.105	Hazardous Material Removal Allowance, Medium	74.77	RM	471,616.25	/RM	35,262,747
		40.04	Environmental Mitigation (% Calculation)	1.00	LS	272,831,730.00	/LS	272,831,730
		40.05.011A	Retaining Wall - 1 Wall (10' Avg. Height) Type 1 Reinforced Concrete R	6,008.04	LF	3,779.97	/LF	22,710,188
		40.05.013A	Retaining Wall - 1 Wall (20' Avg. Height) Type 1 Reinforced Concrete R	7,289.00	LF	10,471.90	/LF	76,329,643
		40.05.013B	Retaining Wall - 1 Wall (20' Avg. Height) Mechanically Stabilized Embankment	4,919.00	LF	1,971.60	/LF	9,698,305
		40.05.013C	Retaining Wall - 1 Wall (20' Avg. Height) Soil Nail Wall	624.00	LF	1,955.58	/LF	1,220,279
		40.05.014A	Retaining Wall - 1 Wall (30' Avg. Height) Type 1 Reinforced Concrete R	2,030.00	LF	9,510.58	/LF	19,306,469
		40.05.014B	Retaining Wall - 1 Wall (30' Avg. Height) Mechanically Stabilized Embankment	4,664.00	LF	3,345.23	/LF	15,602,129
		40.05.014C	Retaining Wall - 1 Wall (30' Avg. Height) Soil Nail Wall	150.00	LF	2,915.62	/LF	437,343
		40.05.015A	Retaining Wall - 1 Wall (40' Avg. Height) Type 1 Reinforced Concrete R	2,570.00	LF	4,711.83	/LF	12,109,395
		40.05.015B	Retaining Wall - 1 Wall (40' Avg. Height) Mechanically Stabilized Embankment	1,660.00	LF	7,504.36	/LF	12,457,234
		40.05.016B	Retaining Wall - 1 Wall (50' Avg. Height) Mechanically Stabilized Embankment	405.00	LF	7,088.13	/LF	2,870,693
		40.05.016C	Retaining Wall - 1 Wall (50' Avg. Height) Soil Nail Wall	1,475.00	LF	7,869.58	/LF	11,607,636
		40.05.017C	Retaining Wall - 1 Wall (60' Avg. Height) Soil Nail Wall	1,720.00	LF	8,902.72	/LF	15,312,677
		40.05.019	Retaining Wall - 1 Wall (80' Avg. Height) Soil Nail Wall	1,505.00	LF	13,242.20	/LF	19,929,510
		40.05.400	Proposed Box Culvert 10' x 10'	30,153.00	LF	1,986.50	/LF	59,898,935
		40.05.401	Proposed Box Culvert 8' x 4'	54,561.00	LF	803.80	/LF	43,856,132
		40.05.402	Proposed Pipe Culvert 72"	40,557.00	LF	800.00	/LF	32,445,600
		40.05.403	Proposed Pipe Culvert 48"	7,654.00	LF	330.94	/LF	2,533,050
		40.05.404	Proposed Box Culvert 8' x 8'	5,608.00	LF	1,292.15	/LF	7,246,377
		40.05.408	Proposed 10' x 4' Channel in Bridge Structure	615.00	LF	989.35	/LF	608,450
		40.06	Temp Facilities	1.00	LS	333,461,003.00	/LS	333,461,003

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	784,709,208.00	/LS	784,709,208
		40.08.342C	Roadway Overcrossing Track - 2 Lanes - Retained Fill	1.00	EA	2,398,688.10	/EA	2,398,688
		40.08.344A	Roadway Overcrossing HSR - 2 Lanes - Retained Fill	3.00	EA	10,853,305.58	/EA	32,559,917
		40.08.344B	Roadway Overcrossing HSR - 2 Lanes - Embankment	3.00	EA	3,017,748.99	/EA	9,053,247
		40.08.424B	Roadway Overcrossing HSR - 4 Lanes - Embankment	1.00	EA	2,916,473.58	/EA	2,916,474
		40.08.426B	Roadway Overcrossing HSR - 6 Lanes - Retained Fill	2.00	EA	16,618,637.50	/EA	33,237,275
		40.08.426C	Roadway Overcrossing HSR - 6 Lanes - Embankment	3.00	EA	42,447,212.13	/EA	127,341,636
		40.08.426D	Roadway Overcrossing HSR - 8 Lanes - Retained Fill/Embankment	1.00	EA	10,355,028.00	/EA	10,355,028
		40.08.426E	Drainage Overcrossing HSR - Retained Fill/Embankment	1.00	EA	1,828,768.10	/EA	1,828,768
		40.08.426G	Roadway Overcrossing HSR - 4 Lanes - Retained Fill/Embankment	2.00	EA	14,895,862.00	/EA	29,791,724
		50.01.010	Train Controls (ATC) - 2 Track	74.48	RM	1,308,828.00	/RM	97,480,201
		50.01.012	Train Controls (ATC) - 6 Track	1.00	Ea	13,664,800.00	/Ea	13,664,800
		50.01.020	Wayside Protection - 2 Track	74.48	RM	125,280.00	/RM	9,330,854
		50.01.030	Train Control, Wayside Facility Work	89.00	EA	157,711.00	/EA	14,036,279
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	74.48	RM	300,823.00	/RM	22,405,297
		60.02.010	Traction Power, Supply Station Site Work	3.00	EA	895,432.00	/EA	2,686,296
		60.02.020	Traction Power, Switching Station Site Work	4.00	EA	338,822.00	/EA	1,355,288
		60.02.030	Traction Power, Parralleling Station Site Work	11.00	Ea	294,508.00	/Ea	3,239,588
		60.02.100	Traction Power Supply - 2 Tracks	74.48	RM	2,813,061.00	/RM	209,516,783
		60.03.100	Traction Power Distribution - 2 Tracks	74.48	RM	2,457,808.00	/RM	183,057,540
		60.03.200	Traction Power Distribution - Yard	39.02	RM	612,480.00	/RM	23,897,745
		80.00.00	Professional Services	1.00	LS	1,101,509,527.00	/LS	1,101,509,527
		90.00.00	Unallocated Contingency				/LS	473,727,259

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
	02-C		Palmdale Subsection					
		10.01.AA1NB	Steel Truss HSR Viaduct, 1 Track sierra Hwy Northbound platform track	430.00	RF	21,414.67	RF	9,208,309
		10.01.AA1SB	Steel Truss HSR Viaduct, 1 Track sierra Hwy Southbound platform track	430.00	RF	21,414.67	RF	9,208,309
		10.01.AA2	Steel Truss HSR viaduct, 2 tracks Sierra Hwy main tracks	430.00	RF	30,493.76	RF	13,112,315
		10.02.060A-1	Bridge Structure - Two Span Steel Plate Girder Struc w/ Trk for SCRRA	380.00	RF	11,605.09	RF	4,409,933
		10.02.060B-1	Brid Struc - 2 Span steel plate girder w/1 track & 1 future track for	372.00	RF	15,820.63	RF	5,885,276
		10.05.111	At-Grade Track Bed in cut - 1 Track (5'Avg ExcDepth)	0.68	RM	2,300,000.00	RM	1,564,000
		10.05.112	At-Grade Track Bed in cut - 1 Track (10'Avg ExcDepth)	0.78	RM	3,400,000.00	RM	2,652,000
		10.05.113	At-Grade Track Bed in cut - 1 Track (15'Avg ExcDepth)	0.08	RM	6,200,000.00	RM	496,000
		10.05.114	At-Grade Track Bed in cut - 1 Track (20"Avg ExcDepth)	0.25	RM	7,100,000.00	RM	1,775,000
		10.05.115	At-Grade Track Bed in cut - 1 Track (40'Avg ExcDepth)	0.31	RM	20,000,000.00	RM	6,200,000
		10.05.116	At-Grade Track Bed in cut - 1 Track (60'Avg ExcDepth)	0.20	RM	39,000,000.00	RM	7,800,000
		10.05.121	At-Grade Track Bed in cut - 2 Track (5'Avg ExcDepth)	0.66	RM	2,850,000.00	RM	1,881,000
		10.05.122	At-Grade Track Bed in cut - 2 Track (10'Avg ExcDepth)	0.63	RM	4,200,000.00	RM	2,646,000
		10.05.123	At-Grade Track Bed in cut - 2 Track (15'Avg ExcDepth)	0.07	RM	6,200,000.00	RM	434,000
		10.05.124	At-Grade Track Bed in cut - 2 Track (20'Avg ExcDepth)	0.12	RM	8,500,000.00	RM	1,020,000
		10.05.211	At-Grade Track Bed in Fill - 1 Track (5'Avg fill ht)	2.63	RM	1,400,000.00	RM	3,682,000
		10.05.212	At-Grade Track Bed in Fill - 1 Track (10'Avg fill ht)	0.76	RM	2,100,000.00	RM	1,596,000
		10.05.213	At-Grade Track Bed in Fill - 1 Track (15'Avg fill ht)	1.10	RM	3,000,000.00	RM	3,300,000
		10.05.221	At-Grade Track Bed in Fill - 2 Track (5'Avg fill ht)	1.64	RM	2,100,000.00	RM	3,444,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.05.222	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.63	RM	2,900,000.00	RM	1,827,000
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	6.09	RM	1,600,000.00	RM	9,744,000
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	3.75	RM	2,500,000.00	RM	9,375,000
		10.07.114A	Cut & cover LMF Crossing	1,080.00	LF	11,971.28	LF	12,928,982
		10.08.413	Retained Fill, Walls Both Sides - 1 Tracks (30'Avg Wall Ht)	0.85	RM	50,000,000.00	RM	42,500,000
		10.08.500	Retained Fill, Walls Sides - 1 Tracks (12'Avg Wall Ht)	2.25	RM	30,000,000.00	RM	67,500,000
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	6.09	RM	2,100,000.00	RM	12,789,000
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	3.75	RM	3,000,000.00	RM	11,250,000
		10.09.810	Ballasted Freight Track - 1 Track	7.39	RM	1,798,782.14	RM	13,293,000
		10.09.820	Ballasted Freight Track - 2 Track	0.86	RM	3,491,860.47	RM	3,003,000
		10.14.214	Ballated Turnout No. 14	7.00	Ea	500,000.00	Ea	3,500,000
		10.14.220	Ballaste Turnout No. 20	3.00	Ea	600,000.00	Ea	1,800,000
		10.14.224	Ballasted Turnout No 24	1.00	Ea	700,000.00	Ea	700,000
		20.01.245	Palmdale Station	1.00	LS	59,000,000.00	LS	59,000,000
		20.01.246	Palmdale Station Site Elements	1.00	LS	26,000,000.00	LS	26,000,000
		20.06.140	Pedestrian Plaza	50,600.00	sf	38.00	sf	1,922,800
		20.06.160	Pedestrian Access, Vertical Structure, 30' Height	12.00	ea	340,000.00	ea	4,080,000
		20.06.210	Parking, at Grade	3,302.00	stl	3,850.00	stl	12,712,700
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	2,427,137.00	SF	8.96	SF	21,735,012
		20.07.020c	Roadway Modification, New Concrete Curb	42,718.00	lf	20.00	lf	854,360
		20.07.020d	Roadway Modification, New Curb and Gutter	80,498.00	lf	27.00	lf	2,173,446
		20.07.020e	Roadway Modification, Concrte Curb Ramps	109.00	ea	2,000.00	ea	218,000
		20.07.020f	Roadway Modification, New Concrete Sidewalk	857,798.00	sf	5.75	sf	4,932,339

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		20.07.020g	Roadway Modification, New Raised Median	372,923.00	sf	12.00	sf	4,475,076
		20.07.020h	Roadway Modification, New Concrete Barrier	1,874.00	lf	125.00	lf	234,250
		20.07.020i	Roadway Modification, New Traffic Signal	11.00	ea	250,000.00	ea	2,750,000
		20.07.020j	Roadway Modification, New Traffic Signal Modification	2.00	sf	125,000.00	sf	250,000
		20.07.020k	Roadway Modification, New Striping	50,057.00	sf	0.20	sf	10,011
		20.07.020l	Roadway Modification, Striping RPM's	2,870.00	ea	10.00	ea	28,700
		20.07.020m	Street Lighting	487.00	ea	3,000.00	ea	1,461,000
		20.07.020n	Roadway Excavation	2,742,295.00	cy	9.00	cy	24,680,655
		20.07.020o	Roadway Embankment	879,984.00	cy	16.00	cy	14,079,744
		40.01.050	Demolition Allowance, Building	1,420,330.00	SF	16.00	SF	22,725,280
		40.01.110	Demolition Allowance, Asphalt Pavement	281,803.00	SY	60.00	SY	16,908,180
		40.01.110a	Demolition Allowance, Concrete Pavement	3,465.00	sy	44.00	sy	152,460
		40.01.110b	Demolition Allowance, Bikeway AC Pavement	10,346.00	sy	30.00	sy	310,380
		40.01.140	Demolition Allowance, Concrete Curb	11,164.00	lf	13.00	lf	145,132
		40.01.140a	Demolition Allowance, Concrete Curb and Gutter	64,175.00	lf	18.00	lf	1,155,150
		40.01.150	Demolition Allowance, Sidewalk and Raised Medians	44,131.00	sy	50.00	sy	2,206,550
		40.01.810	Demolition Allowance, Remove Railroad Tracks	0.50	RM	195,000.00	RM	97,500
		40.02.106R	Removal of Potable Water Pipeline (10" to 16") 12", 16" Dia	21,300.00	lf	45.00	lf	958,500
		40.02.107R	Removal of Natural Gas Pipeline, 6" Dia	700.00	lf	50.00	lf	35,000
		40.02.107a	Natural Gas Pipeline, 6" Dia	750.00	LF	113.00	LF	84,750
		40.02.116a	Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	21,000.00	LF	120.00	LF	2,520,000
		40.02.117R	Removal of Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	993.00	LF	45.00	LF	44,685
		40.02.117a	Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	1,040.00	LF	170.00	LF	176,800

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.121	Overhead Power Trans Facility (? 69kV)	9,375.00	LF	44.00	LF	412,500
		40.02.121R	Removal of Overhead Power Transmission Facility	8,600.00	LF	40.00	LF	344,000
		40.02.127AR	Removal of Sewer, Gravity Pipeline, (10" to 18" Dia)	17,000.00	LF	83.35	LF	1,417,000
		40.02.127a	Sewer, Gravity Pipeline, (10" to 18" Dia) 8", 10", 12", 15" Dia	15,500.00	LF	265.00	LF	4,107,500
		40.02.128AR	Removal of Sewer, Gravity Pipeline, (21" to 42")	800.00	LF	93.75	LF	75,000
		40.02.128a	Sewer, Gravity Pipeline, (21" to 30" Dia.) 42" Dia	2,600.00	LF	1,300.00	LF	3,380,000
		40.02.XYZ	Misc Utilities	1.00	Is	4,347,080.00	Is	4,347,080
		40.02.XYZR	Remove Telephone Ductbank	4,230.00	If	51.52	If	217,950
		40.04.115	Contractor Environmental Mitigation Allowance, Urban Aerial	1.00	LS	22,101,023.00	LS	22,101,023
		40.05.11	Reinforce Concrete Retaining Wall Type 1 (24'Avg Height, for Roadways)	2,277.00	Is	5,500.00	Is	12,523,500
		40.05.408	Proposed 10' x 4' Channel in Bridge Structure	1,450.00	LF	650.00	LF	942,500
		40.05.XYZ	Misc. Site Structures	1.00	Is	21,140,218.30	Is	21,140,218
		40.06	Temp Facilities	1.00	LS	27,012,362.00	LS	27,012,362
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	232,490,125.20	LS	232,490,125
		40.08.425A	Roadway Crossing - 4 lane - 6 Spans	1.00	LS	20,299,824.46	LS	20,299,824
		40.08.425B	Roadway Overcrossing - 6 lane, 10 shoulders, 8' sidewalks - 5 spans	1.00	LS	37,032,273.42	LS	37,032,273
		40.08.425C	Roadway Overcrossing - 6 lane, 10' shoulders, 8' sidewalks - 1 span	1.00	LS	2,835,380.00	LS	2,835,380
		40.08.501	Pedestrian Overcrossing	3,054.00	If	1,702.69	If	5,200,000
		50.01.010	Train Controls (ATC) - 2 Track	3.75	RM	1,308,828.00	RM	4,908,105
		50.01.020	Wayside Protection - 2 Track	3.75	RM	125,280.00	RM	469,800
		50.01.030	Train Control, Wayside Facility Work	10.00	EA	157,711.00	EA	1,577,110
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	3.75	RM	300,823.00	RM	1,128,086
		60.02.030	Traction Power, Parralleling Station Site Work	1.00	Ea	294,508.00	Ea	294,508

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		60.02.100	Traction Power Supply - 2 Tracks	3.75	RM	2,813,061.00	RM	10,548,979
		60.03.100	Traction Power Distribution - 2 Tracks	3.75	RM	2,457,808.00	RM	9,216,780
		80.00.00	Professional Services	1.00	LS	88,366,793.00	LS	88,366,793
		90.00.00	Unallocated Contingency	1.00	LS	40,660,809.00	LS	40,660,809
	CCNM		Cesar Chavez National Monument (CCNM)	1.00	LS	46,648,683.17	LS	46,648,683
			Alternative 02	83.41	RM	166,872,561.82	/RM	13,918,840,381
3			Alternative 03					
	03-A		Bakersfield to Oswell					
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	0.18	RM	69,300,999.94	RM	12,196,976
		10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht)	0.73	RM	68,784,738.00	RM	50,212,859
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	2.69	RM	82,010,860.80	RM	220,609,216
		10.01.249A	Elevated Structure - 3 Track at Station - 3 Columns (40' Avg. Pier Ht)	0.07	RM	154,427,156.06	RM	10,192,192
		10.01.250A	Elevated Structure - 4 Track at Station - 2 Columns (40' Avg. Pier Ht)	0.32	RM	170,900,904.59	RM	54,688,289
		10.01.255	Elevated Structure - 4 Track at Station 4 Columns (40' Avg. Pier Ht)	0.06	RM	216,262,920.67	RM	12,975,775
		10.01.255A	Elevated Structure - 4 Track at Station - 4 Columns (50' Avg. Pier Ht)	0.20	RM	223,732,872.00	RM	44,746,574
		10.01.255B	Elevated Structure - 5 Track at Station - 3 Columns (40' Avg. Pier Ht)	0.11	RM	261,992,719.06	RM	27,771,228
		10.01.255C	Elevated Structure - 5 Track at Station - 3 Columns (50' Avg. Pier Ht)	0.38	RM	261,943,867.91	RM	99,014,782
		10.01.424	Elevated Structure (LS) - 2 Track (40' Avg. Pier Ht)	0.09	RM	63,570,367.96	RM	5,912,044
		10.01.425	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht)	0.39	RM	68,540,332.56	RM	26,730,730
		10.01.426	Elevated Structure (LS) - 2 Track (60' Avg. Pier Ht)	0.15	RM	76,266,168.00	RM	11,439,925
		10.01.825	Elevated Structure - 2 Track Straddle (50' Avg. Pier Ht)	0.19	RM	112,210,468.47	RM	21,319,989
		10.10.110	Direct Fixation Track - 1 Track	0.19	RM	2,499,572.05	RM	474,919

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.10.120	Direct Fixation Track - 2 Track	4.78	RM	4,998,544.25	RM	23,893,042
		10.10.140	Direct Fixation Track - 4 Track	0.29	RM	10,071,007.55	RM	2,920,592
		10.10.145	Direct Fixation Track - 5 Track	0.59	RM	12,595,135.39	RM	7,431,130
		10.14.105	Direct Fixation Turnout (80 MPH)	2.00	EA	850,000.00	EA	1,700,000
		10.14.110	Direct Fixation Turnout (110 MPH)	2.00	EA	1,000,000.00	EA	2,000,000
		10.14.140	Direct Fixation Crossover (110 MPH)	3.00	EA	2,000,000.00	EA	6,000,000
		10.14.199	Ballasted Turnout (25 MPH)	12.00	EA	210,000.00	EA	2,520,000
		10.14.400	Terminal - Bumping Post	2.00	EA	35,000.00	EA	70,000
		20.02.240A	Bakersfield Station - F St	1.00	LS	120,656,500.00	LS	120,656,500
		20.02.241A	Bakersfield Station - Site Elements - F St	1.00	LS	34,640,392.27	LS	34,640,392
		20.02.249A	Bakersfield Station Parking Structures - F St	1.00	LS	114,400,000.00	LS	114,400,000
		20.07.010	Roadway Modification, New AC Paving	10,790.00	Tons	210.30	Tons	2,269,122
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	36,797.90	Tons	262.04	Tons	9,642,438
		30.04.010	Maintenance of Infrastructure Facility (MOIF)	1.00	EA	20,163,776.00	EA	20,163,776
		40.01.110	Demolition Allowance, Asphalt Pavement	95,100.00	SY	55.25	SY	5,254,275
		40.01.140	Demolition Allowance, Concrete Curb	11,200.00	If	16.85	If	188,720
		40.01.150	Demolition Allowance, Sidewalk and Raised Medians	7,600.00	sy	58.47	sy	444,372
		40.02.005	Utility Relocation Allowance, Level 5 Urban	939,629.00	LF	211.37	LF	198,606,207
		40.02.060	Major Utility Relocation, Aerial Transmission Line	0.39	RM	8,600,000.00	RM	3,354,000
		40.03.105	Hazardous Material Removal Allowance, Medium	5.66	RM	471,866.22	RM	2,670,763
		40.04.115	Contractor Environmental Mitigation Allowance, Urban Aerial	1.00	LS	43,270,978.00	LS	43,270,978
		40.04.200	Retention Basins	52,989.29	cy	43.36	cy	2,297,504
		40.05.006A	Retaining Wall - 1 Wall (6' Avg. Height)	190.00	If	1,710.44	If	324,983
		40.06	Temp Facilities	1.00	LS	52,886,751.00	LS	52,886,751

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	120,000,000.00	LS	120,000,000
		40.08.425A-00	Roadway Overcrossing HSR - SR204/F St Interchange	1.00	Ea	23,102,012.62	Ea	23,102,013
		40.08.425A-00a	F Street	1.00	Ea	7,985,815.65	Ea	7,985,816
		40.08.425A-00b	Chester South	1.00	Ea	1,457,198.74	Ea	1,457,199
		40.08.425A-00c	Chester North	1.00	Ea	982,715.88	Ea	982,716
		40.08.425A-00d	Carrier Canal Bridge (Widen)	1.00	Ea	1,971,162.55	Ea	1,971,163
		40.08.425A-00e	Pedestrian Bridge Over SR 204	1.00	Ea	1,523,843.33	Ea	1,523,843
		40.08.435A	Roadway Overcrossing HSR - Pedestrian Overcrossing - Carrier Canal	1.00	Ea	273,487.79	Ea	273,488
		40.08.435B	Roadway Overcrossing HSR - Pedestrian Overcrossing - F St	1.00	Ea	1,298,034.20	Ea	1,298,034
		40.08.440A	Roadway Overcrossing, 2 lane - 34th St	1.00	Ea	8,113,264.29	Ea	8,113,264
		50.01.010	Train Controls (ATC) - 2 Track	5.66	RM	1,309,521.72	RM	7,411,893
		50.01.020	Wayside Protection - 2 Track	5.66	RM	125,346.40	RM	709,461
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	5.66	RM	300,982.45	RM	1,703,561
		60.02.100	Traction Power Supply - 2 Tracks	5.66	RM	2,814,552.02	RM	15,930,364
		60.03.100	Traction Power Distribution - 2 Tracks	5.66	RM	2,459,110.72	RM	13,918,567
		80.00.00	Professional Services	1.00	LS	170,312,731.00	LS	170,312,731
		90.00.00	Unallocated Contingency	1.00	LS	61,346,194.00	LS	61,346,194
	03-B		Oswell to Palmdale Subsection					
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.30	RM	83,573,695.35	/RM	25,322,830
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.05	RM	140,047,638.22	/RM	6,302,144
		10.01.222A	Elevated Structure - 2 Track (20' Avg. Pier Ht) CIP Box Girder	0.05	RM	139,703,896.89	/RM	6,286,675
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	0.06	RM	142,326,497.54	/RM	8,681,916

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht)	0.06	RM	139,651,075.90	/RM	8,518,716
		10.01.227A	Elevated Structure - 2 Track (120' Avg. Pier Ht)	0.11	RM	186,145,800.82	/RM	20,476,038
		10.01.322A	Elevated Structure (LS) - 1 Track (20' Avg. Pier Ht) CIP Box Girder	0.13	RM	96,559,920.31	/RM	12,456,230
		10.01.323A	Elevated Structure (LS) - 1 Track (30' Avg. Pier Ht) CIP Box Girder	0.24	RM	94,036,892.85	/RM	22,474,817
		10.01.324A	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP Box Girder	0.11	RM	67,026,057.98	/RM	7,640,971
		10.01.324C	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP and PC Box G	0.72	RM	26,048,882.35	/RM	18,755,195
		10.01.325A	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP Box Girder	1.06	RM	66,879,295.08	/RM	71,092,691
		10.01.325B	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP and PC Box G	0.41	RM	50,633,778.06	/RM	20,911,750
		10.01.325C	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP and PC Box G	0.25	RM	26,717,248.94	/RM	6,572,443
		10.01.422A	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht) CIP Box Girder	0.95	RM	79,102,833.80	/RM	75,068,589
		10.01.422B	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht) CIP and PC Box G	0.29	RM	43,072,820.62	/RM	12,577,264
		10.01.423A	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht)	0.08	RM	120,344,059.74	/RM	9,146,149
		10.01.423B	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht) CIP Box Girder	0.31	RM	120,328,679.51	/RM	37,061,233
		10.01.425B	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht) CIP and PC Box G	3.50	RM	40,732,713.53	/RM	142,564,497
		10.01.428A	Elevated Structure (LS) - 2 Track (120' Avg. Pier Ht) CIP and PC Box	1.38	RM	159,656,533.98	/RM	219,527,734
		10.01.429A	Elevated Structure (LS) - 2 Track (140' Avg. Pier Ht) CIP and PC Box	0.28	RM	181,638,600.56	/RM	51,585,363
		10.01.430A	Elevated Structure (LS) - 2 Track (200' Avg. Pier Ht) CIP and PC Box	0.58	RM	296,308,847.78	/RM	172,451,749
		10.02.060C	Bridge Structure (LS) - 2 Track Single Span CIP Box Girder	0.12	RM	157,062,534.70	/RM	18,062,191
		10.05.100B	At-Grade Track Bed - 2 Track (Varying Heights) - Alt3	50.82	RM	36,487,801.39	/RM	1,854,346,554
		10.07.101	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock	1.21	RM	250,289,800.62	/RM	302,850,659

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.07.101A	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock -	4.71	RM	250,289,800.78	/RM	1,178,864,962
		10.07.116A	TBM Double Track Tunnel 40ft ID in soft ground	0.30	RM	405,400,859.03	/RM	121,620,258
		10.07.202	D&B Single Track Twin Tunnel 30ft ID in rock	0.01	RM	140,940,750.00	/RM	1,409,408
		10.07.202A	D&B Single Track Twin Tunnel 30ft ID in rock - Alt 1,2,5 (Tehachapi)	0.02	RM	140,940,750.00	/RM	2,818,815
		10.07.206	TBM Double Track Tunnel 40ft ID in soft ground	2.35	RM	405,400,859.04	/RM	952,692,019
		10.07.216	Cut & Cover Box - 2 Track / 1 Box (60' Avg. Exc Depth)	0.10	RM	257,500,000.00	/RM	25,750,000
		10.07.305	SEM Double Track Tunnel 50ft ID in soft ground	0.99	RM	355,000,000.00	/RM	351,450,000
		10.07.803	Tunnel Portal Structure	11.00	EA	10,250,000.00	/EA	112,750,000
		10.07.803A	Tunnel Portal Structure - Alt 3	4.00	EA	10,250,000.00	/EA	41,000,000
		10.07.901	Mechanical & Electrical Allowance for Underground (Single)	6.00	RM	9,430,000.00	/RM	56,580,000
		10.07.902	Mechanical & Electrical Allowance for Underground (Double)	3.00	RM	18,750,000.00	/RM	56,250,000
		10.09.110	Ballasted Track - 1 Track	11.50	RM	2,092,109.91	/RM	24,059,264
		10.09.120	Ballasted Track - 2 Track	50.70	RM	4,024,626.84	/RM	204,056,630
		10.09.122A	Ballasted Track (On Structure) - 2 Track	3.14	RM	3,553,992.42	/RM	11,152,428
		10.10.120	Direct Fixation Track - 2 Track	21.22	RM	4,294,115.13	/RM	91,116,829
		10.14.200	Ballasted Turnout (60 MPH)	4.00	EA	455,370.00	/EA	1,821,480
		10.14.211	Ballasted #11 Turnout	69.00	EA	150,000.00	/EA	10,350,000
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	841,044.00	/EA	1,682,088
		10.14.305	Ballasted Crossover (80 MPH)	7.00	EA	1,133,792.00	/EA	7,936,544
		10.14.311	Ballasted Scissor Crossover (60 MPH)	2.00	EA	967,200.00	/EA	1,934,400
		20.07.010	Roadway Modification, New AC Paving	4,304,811.90	SF	20.02	/SF	86,173,725
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	6,315,979.00	SF	14.80	/SF	93,463,857
		20.07.710	Permanent Service/Emergency Access Road (22' Wide)	28.47	RM	1,622,907.46	/RM	46,196,061
		30.02.010	Light Maintenance Facility (LMF)	1.00	EA	126,384,397.10	/EA	126,384,397

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		30.04.011	Maintenance of Infrastructure Facility (MOIF)	1.00	EA	38,847,604.80	/EA	38,847,605
		30.04.012	Maintenance of Infrastructure Siding (MOIS)	2.00	EA	941,691.25	/EA	1,883,383
		30.05.110	Ballasted Track - Yard Track	27.54	RM	2,092,155.66	/RM	57,611,690
		30.05.211	Ballasted Turnout, No. 20	5.00	EA	200,000.00	/EA	1,000,000
		40.01.050	Demolition Allowance, Building	2,351,890.00	SF	14.00	/SF	32,926,460
		40.01.110	Demolition Allowance, Asphalt Pavement	1,206,928.00	SY	36.00	/SY	43,449,408
		40.02.100	Groundwater Well	10.00	EA	100,000.00	/EA	1,000,000
		40.02.101	Irrigation Pump Station	2.00	EA	500,000.00	/EA	1,000,000
		40.02.102	Irrigation Reservoir	2.00	EA	200,000.00	/EA	400,000
		40.02.103	Irrigation Water Pipeline, 10" to 15" Dia.	4,100.00	LF	122.63	/LF	502,795
		40.02.104	Irrigation Water Pipeline, 18" to 24" Dia.	3,220.00	LF	176.93	/LF	569,724
		40.02.105	Irrigation Water Pipeline, 27" to 33" Dia.	7,000.00	LF	234.56	/LF	1,641,920
		40.02.106	Irrigation Water Pipeline, 36" to 48" Dia.	6,310.00	LF	363.27	/LF	2,292,259
		40.02.107	Natural Gas Pipeline, 3" to 8" Dia.	44,350.00	LF	113.96	/LF	5,053,993
		40.02.110	Natural Gas Pipeline, 30" to 42" Dia.	21,490.00	LF	290.11	/LF	6,234,528
		40.02.111	Oil Pipeline, 6" to 15" Dia.	2,060.00	LF	111.16	/LF	228,998
		40.02.116	Potable Water Pipeline, 10" to 16" Dia.	71,000.00	LF	118.71	/LF	8,428,197
		40.02.117	Potable Water Pipeline, 18" to 24" Dia.	700.00	LF	170.88	/LF	119,618
		40.02.118	Potable Water Pipeline, 27" to 33" Dia.	3,770.00	LF	238.39	/LF	898,723
		40.02.119	Potable Water Pipeline, 36" to 48" Dia.	6,490.00	LF	398.45	/LF	2,585,966
		40.02.121	Overhead Power Trans Facility (? 69kV)	52,420.00	LF	43.63	/LF	2,287,300
		40.02.124	Recycled Water Pipeline, 18" to 24" Dia.	13,500.00	LF	213.20	/LF	2,878,254
		40.02.127	Sewer, Gravity Pipeline, 10" tp 18" Dia.	19,950.00	LF	265.35	/LF	5,293,713
		40.02.128	Sewer, Gravity Pipeline, 21" to 30" Dia.	1,373.00	LF	1,323.86	/LF	1,817,656
		40.03.105	Hazardous Material Removal Allowance, Medium	74.78	RM	471,616.25	/RM	35,267,463
		40.04	Environmental Mitigation (% Calculation)	1.00	LS	279,534,766.00	/LS	279,534,766

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.05.011A	Retaining Wall - 1 Wall (10' Avg. Height) Type 1 Reinforced Concrete R	6,930.00	LF	3,779.78	/LF	26,193,880
		40.05.013A	Retaining Wall - 1 Wall (20' Avg. Height) Type 1 Reinforced Concrete R	10,967.00	LF	10,471.90	/LF	114,845,272
		40.05.013B	Retaining Wall - 1 Wall (20' Avg. Height) Mechanically Stabilized Emba	3,039.00	LF	1,971.60	/LF	5,991,695
		40.05.013C	Retaining Wall - 1 Wall (20' Avg. Height) Soil Nail Wall	624.00	LF	1,955.58	/LF	1,220,279
		40.05.014A	Retaining Wall - 1 Wall (30' Avg. Height) Type 1 Reinforced Concrete R	2,546.00	LF	7,948.51	/LF	20,236,905
		40.05.014B	Retaining Wall - 1 Wall (30' Avg. Height) Mechanically Stabilized Emba	2,078.00	LF	3,345.23	/LF	6,951,378
		40.05.014C	Retaining Wall - 1 Wall (30' Avg. Height) Soil Nail Wall	150.00	LF	2,915.62	/LF	437,343
		40.05.015A	Retaining Wall - 1 Wall (40' Avg. Height) Type 1 Reinforced Concrete R	2,570.00	LF	4,711.83	/LF	12,109,395
		40.05.015B	Retaining Wall - 1 Wall (40' Avg. Height) Mechanically Stabilized Emba	500.00	LF	7,504.36	/LF	3,752,179
		40.05.016B	Retaining Wall - 1 Wall (50' Avg. Height) Mechanically Stabilized Emba	405.00	LF	7,088.13	/LF	2,870,693
		40.05.016C	Retaining Wall - 1 Wall (50' Avg. Height) Soil Nail Wall	1,475.00	LF	7,869.58	/LF	11,607,636
		40.05.017C	Retaining Wall - 1 Wall (60' Avg. Height) Soil Nail Wall	1,720.00	LF	8,902.72	/LF	15,312,677
		40.05.019	Retaining Wall - 1 Wall (80' Avg. Height) Soil Nail Wall	1,505.00	LF	13,242.20	/LF	19,929,510
		40.05.400	Proposed Box Culvert 10' x 10'	27,236.00	LF	1,986.50	/LF	54,104,314
		40.05.401	Proposed Box Culvert 8' x 4'	52,922.00	LF	803.80	/LF	42,538,704
		40.05.402	Proposed Pipe Culvert 72"	42,632.00	LF	800.00	/LF	34,105,600
		40.05.403	Proposed Pipe Culvert 48"	3,897.00	LF	1,276.65	/LF	4,975,100
		40.05.404	Proposed Box Culvert 8' x 8'	5,608.00	LF	1,292.15	/LF	7,246,377
		40.05.408	Proposed 10' x 4' Channel in Bridge Structure	615.00	LF	989.35	/LF	608,450
		40.06	Temp Facilities	1.00	LS	341,653,602.00	/LS	341,653,602
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	781,999,832.00	/LS	781,999,832
		40.08.342A	Roadway Overcrossing - 2 Lanes - Retained Fill	2.00	EA	3,295,898.45	/EA	6,591,797

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.342B	Roadway Overcrossing - 2 Lanes - Embankment	10.00	EA	14,285,825.80	/EA	142,858,258
		40.08.342C	Roadway Overcrossing Track - 2 Lanes - Retained Fill	1.00	EA	2,398,688.10	/EA	2,398,688
		40.08.344A	Roadway Overcrossing HSR - 2 Lanes - Retained Fill	2.00	EA	10,853,305.58	/EA	21,706,611
		40.08.344B	Roadway Overcrossing HSR - 2 Lanes - Embankment	3.00	EA	3,017,748.99	/EA	9,053,247
		40.08.424B	Roadway Overcrossing HSR - 4 Lanes - Embankment	1.00	EA	2,916,473.58	/EA	2,916,474
		40.08.426B	Roadway Overcrossing HSR - 6 Lanes - Retained Fill	2.00	EA	16,253,887.50	/EA	32,507,775
		40.08.426C	Roadway Overcrossing HSR - 6 Lanes - Embankment	3.00	EA	42,447,212.13	/EA	127,341,636
		40.08.426D	Roadway Overcrossing HSR - 8 Lanes - Retained Fill/Embankment	1.00	EA	10,355,028.00	/EA	10,355,028
		40.08.426E	Drainage Overcrossing HSR - Retained Fill/Embankment	1.00	EA	1,828,768.10	/EA	1,828,768
		40.08.426G	Roadway Overcrossing HSR - 4 Lanes - Retained Fill/Embankment	2.00	EA	14,895,862.00	/EA	29,791,724
		50.01.010	Train Controls (ATC) - 2 Track	74.69	RM	1,308,828.00	/RM	97,749,819
		50.01.012	Train Controls (ATC) - 6 Track	1.00	Ea	13,664,800.00	/Ea	13,664,800
		50.01.020	Wayside Protection - 2 Track	74.69	RM	125,280.00	/RM	9,357,163
		50.01.030	Train Control, Wayside Facility Work	80.00	EA	175,453.49	/EA	14,036,279
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	74.69	RM	300,823.00	/RM	22,468,470
		60.02.010	Traction Power, Supply Station Site Work	3.00	EA	895,432.00	/EA	2,686,296
		60.02.020	Traction Power, Switching Station Site Work	4.00	EA	338,822.00	/EA	1,355,288
		60.02.030	Traction Power, Parralleling Station Site Work	11.00	Ea	294,508.00	/Ea	3,239,588
		60.02.100	Traction Power Supply - 2 Tracks	74.69	RM	2,813,061.00	/RM	210,107,526
		60.03.100	Traction Power Distribution - 2 Tracks	74.69	RM	2,457,808.00	/RM	183,573,680
		60.03.200	Traction Power Distribution - Yard	39.04	RM	612,480.00	/RM	23,909,382
		80.00.00	Professional Services	1.00	LS	1,195,016,035.00	/LS	1,195,016,035
		90.00.00	Unallocated Contingency				/LS	483,627,128

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
	03-C		Palmdale Subsection					
		10.01.AA1NB	Steel Truss HSR Viaduct, 1 Track sierra Hwy Northbound platform track	430.00	RF	21,414.67	RF	9,208,309
		10.01.AA1SB	Steel Truss HSR Viaduct, 1 Track sierra Hwy Southbound platform track	430.00	RF	21,414.67	RF	9,208,309
		10.01.AA2	Steel Truss HSR viaduct, 2 tracks Sierra Hwy main tracks	430.00	RF	30,493.76	RF	13,112,315
		10.02.060A-1	Bridge Structure - Two Span Steel Plate Girder Struc w/ Trk for SCRRA	380.00	RF	11,605.09	RF	4,409,933
		10.02.060B-1	Brid Struc - 2 Span steel plate girder w/1 track & 1 future track for	372.00	RF	15,820.63	RF	5,885,276
		10.05.111	At-Grade Track Bed in cut - 1 Track (5'Avg ExcDepth)	0.68	RM	2,300,000.00	RM	1,564,000
		10.05.112	At-Grade Track Bed in cut - 1 Track (10'Avg ExcDepth)	0.78	RM	3,400,000.00	RM	2,652,000
		10.05.113	At-Grade Track Bed in cut - 1 Track (15'Avg ExcDepth)	0.08	RM	6,200,000.00	RM	496,000
		10.05.114	At-Grade Track Bed in cut - 1 Track (20"Avg ExcDepth)	0.25	RM	7,100,000.00	RM	1,775,000
		10.05.115	At-Grade Track Bed in cut - 1 Track (40'Avg ExcDepth)	0.31	RM	20,000,000.00	RM	6,200,000
		10.05.116	At-Grade Track Bed in cut - 1 Track (60'Avg ExcDepth)	0.20	RM	39,000,000.00	RM	7,800,000
		10.05.121	At-Grade Track Bed in cut - 2 Track (5'Avg ExcDepth)	0.66	RM	2,850,000.00	RM	1,881,000
		10.05.122	At-Grade Track Bed in cut - 2 Track (10'Avg ExcDepth)	0.63	RM	4,200,000.00	RM	2,646,000
		10.05.123	At-Grade Track Bed in cut - 2 Track (15'Avg ExcDepth)	0.07	RM	6,200,000.00	RM	434,000
		10.05.124	At-Grade Track Bed in cut - 2 Track (20'Avg ExcDepth)	0.12	RM	8,500,000.00	RM	1,020,000
		10.05.211	At-Grade Track Bed in Fill - 1 Track (5'Avg fill ht)	2.63	RM	1,400,000.00	RM	3,682,000
		10.05.212	At-Grade Track Bed in Fill - 1 Track (10'Avg fill ht)	0.76	RM	2,100,000.00	RM	1,596,000
		10.05.213	At-Grade Track Bed in Fill - 1 Track (15'Avg fill ht)	1.10	RM	3,000,000.00	RM	3,300,000
		10.05.221	At-Grade Track Bed in Fill - 2 Track (5'Avg fill ht)	1.64	RM	2,100,000.00	RM	3,444,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.05.222	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.63	RM	2,900,000.00	RM	1,827,000
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	6.09	RM	1,600,000.00	RM	9,744,000
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	3.75	RM	2,500,000.00	RM	9,375,000
		10.07.114A	Cut & cover LMF Crossing	1,080.00	LF	11,971.28	LF	12,928,982
		10.08.413	Retained Fill, Walls Both Sides - 1 Tracks (30'Avg Wall Ht)	0.85	RM	50,000,000.00	RM	42,500,000
		10.08.500	Retained Fill, Walls Sides - 1 Tracks (12'Avg Wall Ht)	2.25	RM	30,000,000.00	RM	67,500,000
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	6.09	RM	2,100,000.00	RM	12,789,000
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	3.75	RM	3,000,000.00	RM	11,250,000
		10.09.810	Ballasted Freight Track - 1 Track	7.39	RM	1,798,782.14	RM	13,293,000
		10.09.820	Ballasted Freight Track - 2 Track	0.86	RM	3,491,860.47	RM	3,003,000
		10.14.214	Ballated Turnout No. 14	7.00	Ea	500,000.00	Ea	3,500,000
		10.14.220	Ballaste Turnout No. 20	3.00	Ea	600,000.00	Ea	1,800,000
		10.14.224	Ballasted Turnout No 24	1.00	Ea	700,000.00	Ea	700,000
		20.01.245	Palmdale Station	1.00	LS	59,000,000.00	LS	59,000,000
		20.01.246	Palmdale Station Site Elements	1.00	LS	26,000,000.00	LS	26,000,000
		20.06.140	Pedestrian Plaza	50,600.00	sf	38.00	sf	1,922,800
		20.06.160	Pedestrian Access, Vertical Structure, 30' Height	12.00	ea	340,000.00	ea	4,080,000
		20.06.210	Parking, at Grade	3,302.00	stl	3,850.00	stl	12,712,700
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	2,427,137.00	SF	8.96	SF	21,735,012
		20.07.020c	Roadway Modification, New Concrete Curb	42,718.00	lf	20.00	lf	854,360
		20.07.020d	Roadway Modification, New Curb and Gutter	80,498.00	lf	27.00	lf	2,173,446
		20.07.020e	Roadway Modification, Concrte Curb Ramps	109.00	ea	2,000.00	ea	218,000
		20.07.020f	Roadway Modification, New Concrete Sidewalk	857,798.00	sf	5.75	sf	4,932,339

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		20.07.020g	Roadway Modification, New Raised Median	372,923.00	sf	12.00	sf	4,475,076
		20.07.020h	Roadway Modification, New Concrete Barrier	1,874.00	lf	125.00	lf	234,250
		20.07.020i	Roadway Modification, New Traffic Signal	11.00	ea	250,000.00	ea	2,750,000
		20.07.020j	Roadway Modification, New Traffic Signal Modification	2.00	sf	125,000.00	sf	250,000
		20.07.020k	Roadway Modification, New Striping	50,057.00	sf	0.20	sf	10,011
		20.07.020l	Roadway Modification, Striping RPM's	2,870.00	ea	10.00	ea	28,700
		20.07.020m	Street Lighting	487.00	ea	3,000.00	ea	1,461,000
		20.07.020n	Roadway Excavation	2,742,295.00	cy	9.00	cy	24,680,655
		20.07.020o	Roadway Embankment	879,984.00	cy	16.00	cy	14,079,744
		40.01.050	Demolition Allowance, Building	1,420,330.00	SF	16.00	SF	22,725,280
		40.01.110	Demolition Allowance, Asphalt Pavement	281,803.00	SY	60.00	SY	16,908,180
		40.01.110a	Demolition Allowance, Concrete Pavement	3,465.00	sy	44.00	sy	152,460
		40.01.110b	Demolition Allowance, Bikeway AC Pavement	10,346.00	sy	30.00	sy	310,380
		40.01.140	Demolition Allowance, Concrete Curb	11,164.00	lf	13.00	lf	145,132
		40.01.140a	Demolition Allowance, Concrete Curb and Gutter	64,175.00	lf	18.00	lf	1,155,150
		40.01.150	Demolition Allowance, Sidewalk and Raised Medians	44,131.00	sy	50.00	sy	2,206,550
		40.01.810	Demolition Allowance, Remove Railroad Tracks	0.50	RM	195,000.00	RM	97,500
		40.02.106R	Removal of Potable Water Pipeline (10" to 16") 12", 16" Dia	21,300.00	lf	45.00	lf	958,500
		40.02.107R	Removal of Natural Gas Pipeline, 6" Dia	700.00	lf	50.00	lf	35,000
		40.02.107a	Natural Gas Pipeline, 6" Dia	750.00	LF	113.00	LF	84,750
		40.02.116a	Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	21,000.00	LF	120.00	LF	2,520,000
		40.02.117R	Removal of Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	993.00	LF	45.00	LF	44,685
		40.02.117a	Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	1,040.00	LF	170.00	LF	176,800

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.121	Overhead Power Trans Facility (? 69kV)	9,375.00	LF	44.00	LF	412,500
		40.02.121R	Removal of Overhead Power Transmission Facility	8,600.00	LF	40.00	LF	344,000
		40.02.127AR	Removal of Sewer, Gravity Pipeline, (10" to 18" Dia)	17,000.00	LF	83.35	LF	1,417,000
		40.02.127a	Sewer, Gravity Pipeline, (10" to 18" Dia) 8", 10", 12", 15" Dia	15,500.00	LF	265.00	LF	4,107,500
		40.02.128AR	Removal of Sewer, Gravity Pipeline, (21" to 42")	800.00	LF	93.75	LF	75,000
		40.02.128a	Sewer, Gravity Pipeline, (21" to 30" Dia.) 42" Dia	2,600.00	LF	1,300.00	LF	3,380,000
		40.02.XYZ	Misc Utilities	1.00	Is	4,347,080.00	Is	4,347,080
		40.02.XYZR	Remove Telephone Ductbank	4,230.00	If	51.52	If	217,950
		40.04.115	Contractor Environmental Mitigation Allowance, Urban Aerial	1.00	LS	22,101,023.00	LS	22,101,023
		40.05.11	Reinforce Concrete Retaining Wall Type 1 (24'Avg Height, for Roadways)	2,277.00	Is	5,500.00	Is	12,523,500
		40.05.408	Proposed 10' x 4' Channel in Bridge Structure	1,450.00	LF	650.00	LF	942,500
		40.05.XYZ	Misc. Site Structures	1.00	Is	21,140,218.30	Is	21,140,218
		40.06	Temp Facilities	1.00	LS	27,012,362.00	LS	27,012,362
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	232,490,125.20	LS	232,490,125
		40.08.425A	Roadway Crossing - 4 lane - 6 Spans	1.00	LS	20,299,824.46	LS	20,299,824
		40.08.425B	Roadway Overcrossing - 6 lane, 10 shoulders, 8' sidewalks - 5 spans	1.00	LS	37,032,273.42	LS	37,032,273
		40.08.425C	Roadway Overcrossing - 6 lane, 10' shoulders, 8' sidewalks - 1 span	1.00	LS	2,835,380.00	LS	2,835,380
		40.08.501	Pedestrian Overcrossing	3,054.00	If	1,702.69	If	5,200,000
		50.01.010	Train Controls (ATC) - 2 Track	3.75	RM	1,308,828.00	RM	4,908,105
		50.01.020	Wayside Protection - 2 Track	3.75	RM	125,280.00	RM	469,800
		50.01.030	Train Control, Wayside Facility Work	10.00	EA	157,711.00	EA	1,577,110
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	3.75	RM	300,823.00	RM	1,128,086
		60.02.030	Traction Power, Parralleling Station Site Work	1.00	Ea	294,508.00	Ea	294,508

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		60.02.100	Traction Power Supply - 2 Tracks	3.75	RM	2,813,061.00	RM	10,548,979
		60.03.100	Traction Power Distribution - 2 Tracks	3.75	RM	2,457,808.00	RM	9,216,780
		80.00.00	Professional Services	1.00	LS	88,366,793.00	LS	88,366,793
		90.00.00	Unallocated Contingency	1.00	LS	40,660,809.00	LS	40,660,809
	CCNM		Cesar Chavez National Monument (CCNM)	1.00	LS	46,648,683.17	LS	46,648,683
			03 Alternative 03	83.41	RM	170,508,405.29	/RM	14,222,106,085
5			Alternative 05					
	05-A		Bakersfield to Oswell					
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	0.18	RM	69,300,999.94	RM	12,196,976
		10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht)	0.73	RM	68,784,738.00	RM	50,212,859
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	2.69	RM	82,010,860.80	RM	220,609,216
		10.01.249A	Elevated Structure - 3 Track at Station - 3 Columns (40' Avg. Pier Ht)	0.07	RM	154,427,156.06	RM	10,192,192
		10.01.250A	Elevated Structure - 4 Track at Station - 2 Columns (40' Avg. Pier Ht)	0.32	RM	170,900,904.59	RM	54,688,289
		10.01.255	Elevated Structure - 4 Track at Station 4 Columns (40' Avg. Pier Ht)	0.06	RM	216,262,920.67	RM	12,975,775
		10.01.255A	Elevated Structure - 4 Track at Station - 4 Columns (50' Avg. Pier Ht)	0.20	RM	223,732,872.00	RM	44,746,574
		10.01.255B	Elevated Structure - 5 Track at Station - 3 Columns (40' Avg. Pier Ht)	0.11	RM	261,992,719.06	RM	27,771,228
		10.01.255C	Elevated Structure - 5 Track at Station - 3 Columns (50' Avg. Pier Ht)	0.38	RM	261,943,867.91	RM	99,014,782
		10.01.424	Elevated Structure (LS) - 2 Track (40' Avg. Pier Ht)	0.09	RM	63,570,367.96	RM	5,912,044
		10.01.425	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht)	0.39	RM	68,540,332.56	RM	26,730,730
		10.01.426	Elevated Structure (LS) - 2 Track (60' Avg. Pier Ht)	0.15	RM	76,266,168.00	RM	11,439,925
		10.01.825	Elevated Structure - 2 Track Straddle (50' Avg. Pier Ht)	0.19	RM	112,210,468.47	RM	21,319,989
		10.10.110	Direct Fixation Track - 1 Track	0.19	RM	2,499,572.05	RM	474,919

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.10.120	Direct Fixation Track - 2 Track	4.78	RM	4,998,544.25	RM	23,893,042
		10.10.140	Direct Fixation Track - 4 Track	0.29	RM	10,071,007.55	RM	2,920,592
		10.10.145	Direct Fixation Track - 5 Track	0.59	RM	12,595,135.39	RM	7,431,130
		10.14.105	Direct Fixation Turnout (80 MPH)	2.00	EA	850,000.00	EA	1,700,000
		10.14.110	Direct Fixation Turnout (110 MPH)	2.00	EA	1,000,000.00	EA	2,000,000
		10.14.140	Direct Fixation Crossover (110 MPH)	3.00	EA	2,000,000.00	EA	6,000,000
		10.14.199	Ballasted Turnout (25 MPH)	12.00	EA	210,000.00	EA	2,520,000
		10.14.400	Terminal - Bumping Post	2.00	EA	35,000.00	EA	70,000
		20.02.240A	Bakersfield Station - F St	1.00	LS	120,656,500.00	LS	120,656,500
		20.02.241A	Bakersfield Station - Site Elements - F St	1.00	LS	34,640,392.27	LS	34,640,392
		20.02.249A	Bakersfield Station Parking Structures - F St	1.00	LS	114,400,000.00	LS	114,400,000
		20.07.010	Roadway Modification, New AC Paving	10,790.00	Tons	210.30	Tons	2,269,122
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	36,797.90	Tons	262.04	Tons	9,642,438
		30.04.010	Maintenance of Infrastructure Facility (MOIF)	1.00	EA	20,163,776.00	EA	20,163,776
		40.01.110	Demolition Allowance, Asphalt Pavement	95,100.00	SY	55.25	SY	5,254,275
		40.01.140	Demolition Allowance, Concrete Curb	11,200.00	lf	16.85	lf	188,720
		40.01.150	Demolition Allowance, Sidewalk and Raised Medians	7,600.00	sy	58.47	sy	444,372
		40.02.005	Utility Relocation Allowance, Level 5 Urban	939,629.00	LF	211.37	LF	198,606,207
		40.02.060	Major Utility Relocation, Aerial Transmission Line	0.39	RM	8,600,000.00	RM	3,354,000
		40.03.105	Hazardous Material Removal Allowance, Medium	5.66	RM	471,866.22	RM	2,670,763
		40.04.115	Contractor Environmental Mitigation Allowance, Urban Aerial	1.00	LS	43,270,978.00	LS	43,270,978
		40.04.200	Retention Basins	52,989.29	cy	43.36	cy	2,297,504
		40.05.006A	Retaining Wall - 1 Wall (6' Avg. Height)	190.00	lf	1,710.44	lf	324,983
		40.06	Temp Facilities	1.00	LS	52,886,751.00	LS	52,886,751

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	120,000,000.00	LS	120,000,000
		40.08.425A-00	Roadway Overcrossing HSR - SR204/F St Interchange	1.00	Ea	23,102,012.62	Ea	23,102,013
		40.08.425A-00a	F Street	1.00	Ea	7,985,815.65	Ea	7,985,816
		40.08.425A-00b	Chester South	1.00	Ea	1,457,198.74	Ea	1,457,199
		40.08.425A-00c	Chester North	1.00	Ea	982,715.88	Ea	982,716
		40.08.425A-00d	Carrier Canal Bridge (Widen)	1.00	Ea	1,971,162.55	Ea	1,971,163
		40.08.425A-00e	Pedestrian Bridge Over SR 204	1.00	Ea	1,523,843.33	Ea	1,523,843
		40.08.435A	Roadway Overcrossing HSR - Pedestrian Overcrossing - Carrier Canal	1.00	Ea	273,487.79	Ea	273,488
		40.08.435B	Roadway Overcrossing HSR - Pedestrian Overcrossing - F St	1.00	Ea	1,298,034.20	Ea	1,298,034
		40.08.440A	Roadway Overcrossing, 2 lane - 34th St	1.00	Ea	8,113,264.29	Ea	8,113,264
		50.01.010	Train Controls (ATC) - 2 Track	5.66	RM	1,309,521.72	RM	7,411,893
		50.01.020	Wayside Protection - 2 Track	5.66	RM	125,346.40	RM	709,461
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	5.66	RM	300,982.45	RM	1,703,561
		60.02.100	Traction Power Supply - 2 Tracks	5.66	RM	2,814,552.02	RM	15,930,364
		60.03.100	Traction Power Distribution - 2 Tracks	5.66	RM	2,459,110.72	RM	13,918,567
		80.00.00	Professional Services	1.00	LS	170,312,731.00	LS	170,312,731
		90.00.00	Unallocated Contingency	1.00	LS	61,346,194.00	LS	61,346,194
	05-B		Oswell to Palmdale Subsection					
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.30	RM	83,573,695.35	/RM	25,322,830
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.05	RM	140,047,638.22	/RM	6,302,144
		10.01.222A	Elevated Structure - 2 Track (20' Avg. Pier Ht) CIP Box Girder	0.05	RM	139,703,896.89	/RM	6,286,675
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	0.06	RM	142,326,497.54	/RM	8,681,916

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht)	0.06	RM	139,651,075.90	/RM	8,518,716
		10.01.227A	Elevated Structure - 2 Track (120' Avg. Pier Ht)	0.11	RM	187,853,560.46	/RM	20,476,038
		10.01.322A	Elevated Structure (LS) - 1 Track (20' Avg. Pier Ht) CIP Box Girder	0.23	RM	97,083,438.02	/RM	22,037,940
		10.01.323A	Elevated Structure (LS) - 1 Track (30' Avg. Pier Ht) CIP Box Girder	0.38	RM	93,892,144.64	/RM	35,585,123
		10.01.324A	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP Box Girder	0.36	RM	68,700,047.88	/RM	25,006,817
		10.01.324B	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP and PC Box G	0.59	RM	22,609,041.17	/RM	13,316,725
		10.01.324C	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht) CIP and PC Box G	0.72	RM	26,048,882.35	/RM	18,755,195
		10.01.325A	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP Box Girder	0.17	RM	66,288,707.85	/RM	11,401,658
		10.01.325B	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP and PC Box G	0.47	RM	50,680,775.29	/RM	23,972,007
		10.01.325C	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht) CIP and PC Box G	0.25	RM	26,717,248.94	/RM	6,572,443
		10.01.422A	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht) CIP Box Girder	1.10	RM	79,163,501.71	/RM	86,921,525
		10.01.422B	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht) CIP and PC Box G	0.29	RM	43,072,820.62	/RM	12,577,264
		10.01.423A	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht)	0.08	RM	120,344,059.74	/RM	9,146,149
		10.01.423B	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht) CIP Box Girder	0.17	RM	118,853,227.37	/RM	20,323,902
		10.01.425B	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht) CIP and PC Box G	3.50	RM	40,732,713.53	/RM	142,564,497
		10.01.428A	Elevated Structure (LS) - 2 Track (120' Avg. Pier Ht) CIP and PC Box	1.38	RM	159,656,533.98	/RM	219,527,734
		10.01.429A	Elevated Structure (LS) - 2 Track (140' Avg. Pier Ht) CIP and PC Box	0.28	RM	181,638,600.56	/RM	51,585,363
		10.01.430A	Elevated Structure (LS) - 2 Track (200' Avg. Pier Ht) CIP and PC Box	0.59	RM	294,789,315.23	/RM	172,451,749
		10.02.060B	Bridge Structure (LS) - 1 Track Single Span CIP Box Girder	0.11	RM	137,327,008.00	/RM	15,105,971
		10.02.060C	Bridge Structure (LS) - 2 Track Single Span CIP Box Girder	0.12	RM	157,062,534.70	/RM	18,062,191

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.05.100C	At-Grade Track Bed - 2 Track (Varying Heights) - Alt5	50.80	RM	33,843,772.86	/RM	1,719,399,036
		10.07.101	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock	1.21	RM	250,289,800.62	/RM	302,850,659
		10.07.101A	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock -	4.16	RM	250,289,800.78	/RM	1,041,205,571
		10.07.202	D&B Single Track Twin Tunnel 30ft ID in rock	0.01	RM	140,940,750.00	/RM	1,409,408
		10.07.202A	D&B Single Track Twin Tunnel 30ft ID in rock - Alt 1,2,5 (Tehachapi)	0.01	RM	140,940,750.00	/RM	1,409,408
		10.07.206	TBM Double Track Tunnel 40ft ID in soft ground	2.35	RM	405,400,859.04	/RM	952,692,019
		10.07.216	Cut & Cover Box - 2 Track / 1 Box (60' Avg. Exc Depth)	0.10	RM	257,500,000.00	/RM	25,750,000
		10.07.305	SEM Double Track Tunnel 50ft ID in soft ground	0.99	RM	355,000,000.00	/RM	351,450,000
		10.07.803	Tunnel Portal Structure	11.00	EA	10,250,000.00	/EA	112,750,000
		10.07.803A	Tunnel Portal Structure - Alt 3	4.00	EA	10,250,000.00	/EA	41,000,000
		10.07.901	Mechanical & Electrical Allowance for Underground (Single)	6.00	RM	9,430,000.00	/RM	56,580,000
		10.09.110	Ballasted Track - 1 Track	11.47	RM	2,077,511.68	/RM	23,818,671
		10.09.120	Ballasted Track - 2 Track	51.73	RM	4,024,648.85	/RM	208,178,986
		10.09.122A	Ballasted Track (On Structure) - 2 Track	3.14	RM	3,553,992.42	/RM	11,152,428
		10.10.120	Direct Fixation Track - 2 Track	20.63	RM	4,241,384.34	/RM	87,508,242
		10.14.200	Ballasted Turnout (60 MPH)	4.00	EA	455,370.00	/EA	1,821,480
		10.14.211	Ballasted #11 Turnout	69.00	EA	150,000.00	/EA	10,350,000
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	841,044.00	/EA	1,682,088
		10.14.305	Ballasted Crossover (80 MPH)	7.00	EA	1,133,792.00	/EA	7,936,544
		10.14.311	Ballasted Scissor Crossover (60 MPH)	2.00	EA	967,200.00	/EA	1,934,400
		20.07.010	Roadway Modification, New AC Paving	4,453,188.00	SF	20.02	/SF	89,143,917
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	7,308,984.00	SF	14.80	/SF	108,158,345
		20.07.710	Permanent Service/Emergency Access Road (22' Wide)	27.89	RM	1,623,308.98	/RM	45,270,841
		30.02.010	Light Maintenance Facility (LMF)	1.00	EA	126,384,397.10	/EA	126,384,397

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		30.04.011	Maintenance of Infrastructure Facility (MOIF)	1.00	EA	38,847,604.80	/EA	38,847,605
		30.04.012	Maintenance of Infrastructure Siding (MOIS)	2.00	EA	941,691.25	/EA	1,883,383
		30.05.110	Ballasted Track - Yard Track	27.54	RM	2,092,155.66	/RM	57,611,690
		30.05.211	Ballasted Turnout, No. 20	5.00	EA	200,000.00	/EA	1,000,000
		40.01.010	Demolition Allowance, Bridge	64,327.00	SF	29.00	/SF	1,865,483
		40.01.050	Demolition Allowance, Building	2,260,784.00	SF	14.00	/SF	31,650,976
		40.01.110	Demolition Allowance, Asphalt Pavement	1,340,296.00	SY	36.00	/SY	48,250,656
		40.02.100	Groundwater Well	9.00	EA	100,000.00	/EA	900,000
		40.02.101	Irrigation Pump Station	2.00	EA	500,000.00	/EA	1,000,000
		40.02.102	Irrigation Reservoir	2.00	EA	200,000.00	/EA	400,000
		40.02.103	Irrigation Water Pipeline, 10" to 15" Dia.	4,100.00	LF	122.63	/LF	502,795
		40.02.104	Irrigation Water Pipeline, 18" to 24" Dia.	3,220.00	LF	176.93	/LF	569,724
		40.02.105	Irrigation Water Pipeline, 27" to 33" Dia.	7,000.00	LF	234.56	/LF	1,641,920
		40.02.106	Irrigation Water Pipeline, 36" to 48" Dia.	6,310.00	LF	363.27	/LF	2,292,259
		40.02.107	Natural Gas Pipeline, 3" to 8" Dia.	50,230.00	LF	113.96	/LF	5,724,060
		40.02.110	Natural Gas Pipeline, 30" to 42" Dia.	18,910.00	LF	290.11	/LF	5,486,037
		40.02.111	Oil Pipeline, 6" to 15" Dia.	2,060.00	LF	111.16	/LF	228,998
		40.02.116	Potable Water Pipeline, 10" to 16" Dia.	78,550.00	LF	118.71	/LF	9,324,435
		40.02.117	Potable Water Pipeline, 18" to 24" Dia.	910.00	LF	170.88	/LF	155,504
		40.02.118	Potable Water Pipeline, 27" to 33" Dia.	3,370.00	LF	238.39	/LF	803,368
		40.02.119	Potable Water Pipeline, 36" to 48" Dia.	7,500.00	LF	398.45	/LF	2,988,405
		40.02.121	Overhead Power Trans Facility (? 69kV)	54,780.00	LF	43.44	/LF	2,379,700
		40.02.124	Recycled Water Pipeline, 18" to 24" Dia.	10,900.00	LF	213.20	/LF	2,323,924
		40.02.127	Sewer, Gravity Pipeline, 10" tp 18" Dia.	23,280.00	LF	265.35	/LF	6,177,325
		40.02.128	Sewer, Gravity Pipeline, 21" to 30" Dia.	1,323.00	LF	1,323.86	/LF	1,751,463
		40.03.105	Hazardous Material Removal Allowance, Medium	74.77	RM	471,616.25	/RM	35,262,747
		40.04	Environmental Mitigation (% Calculation)	1.00	LS	261,613,866.00	/LS	261,613,866

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.05.011A	Retaining Wall - 1 Wall (10' Avg. Height) Type 1 Reinforced Concrete R	6,574.66	LF	3,779.97	/LF	24,851,992
		40.05.013A	Retaining Wall - 1 Wall (20' Avg. Height) Type 1 Reinforced Concrete R	3,678.00	LF	10,471.90	/LF	38,515,630
		40.05.013B	Retaining Wall - 1 Wall (20' Avg. Height) Mechanically Stabilized Emba	3,654.00	LF	1,971.60	/LF	7,204,230
		40.05.014A	Retaining Wall - 1 Wall (30' Avg. Height) Type 1 Reinforced Concrete R	516.00	LF	32,124.94	/LF	16,576,468
		40.05.014B	Retaining Wall - 1 Wall (30' Avg. Height) Mechanically Stabilized Emba	2,199.00	LF	3,345.23	/LF	7,356,150
		40.05.015B	Retaining Wall - 1 Wall (40' Avg. Height) Mechanically Stabilized Emba	500.00	LF	7,504.36	/LF	3,752,179
		40.05.016B	Retaining Wall - 1 Wall (50' Avg. Height) Mechanically Stabilized Emba	405.00	LF	7,088.13	/LF	2,870,693
		40.05.016C	Retaining Wall - 1 Wall (50' Avg. Height) Soil Nail Wall	1,475.00	LF	7,869.58	/LF	11,607,636
		40.05.017C	Retaining Wall - 1 Wall (60' Avg. Height) Soil Nail Wall	1,720.00	LF	8,902.72	/LF	15,312,677
		40.05.019	Retaining Wall - 1 Wall (80' Avg. Height) Soil Nail Wall	1,505.00	LF	13,242.20	/LF	19,929,510
		40.05.400	Proposed Box Culvert 10' x 10'	30,051.00	LF	1,986.50	/LF	59,696,312
		40.05.401	Proposed Box Culvert 8' x 4'	53,670.00	LF	803.80	/LF	43,139,946
		40.05.402	Proposed Pipe Culvert 72"	42,632.00	LF	800.00	/LF	34,105,600
		40.05.403	Proposed Pipe Culvert 48"	7,654.00	LF	650.00	/LF	4,975,100
		40.05.404	Proposed Box Culvert 8' x 8'	5,608.00	LF	1,292.15	/LF	7,246,377
		40.05.408	Proposed 10' x 4' Channel in Bridge Structure	695.00	LF	989.35	/LF	687,598
		40.06	Temp Facilities	1.00	LS	319,750,280.00	/LS	319,750,280
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	743,437,781.00	/LS	743,437,781
		40.08.342A	Roadway Overcrossing - 2 Lanes - Retained Fill	2.00	EA	3,295,898.45	/EA	6,591,797
		40.08.342B	Roadway Overcrossing - 2 Lanes - Embankment	10.00	EA	14,285,825.80	/EA	142,858,258
		40.08.344A	Roadway Overcrossing HSR - 2 Lanes - Retained Fill	3.00	EA	10,853,305.58	/EA	32,559,917
		40.08.344B	Roadway Overcrossing HSR - 2 Lanes - Embankment	3.00	EA	3,017,748.99	/EA	9,053,247

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.422A	Roadway Overcrossing HSR - 2 Lanes - Retained Fill/Embankment	1.00	EA	3,327,015.45	/EA	3,327,015
		40.08.424B	Roadway Overcrossing HSR - 4 Lanes - Embankment	1.00	EA	2,916,473.58	/EA	2,916,474
		40.08.426B	Roadway Overcrossing HSR - 6 Lanes - Retained Fill	1.00	EA	16,618,637.50	/EA	16,618,638
		40.08.426C	Roadway Overcrossing HSR - 6 Lanes - Embankment	3.00	EA	42,447,212.13	/EA	127,341,636
		40.08.426D	Roadway Overcrossing HSR - 8 Lanes - Retained Fill/Embankment	1.00	EA	10,355,028.00	/EA	10,355,028
		40.08.426E	Drainage Overcrossing HSR - Retained Fill/Embankment	1.00	EA	1,828,768.10	/EA	1,828,768
		40.08.426F	Roadway Overcrossing HSR - 6 Lanes - Retained Fill/Embankment	1.00	EA	14,619,762.00	/EA	14,619,762
		40.08.426G	Roadway Overcrossing HSR - 4 Lanes - Retained Fill/Embankment	2.00	EA	14,895,862.00	/EA	29,791,724
		50.01.010	Train Controls (ATC) - 2 Track	74.67	RM	1,308,828.00	/RM	97,727,569
		50.01.012	Train Controls (ATC) - 6 Track	1.00	Ea	13,664,800.00	/Ea	13,664,800
		50.01.020	Wayside Protection - 2 Track	74.67	RM	125,280.00	/RM	9,354,658
		50.01.030	Train Control, Wayside Facility Work	89.00	EA	157,711.00	/EA	14,036,279
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	74.67	RM	300,823.00	/RM	22,462,453
		60.02.010	Traction Power, Supply Station Site Work	3.00	EA	895,432.00	/EA	2,686,296
		60.02.020	Traction Power, Switching Station Site Work	4.00	EA	338,822.00	/EA	1,355,288
		60.02.030	Traction Power, Parralleling Station Site Work	11.00	Ea	294,508.00	/Ea	3,239,588
		60.02.100	Traction Power Supply - 2 Tracks	74.67	RM	2,813,061.00	/RM	210,051,265
		60.03.100	Traction Power Distribution - 2 Tracks	74.67	RM	2,457,808.00	/RM	183,524,523
		60.03.200	Traction Power Distribution - Yard	39.04	RM	612,480.00	/RM	23,909,382
		80.00.00	Professional Services	1.00	LS	1,059,623,630.00	/LS	1,059,623,630
		90.00.00	Unallocated Contingency				/LS	455,059,767
	05-C		Palmdale Subsection					

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.AA1NB	Steel Truss HSR Viaduct, 1 Track sierra Hwy Northbound platform track	430.00	RF	21,414.67	RF	9,208,309
		10.01.AA1SB	Steel Truss HSR Viaduct, 1 Track sierra Hwy Southbound platform track	430.00	RF	21,414.67	RF	9,208,309
		10.01.AA2	Steel Truss HSR viaduct, 2 tracks Sierra Hwy main tracks	430.00	RF	30,493.76	RF	13,112,315
		10.02.060A-1	Bridge Structure - Two Span Steel Plate Girder Struc w/ Trk for SCRRRA	380.00	RF	11,605.09	RF	4,409,933
		10.02.060B-1	Brid Struc - 2 Span steel plate girder w/1 track & 1 future track for	372.00	RF	15,820.63	RF	5,885,276
		10.05.111	At-Grade Track Bed in cut - 1 Track (5'Avg ExcDepth)	0.68	RM	2,300,000.00	RM	1,564,000
		10.05.112	At-Grade Track Bed in cut - 1 Track (10'Avg ExcDepth)	0.78	RM	3,400,000.00	RM	2,652,000
		10.05.113	At-Grade Track Bed in cut - 1 Track (15'Avg ExcDepth)	0.08	RM	6,200,000.00	RM	496,000
		10.05.114	At-Grade Track Bed in cut - 1 Track (20"Avg ExcDepth)	0.25	RM	7,100,000.00	RM	1,775,000
		10.05.115	At-Grade Track Bed in cut - 1 Track (40'Avg ExcDepth)	0.31	RM	20,000,000.00	RM	6,200,000
		10.05.116	At-Grade Track Bed in cut - 1 Track (60'Avg ExcDepth)	0.20	RM	39,000,000.00	RM	7,800,000
		10.05.121	At-Grade Track Bed in cut - 2 Track (5'Avg ExcDepth)	0.66	RM	2,850,000.00	RM	1,881,000
		10.05.122	At-Grade Track Bed in cut - 2 Track (10'Avg ExcDepth)	0.63	RM	4,200,000.00	RM	2,646,000
		10.05.123	At-Grade Track Bed in cut - 2 Track (15'Avg ExcDepth)	0.07	RM	6,200,000.00	RM	434,000
		10.05.124	At-Grade Track Bed in cut - 2 Track (20'Avg ExcDepth)	0.12	RM	8,500,000.00	RM	1,020,000
		10.05.211	At-Grade Track Bed in Fill - 1 Track (5'Avg fill ht)	2.63	RM	1,400,000.00	RM	3,682,000
		10.05.212	At-Grade Track Bed in Fill - 1 Track (10'Avg fill ht)	0.76	RM	2,100,000.00	RM	1,596,000
		10.05.213	At-Grade Track Bed in Fill - 1 Track (15'Avg fill ht)	1.10	RM	3,000,000.00	RM	3,300,000
		10.05.221	At-Grade Track Bed in Fill - 2 Track (5'Avg fill ht)	1.64	RM	2,100,000.00	RM	3,444,000
		10.05.222	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.63	RM	2,900,000.00	RM	1,827,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	6.09	RM	1,600,000.00	RM	9,744,000
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	3.75	RM	2,500,000.00	RM	9,375,000
		10.07.114A	Cut & cover LMF Crossing	1,080.00	LF	11,971.28	LF	12,928,982
		10.08.413	Retained Fill, Walls Both Sides - 1 Tracks (30'Avg Wall Ht)	0.85	RM	50,000,000.00	RM	42,500,000
		10.08.500	Retained Fill, Walls Sides - 1 Tracks (12'Avg Wall Ht)	2.25	RM	30,000,000.00	RM	67,500,000
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	6.09	RM	2,100,000.00	RM	12,789,000
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	3.75	RM	3,000,000.00	RM	11,250,000
		10.09.810	Ballasted Freight Track - 1 Track	7.39	RM	1,798,782.14	RM	13,293,000
		10.09.820	Ballasted Freight Track - 2 Track	0.86	RM	3,491,860.47	RM	3,003,000
		10.14.214	Ballated Turnout No. 14	7.00	Ea	500,000.00	Ea	3,500,000
		10.14.220	Ballaste Turnout No. 20	3.00	Ea	600,000.00	Ea	1,800,000
		10.14.224	Ballasted Turnout No 24	1.00	Ea	700,000.00	Ea	700,000
		20.01.245	Palmdale Station	1.00	LS	59,000,000.00	LS	59,000,000
		20.01.246	Palmdale Station Site Elements	1.00	LS	26,000,000.00	LS	26,000,000
		20.06.140	Pedestrian Plaza	50,600.00	sf	38.00	sf	1,922,800
		20.06.160	Pedestrian Access, Vertical Structure, 30' Height	12.00	ea	340,000.00	ea	4,080,000
		20.06.210	Parking, at Grade	3,302.00	stl	3,850.00	stl	12,712,700
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	2,427,137.00	SF	8.96	SF	21,735,012
		20.07.020c	Roadway Modification, New Concrete Curb	42,718.00	lf	20.00	lf	854,360
		20.07.020d	Roadway Modification, New Curb and Gutter	80,498.00	lf	27.00	lf	2,173,446
		20.07.020e	Roadway Modification, Concrte Curb Ramps	109.00	ea	2,000.00	ea	218,000
		20.07.020f	Roadway Modification, New Concrete Sidewalk	857,798.00	sf	5.75	sf	4,932,339
		20.07.020g	Roadway Modification, New Raised Median	372,923.00	sf	12.00	sf	4,475,076

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		20.07.020h	Roadway Modification, New Concrete Barrier	1,874.00	lf	125.00	lf	234,250
		20.07.020i	Roadway Modification, New Traffic Signal	11.00	ea	250,000.00	ea	2,750,000
		20.07.020j	Roadway Modification, New Traffic Signal Modification	2.00	sf	125,000.00	sf	250,000
		20.07.020k	Roadway Modification, New Striping	50,057.00	sf	0.20	sf	10,011
		20.07.020l	Roadway Modification, Striping RPM's	2,870.00	ea	10.00	ea	28,700
		20.07.020m	Street Lighting	487.00	ea	3,000.00	ea	1,461,000
		20.07.020n	Roadway Excavation	2,742,295.00	cy	9.00	cy	24,680,655
		20.07.020o	Roadway Embankment	879,984.00	cy	16.00	cy	14,079,744
		40.01.050	Demolition Allowance, Building	1,420,330.00	SF	16.00	SF	22,725,280
		40.01.110	Demolition Allowance, Asphalt Pavement	281,803.00	SY	60.00	SY	16,908,180
		40.01.110a	Demolition Allowance, Concrete Pavement	3,465.00	sy	44.00	sy	152,460
		40.01.110b	Demolition Allowance, Bikeway AC Pavement	10,346.00	sy	30.00	sy	310,380
		40.01.140	Demolition Allowance, Concrete Curb	11,164.00	lf	13.00	lf	145,132
		40.01.140a	Demolition Allowance, Concrete Curb and Gutter	64,175.00	lf	18.00	lf	1,155,150
		40.01.150	Demolition Allowance, Sidewalk and Raised Medians	44,131.00	sy	50.00	sy	2,206,550
		40.01.810	Demolition Allowance, Remove Railroad Tracks	0.50	RM	195,000.00	RM	97,500
		40.02.106R	Removal of Potable Water Pipeline (10" to 16") 12", 16" Dia	21,300.00	lf	45.00	lf	958,500
		40.02.107R	Removal of Natural Gas Pipeline, 6" Dia	700.00	lf	50.00	lf	35,000
		40.02.107a	Natural Gas Pipeline, 6" Dia	750.00	LF	113.00	LF	84,750
		40.02.116a	Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	21,000.00	LF	120.00	LF	2,520,000
		40.02.117R	Removal of Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	993.00	LF	45.00	LF	44,685
		40.02.117a	Potable Water Pipeline, (18" to 24" Dia.) 20" Dia	1,040.00	LF	170.00	LF	176,800
		40.02.121	Overhead Power Trans Facility (? 69kV)	9,375.00	LF	44.00	LF	412,500

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.121R	Removal of Overhead Power Transmission Facility	8,600.00	LF	40.00	LF	344,000
		40.02.127AR	Removal of Sewer, Gravity Pipeline, (10" to 18" Dia)	17,000.00	LF	83.35	LF	1,417,000
		40.02.127a	Sewer, Gravity Pipeline, (10" to 18" Dia) 8", 10", 12", 15" Dia	15,500.00	LF	265.00	LF	4,107,500
		40.02.128AR	Removal of Sewer, Gravity Pipeline, (21" to 42")	800.00	LF	93.75	LF	75,000
		40.02.128a	Sewer, Gravity Pipeline, (21" to 30" Dia.) 42" Dia	2,600.00	LF	1,300.00	LF	3,380,000
		40.02.XYZ	Misc Utilities	1.00	Is	4,347,080.00	Is	4,347,080
		40.02.XYZR	Remove Telephone Ductbank	4,230.00	If	51.52	If	217,950
		40.04.115	Contractor Environmental Mitigation Allowance, Urban Aerial	1.00	LS	22,101,023.00	LS	22,101,023
		40.05.11	Reinforce Concrete Retaining Wall Type 1 (24'Avg Height, for Roadways)	2,277.00	Is	5,500.00	Is	12,523,500
		40.05.408	Proposed 10' x 4' Channel in Bridge Structure	1,450.00	LF	650.00	LF	942,500
		40.05.XYZ	Misc. Site Structures	1.00	Is	21,140,218.30	Is	21,140,218
		40.06	Temp Facilities	1.00	LS	27,012,362.00	LS	27,012,362
		40.07	Right of Way Purchase (From Regional Consultant)	1.00	LS	232,490,125.20	LS	232,490,125
		40.08.425A	Roadway Crossing - 4 lane - 6 Spans	1.00	LS	20,299,824.46	LS	20,299,824
		40.08.425B	Roadway Overcrossing - 6 lane, 10 shoulders, 8' sidewalks - 5 spans	1.00	LS	37,032,273.42	LS	37,032,273
		40.08.425C	Roadway Overcrossing - 6 lane, 10' shoulders, 8' sidewalks - 1 span	1.00	LS	2,835,380.00	LS	2,835,380
		40.08.501	Pedestrian Overcrossing	3,054.00	If	1,702.69	If	5,200,000
		50.01.010	Train Controls (ATC) - 2 Track	3.75	RM	1,308,828.00	RM	4,908,105
		50.01.020	Wayside Protection - 2 Track	3.75	RM	125,280.00	RM	469,800
		50.01.030	Train Control, Wayside Facility Work	10.00	EA	157,711.00	EA	1,577,110
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	3.75	RM	300,823.00	RM	1,128,086
		60.02.030	Traction Power, Parralleling Station Site Work	1.00	Ea	294,508.00	Ea	294,508
		60.02.100	Traction Power Supply - 2 Tracks	3.75	RM	2,813,061.00	RM	10,548,979

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		60.03.100	Traction Power Distribution - 2 Tracks	3.75	RM	2,457,808.00	RM	9,216,780
		80.00.00	Professional Services	1.00	LS	88,366,793.00	LS	88,366,793
		90.00.00	Unallocated Contingency	1.00	LS	40,660,809.00	LS	40,660,809
	CCNM		Cesar Chavez National Monument (CCNM)	1.00	LS	46,648,683.17	LS	46,648,683
			05 Alternative 05	83.41	RM	161,633,150.44	/RM	13,481,821,078

Detail Cost Budget Data (By Major Task)

ALT	SCC-Major	Description	Grand Total
01		Alternative 01	
	10.00	Track Structure & Track	6,984,190,273
	20.00	Stations, Terminal, Intermodal	691,182,552
	30.00	Support Facilities, Yards, and Shops	245,890,851
	40.00	Sitework, Right of Way, Land, Existing Conditions	3,226,203,336
	50.00	Communications & Signaling	175,360,658
	60.00	Electric Traction	475,286,607
	80.00	Professional Services	1,358,748,533
	90.00	Unallocated Contingency	569,066,806
		01 Alternative 01	13,725,929,616
02		Alternative 02	
	10.00	Track Structure & Track	7,383,385,032
	20.00	Stations, Terminal, Intermodal	627,481,423
	30.00	Support Facilities, Yards, and Shops	245,890,851
	40.00	Sitework, Right of Way, Land, Existing Conditions	3,070,567,082
	50.00	Communications & Signaling	174,825,447
	60.00	Electric Traction	473,662,438
	80.00	Professional Services	1,365,159,337
	90.00	Unallocated Contingency	577,868,772
		02 Alternative 02	13,918,840,382
03		Alternative 03	
	10.00	Track Structure & Track	7,336,156,772
	20.00	Stations, Terminal, Intermodal	689,040,188
	30.00	Support Facilities, Yards, and Shops	245,890,851
	40.00	Sitework, Right of Way, Land, Existing Conditions	3,254,618,286
	50.00	Communications & Signaling	175,184,547
	60.00	Electric Traction	474,780,957
	80.00	Professional Services	1,458,665,845
	90.00	Unallocated Contingency	587,768,641
		03 Alternative 03	14,222,106,087
05		Alternative 05	
	10.00	Track Structure & Track	6,891,508,761
	20.00	Stations, Terminal, Intermodal	705,779,649
	30.00	Support Facilities, Yards, and Shops	245,890,851
	40.00	Sitework, Right of Way, Land, Existing Conditions	3,106,337,782
	50.00	Communications & Signaling	175,153,775
	60.00	Electric Traction	474,675,540
	80.00	Professional Services	1,323,273,440
	90.00	Unallocated Contingency	559,201,280
		05 Alternative 05	13,481,821,078
		Notes:	
		Costs above are all inclusive Bakersfield Station to Palmdale Station including Cesar Chavez National Monument (CCNM)	

APPENDIX D LIST OF DOCUMENTS

The following documents were provided.

- 11_EEPB-SEN-TK04-RE-0008_REV00_Draft PEPD TVS Concept Report
- BP_TYLI_DrPEPD_BakersfieldSet_WBS_4.9.6_2016-09-07
- BP_TYLI_DrPEPD_BOQ_Report_2016-09-07
- BP_TYLI_DrPEPDBridges_ElevStrucDwg_Rd_Tr_WBS_4.9.6_2016-09-07
- BP_TYLI_DrPEPDExistStructuresRpt_WBS_4.9.6_2016-09-07
- BP_TYLI_DrPEPDMOW_WBS_4.9.6_MaintenanceFacilities_2016-09-07
- BP_TYLI_DrPEPD_ROWRequirementsRpt_WBS_4.9.6_2016-09-07
- BP_TYLI_4thDrPEPD_UPE Codes_Backup_QtysSumm_WBS_4.9.6_2016-12-14
- BP_TYLI_4thDrTrkQty_WBS_4.9.6_2016-12-14
- FBLGA_TYLI_Master_UPE_Summary_FsttoOswell_WBS_4.9.6
- EEPB-SEN-TK04-RE-0007_Rev00_Palmdale_BOQ_Report

Cesar Chavez National Monument (CCNM)

- Chavez Center Area with HSR alignments
- CCNM Quantities_2018-0829