

APPENDIX 6-A: SAN JOSE TO MERCED PROJECT SECTION: PEPD RECORD SET CAPITAL COST ESTIMATE REPORT

California High Speed Rail Authority

San Jose to Merced Project Section

PEPD Record Set Capital Cost Estimate Report

December 2021

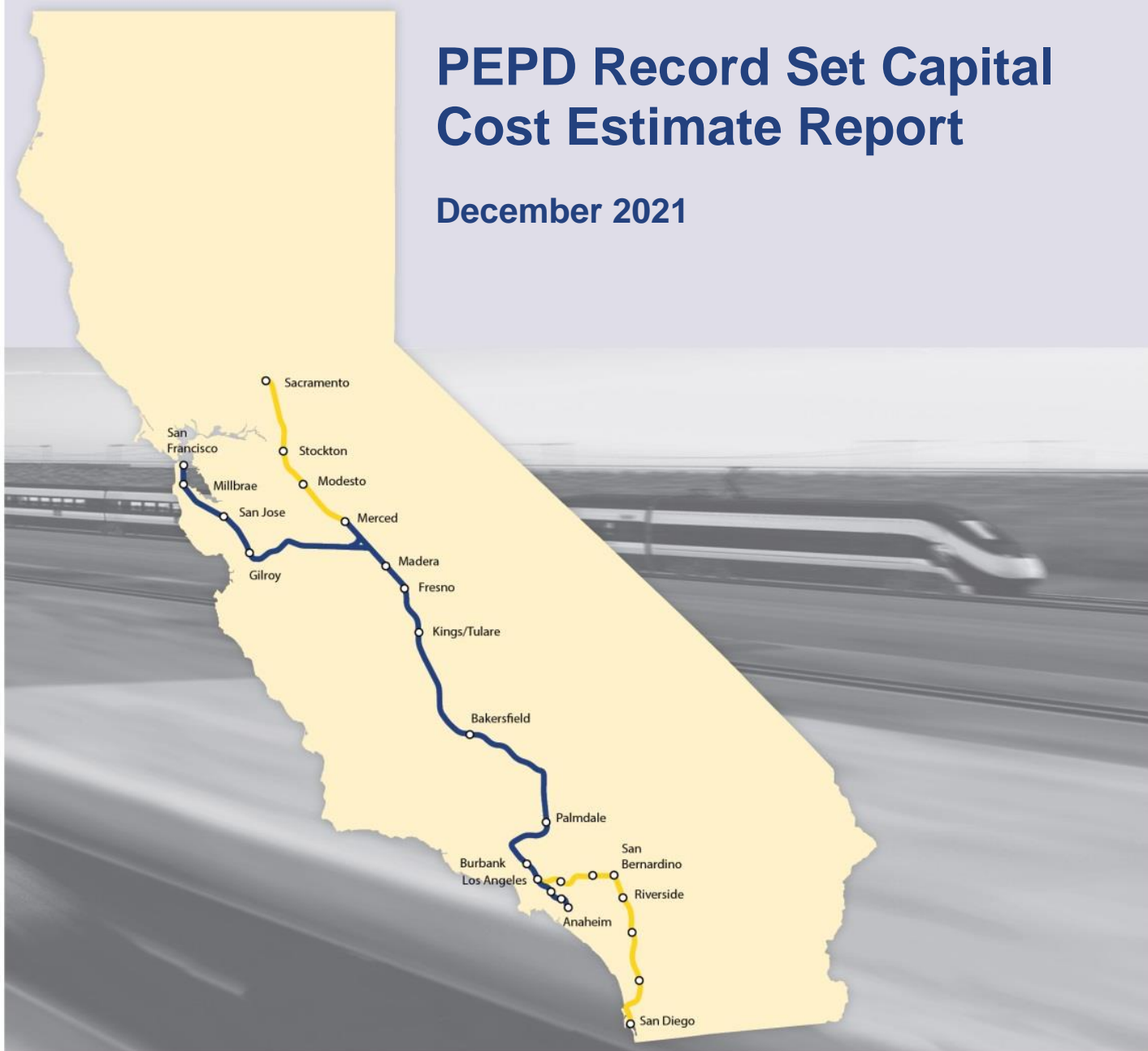


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1.0 INTRODUCTION

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) San Jose to Merced 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 San Jose to Merced 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%	5% - 15%	15% - 30%	30% - 100%
Project EIR/S	0% - 15%	15% - 30%	30% - 90%	90% - 100%
PEPD Design Level	0% - 15%	15% - 30%	30% - 90%	90% - 100%
Procurement Level	0% - 15%	15% - 30%	30% - 90%	90% - 100%
Design-Build	0% - 15%	15% - 30%	30% - 90%	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 San Jose to Merced PEPD quantities document "JM 2021_PEPD_AppA-Qty-v11_20211108."

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	40%
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 "JM-ENG-RS-RPRT-RW-20211011."

2.3.7 Vehicle Estimate

The costs for the San Jose to Merced 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 2021\$ Q4.
- Allocated Contingency is included in all costs.
- ROW costs have been included based on current ROW report as referenced in the list of documents from the RC. A high value is taken into consideration for the estimate.
- ROW costs do not include costs for an agreement or procurement of ROW with railroads within the shared corridor.

- Subsection SS99 Complete contains alternative wide elements that cannot be assigned to a specific subsection such as professional services, ROW, systems, and unallocated contingency in the Appendix C detailed estimate tables.

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

Alternative	Subsection	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
01			Alternative 01					
	SS1		San Jose Diridon Sta Approach: Viaduct to I-880 (Scott to Diridon Sta)					
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.04	R M	200,136,594.25	/R M	8,005,464
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.02	R M	202,498,578.00	/R M	4,049,972
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	0.33	R M	223,965,402.39	/R M	73,908,583
		10.01.226a	Elevated Structure - 2 Track (60' Avg. Pier Ht, 90' Span)	0.03	R M	304,188,495.00	/R M	9,125,655
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	0.04	R M	241,240,256.75	/R M	9,649,610
		10.01.226d	Elevated Structure - 2 Track (60' Avg. Pier Ht, 120' Span)	0.05	R M	197,175,132.20	/R M	9,858,757
		10.02.044	Scott-Diridon - 4 Trk over 3 Trk (60' Avg. Pier Ht) - 120' Spacing	0.29	R M	773,052,862.69	/R M	224,185,330
		10.02.045	Scott-Diridon - Diridon-Tamien - 4 Trk	0.19	R M	856,527,020.84	/R M	162,740,134
		10.02.048	Scott-Diridon - BC -160-220-160 Span - Taylor St	0.10	R M	145,875,957.00	/R M	14,587,596

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.051	Scott-Diridon - BC -180-180 span - SJ City Market, Wye S Trk	0.07	R M	124,084,888.43	/R M	8,685,942
		10.02.052	Scott-Diridon - 4 Trk BC-150-240-150 Span - Santa Clara Street	0.10	R M	318,439,484.20	/R M	31,843,948
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	3.11	R M	4,096,042.18	/R M	12,738,691
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	3.00	R M	7,153,487.57	/R M	21,460,463
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	0.68	R M	7,449,992.63	/R M	5,065,995
		10.06.240	At-Grade Track-Bed With Closed Drainage - 4 Track	0.85	R M	7,740,488.34	/R M	6,579,415
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.13	R M	15,302,317.08	/R M	1,989,301
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.09	R M	28,101,146.56	/R M	2,529,103
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	3.11	R M	1,564,808.30	/R M	4,866,554
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	3.23	R M	3,073,829.09	/R M	9,928,468
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	0.68	R M	4,709,633.37	/R M	3,202,551
		10.09.142	Ballasted Track (Track Laying Machine) - 4 Track	0.85	R M	6,272,123.49	/R M	5,331,305
		10.10.120	Direct Fixation Track - 2 Track	0.68	R M	4,520,631.81	/R M	3,074,030
		10.10.140	Direct Fixation Track - 4 Track	0.58	R M	9,058,582.22	/R M	5,253,978

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.201	Ballasted Turnout #9	2.00	EA	127,172.82	/EA	254,346
		10.14.202	Ballasted Turnout #10	2.00	EA	138,477.07	/EA	276,954
		10.14.203	Ballasted Turnout #11 & #14	4.00	EA	155,433.44	/EA	621,734
		10.14.204	Ballasted Turnout #15	2.00	EA	211,954.70	/EA	423,909
		10.14.206	Ballasted Turnout #20	2.00	EA	339,127.52	/EA	678,255
		10.14.321	Ballasted Crossover #10	3.00	EA	720,645.97	/EA	2,161,938
		10.14.400	Terminal - Bumping Post	2.00	Ea	45,217.00	/Ea	90,434
		20.02.225	San Jose (Diridon) Sta	1.00	LS	307,339,406.31	/LS	307,339,406
		20.06.173	Ped Brdg Undercrossing HSR & Ramps/Stairs (College Park Sta):	1.00	EA	23,682,109.48	/EA	23,682,109
		20.06.210	Parking, at Grade	207.00	stl	8,589.07	/stl	1,777,938
		20.07.010	Roadway Modification, New AC Paving	60,800.00	SF	170.36	/SF	10,357,586
		20.07.715	Access Road Entrance Point	1.00	EA	48,632.72	/EA	48,633
		40.02.002	Natural Gas/Oil, 9"-16"	1,890.00	LF	194.54	/LF	367,686
		40.02.003	Potable Water, 10"-16"	3,267.00	LF	307.18	/LF	1,003,559
		40.02.005	Utility Relocation Allowance, Level 5 Urban	1,233.00	LF	197.11	/LF	243,040
		40.02.006	Sanitary Sewer, 37"-48"	1,964.00	LF	399.33	/LF	784,294
		40.02.008	Storm Drain, 42"-54"	2,295.00	LF	348.65	/LF	800,159
		40.02.011	Pump Station (Storm)	2.00	EA	383,975.90	/EA	767,952
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,301.00	LF	282.95	/LF	651,077
		40.02.020	Electric OH, 115 kV	6,753.00	LF	244.82	/LF	1,653,294
		40.02.022	Electirc OH, unknown	153.00	LF	194.31	/LF	29,729

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.100.v	Rdwy Overxing HSR (West Hedding): 2-Ln Rdwy Over 2 Trk	1.00	EA	28,884,706.55	/EA	28,884,707
		40.08.200.ad	Rdwy Underxing HSR (West Taylor): 2-Ln Rdwy Under 3 Trk	1.00	EA	4,371,515.23	/EA	4,371,515
		40.08.200.ad1	Rdwy Underxing Rail- 3 Trk (Main) Over 4 Ln Rdwy	1.00	EA	7,004,091.63	/EA	7,004,092
		40.08.200.ad2	Trench Base Slab - Taylor	1.00	EA	21,388,093.22	/EA	21,388,093
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn					
		10.01.001	Topsoil	270,683.00	CY	4.24	/CY	1,146,709
		10.01.002	Cut	4,432,073.00	CY	13.42	/CY	59,477,076
		10.01.004	Overbreak In Embankment	178,617.00	CY	19.79	/CY	3,534,450
		10.01.005	Embankment	1,866,629.00	CY	22.60	/CY	42,191,483
		10.01.006	Overbreak Fill In Cut	55,866.00	CY	19.79	/CY	1,105,468
		10.01.007	Overbreak Fill In Embankment	178,617.00	CY	19.79	/CY	3,534,450
		10.01.008	Subballast	38,915.00	CY	59.35	/CY	2,309,595
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.11	R M	130,484,442.45	/R M	14,353,289
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.06	R M	133,704,872.83	/R M	8,022,292
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.25	R M	139,750,142.12	/R M	34,937,536

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	0.03	R M	130,446,730.67	/R M	3,913,402
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.71	R M	152,272,694.35	/R M	260,386,307
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.07	R M	148,443,679.00	/R M	10,391,058
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.20	R M	206,586,823.40	/R M	41,317,365
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	2.00	EA	191,832.26	/EA	383,665
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	4.00	EA	983,616.75	/EA	3,934,467
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	6.00	EA	2,864,326.53	/EA	17,185,959
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.00	EA	295,126.59	/EA	295,127
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	2.00	EA	1,513,256.52	/EA	3,026,513
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.57	R M	216,837,944.13	/R M	340,435,572
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.00	If	33,583.85	/If	33,583,852
		10.07.950	Allowance For Construction Monitoring	1.57	R M	271,616.00	/R M	426,437
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	4.04	R M	2,350,177.49	/R M	9,494,717
		10.09.120	Ballasted Track - 2 Track	0.84	R M	4,644,098.76	/R M	3,901,043
		10.10.110	Direct Fixation Track - 1 Track	3.74	R M	2,267,324.30	/R M	8,479,793
		10.16.100	Drainage	59.00	EA	192,878.77	/EA	11,379,848
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	124,230.00	SF	170.36	/SF	21,163,205
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	550.00	lf	3,839.76	/lf	2,111,867
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	582.00	LF	7,679.52	/LF	4,469,479
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	275.00	LF	9,215.42	/LF	2,534,241
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	240.00	LF	10,751.33	/LF	2,580,318
		40.05.028	Retaining Wall In Fill - 1 Wall (50' Avg. Height)	345.00	LF	12,287.23	/LF	4,239,094
		40.05.052	Retaining Wall In Cut - 1 Wall (30' Avg. Exc Depth)	684.00	LF	9,215.42	/LF	6,303,348

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	587.00	LF	12,297.69	/LF	7,218,747
		40.08.100.b	Rdwy Overxing HSR (Bloomfield Ave): 2-Ln Rdwy Over MF	1.00	EA	79,140,313.63	/EA	79,140,314
	SS14		Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.83	CY	4.24	/CY	3,568,083
		10.01.002	Cut	15,347,083.00	CY	13.42	/CY	205,953,215
		10.01.004	Overbreak In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.005	Embankment	8,679,515.00	CY	22.60	/CY	196,160,767
		10.01.006	Overbreak Fill In Cut	72,100.00	CY	19.79	/CY	1,426,706
		10.01.007	Overbreak Fill In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.008	Subballast	143,484.00	CY	59.35	/CY	8,515,772
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.58	R M	154,200,922.48	/R M	89,436,535
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.11	R M	156,620,053.00	/R M	17,228,206
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.08	R M	148,498,029.38	/R M	11,879,842
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.93	R M	168,597,657.13	/R M	156,795,821
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.38	R M	176,322,161.81	/R M	419,646,745

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.02	R M	170,351,049.00	/R M	3,407,021
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.07	R M	151,524,442.71	/R M	10,606,711
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.12	R M	171,400,316.42	/R M	20,568,038
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.11	R M	186,079,494.18	/R M	20,468,744
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.27	R M	196,606,822.63	/R M	53,083,842
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.27	R M	204,995,325.78	/R M	55,348,738
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.73	R M	210,460,755.11	/R M	153,636,351
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.19	R M	210,576,875.53	/R M	40,009,606
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.12	R M	203,677,321.58	/R M	24,441,279
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.10	R M	210,836,926.40	/R M	21,083,693
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.00	EA	191,832.28	/EA	767,329
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.00	EA	983,616.76	/EA	17,705,102
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.00	EA	2,864,326.53	/EA	57,286,531

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.00	EA	295,126.56	/EA	1,180,506
		10.05.320	Transition Wedge 1 Trk Embankment- Slab	4.00	EA	9,600.28	/EA	38,401
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.00	EA	11,513.90	/EA	46,056
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.00	EA	14,027.54	/EA	56,110
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.61	R M	216,837,944.12	/R M	2,951,164,419
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.00	lf	33,583.85	/lf	302,254,665
		10.07.850	Pumping Sta	1.00	EA	339,520.00	/EA	339,520
		10.07.920	Ventilation Equipment Allowance (INCLUDED w/10.07.902)	4.00	EA	173,849,447.78	/EA	695,397,791
		10.07.950	Allowance For Construction Monitoring	13.61	R M	271,616.00	/R M	3,696,694
		10.07.970	Fault Chamber	2.00	EA	166,409,372.86	/EA	332,818,746
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	4.24	R M	2,350,177.49	/R M	9,964,753

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.09.120	Ballasted Track - 2 Track	13.30	R M	4,644,098.77	/R M	61,766,514
		10.10.110	Direct Fixation Track - 1 Track	31.00	R M	2,267,324.31	/R M	70,287,054
		10.10.120	Direct Fixation Track - 2 Track	0.24	R M	4,520,631.83	/R M	1,084,952
		10.15.101	Wildlife Crossing	10.00	EA	71,301.56	/EA	713,016
		10.16.100	Drainage	2.00	EA	192,878.78	/EA	385,758
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	777,970.00	SF	170.36	/SF	132,531,103
		40.02.020	Electric OH, 115 kV	455.00	LF	244.82	/LF	111,395
		40.02.021	Electric OH, 230 kV	1,340.00	LF	194.31	/LF	260,369
		40.02.022	Electric OH, unknown	1,925.00	LF	194.31	/LF	374,037
		40.02.025	Potable Water, 120"	3,800.00	LF	7,679.52	/LF	29,182,168
		40.02.043	Drainage Canal, All Sizes	785.00	LF	502.07	/LF	394,121
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.00	LF	194.31	/LF	80,637
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.00	lf	3,839.76	/lf	6,254,967
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.00	LF	9,215.42	/LF	8,763,866
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.00	LF	10,751.33	/LF	7,278,647
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.00	LF	13,823.13	/LF	13,684,901
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.00	LF	18,430.84	/LF	19,462,970

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,089.84	LF	12,287.23	/LF	37,965,571
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.00	EA	725,071.17	/EA	725,071
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.00	EA	9,101.36	/EA	9,101
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.00	EA	41,939.95	/EA	41,940
	SS16		San Joaquin Valley					
		10.01.001	Topsoil	447,415.00	CY	4.24	/CY	1,895,411
		10.01.002	Cut	23,638.00	CY	13.42	/CY	317,217
		10.01.004	Overbreak In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.005	Embankment	2,531,377.00	CY	22.60	/CY	57,216,798
		10.01.006	Overbreak Fill In Cut	1,701.00	CY	19.79	/CY	33,657
		10.01.007	Overbreak Fill In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.008	Subballast	128,198.00	CY	59.35	/CY	7,608,550
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.71	R M	180,812,350.63	/R M	490,001,470
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.63	R M	189,953,839.66	/R M	309,624,759
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.67	R M	198,211,318.33	/R M	132,801,583
		10.02.036	BC - 150-275-150 - Cherokee	0.11	R M	224,216,722.09	/R M	24,663,839
		10.02.037	BC - 200-350-200 - San Luis	0.14	R M	178,203,214.64	/R M	24,948,450

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.038	BC - 120-220-120 Span - Los Banos	0.09	R M	262,414,325.78	/R M	23,617,289
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.00	EA	1,513,256.54	/EA	12,106,052
		10.09.110	Ballasted Track - 1 Track	0.55	R M	2,350,177.49	/R M	1,292,598
		10.09.120	Ballasted Track - 2 Track	12.75	R M	4,644,098.78	/R M	59,212,259
		10.10.120	Direct Fixation Track - 2 Track	5.37	R M	4,501,074.99	/R M	24,170,773
		10.14.206	Ballasted Turnout #20	3.00	EA	339,127.52	/EA	1,017,383
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	2,119,546.96	/EA	4,239,094
		10.14.305	Ballasted Crossover (80 MPH)	2.00	EA	1,602,377.51	/EA	3,204,755
		10.14.400	Terminal - Bumping Post	1.00	Ea	45,217.00	/Ea	45,217
		10.15.101	Wildlife Crossing	67.00	EA	71,301.56	/EA	4,777,205
		10.16.100	Drainage	42.00	EA	192,878.77	/EA	8,100,909
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	746,920.00	SF	170.36	/SF	127,241,579
		30.04.010c	MOIF Siding	1.00	EA	3,611,952.25	/EA	3,611,952
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.00	LF	282.95	/LF	1,498,241
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,255.00	LF	282.95	/LF	1,769,876
		40.02.019	Electric OH, 51-114 kV	3,770.00	LF	129.63	/LF	488,708
		40.02.022	Electirc OH, unknown	23,930.00	LF	194.31	/LF	4,649,723
		40.02.035	Potable Water Storage Tank	1.00	EA	76,795.17	/EA	76,795

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.043	Drainage Canal, All Sizes	29,515.00	LF	502.07	/LF	14,818,454
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.00	LF	194.31	/LF	2,383,153
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.66	lf	3,839.76	/lf	2,534
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	51,328,605.99	/EA	51,328,606
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	28,529,153.87	/EA	28,529,154
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	26,999,657.46	/EA	26,999,657
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	27,497,062.74	/EA	27,497,063
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys	1.00	EA	30,740,316.48	/EA	30,740,316
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to					
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.14	R M	197,484,535.43	/R M	27,647,835
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.11	R M	209,654,303.45	/R M	23,061,973
		10.02.040	Diridon-Tamien - 2 Track	1.06	R M	198,673,112.12	/R M	210,593,499

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.041	Diridon-Tamien - 4 Track	0.52	R M	482,156,229.21	/R M	250,721,239
		10.10.120	Direct Fixation Track - 2 Track	1.35	R M	4,495,391.82	/R M	6,068,779
		10.10.140	Direct Fixation Track - 4 Track	0.49	R M	9,005,693.22	/R M	4,412,790
		10.14.150	Direct Fixation Crossover #15	1.00	EA	2,548,376.01	/EA	2,548,376
		20.06.211	Bike Path Realignment (Almaden Expy)	1.00	EA	22,305,800.86	/EA	22,305,801
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	9,800.00	SF	170.36	/SF	1,669,479
		40.02.005	Utility Relocation Allowance, Level 5 Urban	750.00	LF	197.11	/LF	147,834
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,040.00	LF	282.95	/LF	577,226
		40.02.020	Electric OH, 115 kV	1,400.00	LF	244.82	/LF	342,753
		40.02.024	Transmission Tower	1.00	EA	614,361.43	/EA	614,361
	SS4		San Jose to Monterey Corridor:Alma Ave to Communication Hill					
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.20	R M	177,019,979.55	/R M	35,403,996
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.28	R M	4,050,193.61	/R M	1,134,054
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	2.16	R M	7,163,896.40	/R M	15,474,016
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	0.27	R M	7,317,025.74	/R M	1,975,597

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.14	R M	15,224,244.29	/R M	2,131,394
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20' Avg. Wall Ht)	0.28	R M	27,466,208.21	/R M	7,690,538
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.28	R M	1,547,292.68	/R M	433,242
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	2.59	R M	3,075,034.35	/R M	7,964,339
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	0.27	R M	4,622,418.04	/R M	1,248,053
		10.10.120	Direct Fixation Track - 2 Track	0.19	R M	4,531,584.53	/R M	861,001
		10.14.201	Ballasted Turnout #9	2.00	EA	127,172.82	/EA	254,346
		10.14.203	Ballasted Turnout #11 & #14	1.00	EA	155,433.45	/EA	155,433
		10.14.320	Ballasted Crossover	1.00	EA	593,473.15	/EA	593,473
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	53,020.00	SF	170.36	/SF	9,032,224
		40.02.002	Natural Gas/Oil, 9"-16"	1,480.00	LF	194.54	/LF	287,923
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	16,040.00	LF	282.95	/LF	4,538,580
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	2,520.00	LF	244.82	/LF	616,956
		40.08.100.r	Rdwy Overxing HSR (Curtner Ave): 4-Ln Rdwy Over 4 Trk	1.00	EA	16,901,318.52	/EA	16,901,319
		40.08.100.s	Rdwy Overxing HSR (Almaden Expr): 4-Ln Rdwy Over 4 Trk	1.00	EA	12,090,542.80	/EA	12,090,543

Alternativ	Subsection	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.ai	Rdwy Underxing HSR (SR87): 1-Ln Rdwy Under Eight-Ln Highway	1.00	EA	434,561.14	/EA	434,561
		40.08.200.aj	Rdwy Underxing HSR (Almaden Rd): 2-Ln Rdwy Under 4 Trk	1.00	EA	2,145,737.04	/EA	2,145,737
		40.08.200.aj1	HSR Underpass	1.00	EA	9,261,833.85	/EA	9,261,834
		40.08.200.aj2	Caltrain & UPRR Underpass	1.00	EA	2,150,156.81	/EA	2,150,157
	SS67		Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)					
		10.01.001	Topsoil	25,218.00	CY	4.24	/CY	106,834
		10.01.002	Cut	12,217.00	CY	13.42	/CY	163,948
		10.01.004	Overbreak In Embankment	32,019.00	CY	19.79	/CY	633,584
		10.01.005	Embankment	157,306.00	CY	22.60	/CY	3,555,588
		10.01.006	Overbreak Fill In Cut	6,300.00	CY	19.79	/CY	124,655
		10.01.007	Overbreak Fill In Embankment	32,019.00	CY	19.79	/CY	633,584
		10.01.008	Subballast	7,424.00	CY	59.35	/CY	440,603
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	1.77	R M	192,509,396.50	/R M	340,741,632
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.09	R M	237,498,371.33	/R M	21,374,853
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	7.05	R M	201,892,892.46	/R M	1,423,344,892
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.05	R M	151,524,443.00	/R M	7,576,222
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.04	R M	177,019,974.50	/R M	7,080,799

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	3.72	R M	211,660,245.99	/R M	787,376,115
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.16	R M	204,737,338.25	/R M	32,757,974
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.11	R M	182,229,568.36	/R M	20,045,253
		10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht)	0.07	R M	303,601,025.29	/R M	21,252,072
		10.01.225a	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 90' Spacing	0.02	R M	203,223,639.00	/R M	4,064,473
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	1.78	R M	222,164,554.02	/R M	395,452,906
		10.01.225c	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 120' Spacing	0.34	R M	209,447,595.82	/R M	71,212,183
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	0.06	R M	293,401,745.33	/R M	17,604,105
		10.01.226a	Elevated Structure - 2 Track (60' Avg. Pier Ht, 90' Span)	0.15	R M	270,658,585.67	/R M	40,598,788
		10.01.226b	Elevated Structure - 2 Track (60' Avg. Pier Ht, 100' Span)	0.08	R M	234,910,454.00	/R M	18,792,836
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	1.59	R M	230,923,039.21	/R M	367,167,632
		10.01.226d	Elevated Structure - 2 Track (60' Avg. Pier Ht, 120' Span)	0.05	R M	197,175,132.40	/R M	9,858,757

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.08	R M	203,233,643.75	/R M	16,258,692
		10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht)	0.06	R M	303,550,783.33	/R M	18,213,047
		10.01.227a	Elevated Structure - 2 Track (70' Avg. Pier Ht, 90' Span)	0.13	R M	291,489,892.69	/R M	37,893,686
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	1.17	R M	240,572,161.56	/R M	281,469,429
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.06	R M	200,047,340.00	/R M	12,002,840
		10.02.020	BC - 225-225-225-225 - UPRR	0.04	R M	545,286,857.00	/R M	21,811,474
		10.02.021	BC - 155-310-155 Span - Monterey	0.12	R M	253,495,539.42	/R M	30,419,465
		10.02.023	BC - 90-180'-90 Span - Capitol	0.07	R M	304,571,505.86	/R M	21,320,005
		10.02.024	BC - 110-220-220-110 Span - Blossom	0.13	R M	232,033,483.31	/R M	30,164,353
		10.02.025	BC - 205-410-205 Span - Sr85	0.16	R M	195,415,373.00	/R M	31,266,460
		10.02.026	BC - 115-230-115 Span - Bernal	0.09	R M	253,589,523.00	/R M	22,823,057
		10.02.027	BC - 110-220-110 Span - Bailey	0.08	R M	276,816,082.12	/R M	22,145,287
		10.02.028	BC - 260-260 - Cochrane 1	0.10	R M	214,733,967.60	/R M	21,473,397
		10.02.029	BC - 233-233-233-233 - Cochrane 2	0.18	R M	295,980,656.28	/R M	53,276,518

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.030	BC - 260-260 - Dunne	0.10	R M	204,818,595.30	/R M	20,481,860
		10.02.031	BC - 240-240 - Tennant	0.09	R M	244,571,440.11	/R M	22,011,430
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	1.00	EA	1,513,256.49	/EA	1,513,256
		10.09.110	Ballasted Track - 1 Track	0.30	R M	2,373,916.63	/R M	712,175
		10.09.120	Ballasted Track - 2 Track	0.71	R M	4,627,003.04	/R M	3,285,172
		10.09.920	Ballasted Trk Relocation - 1 Trk (Permanent)	1.61	R M	282,902.95	/R M	455,474
		10.10.120	Direct Fixation Track - 2 Track	19.90	R M	4,501,931.75	/R M	89,588,442
		10.14.200	Ballasted Turnout (60 MPH)	1.00	EA	642,929.25	/EA	642,929
		10.14.202	Ballasted Turnout #10	5.00	EA	138,477.07	/EA	692,385
		10.14.203	Ballasted Turnout #11 & #14	5.00	EA	155,433.44	/EA	777,167
		10.15.102	Wildlife Crossing - 30' wide	2.00	EA	393,387.92	/EA	786,776
		10.15.103	Wildlife Crossing - 40' wide	2.00	EA	722,115.53	/EA	1,444,231
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	100,240.00	SF	170.36	/SF	17,076,388
		40.01.110	Demolition Allowance, Asphalt Pavement	392,200.00	SY	13.58	/SY	5,324,725
		40.01.810	Demolition Allowance, Remove Railroad Tracks	1.61	R M	307,562.32	/R M	495,175
		40.02.001	Natural Gas/Oil, 4.5"-8"	760.00	LF	163.82	/LF	124,507
		40.02.002	Natural Gas/Oil, 9"-16"	830.00	LF	194.54	/LF	161,471

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.007	Sanitary Sewer, 49"-54"	15,980.00	LF	436.20	/LF	6,970,517
		40.02.008	Storm Drain, 42"-54"	1,080.00	LF	348.65	/LF	376,545
		40.02.009	Storm Drain, 55"-72"	320.00	LF	371.69	/LF	118,941
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	43,280.00	LF	282.95	/LF	12,246,242
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,265.00	LF	282.95	/LF	1,772,706
		40.02.015	Telecommunication Facility	1.00	EA	460,771.08	/EA	460,771
		40.02.019	Electric OH, 51-114 kV	230.00	LF	129.63	/LF	29,815
		40.02.020	Electric OH, 115 kV	2,600.00	LF	244.82	/LF	636,541
		40.02.021	Electric OH, 230 kV	5,465.00	LF	194.31	/LF	1,061,878
		40.02.022	Electirc OH, unknown	5,320.00	LF	194.31	/LF	1,033,704
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	8,280.00	LF	244.82	/LF	2,027,140
		40.02.047	Recycled Water, All Sizes	10,050.00	LF	148.54	/LF	1,492,827
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	4,375.00	LF	9,215.42	/LF	40,317,470
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	3,735.00	LF	10,751.33	/LF	40,156,200
		40.08.200.a	Rdwy Underxing HSR (NB Monterey Rd Realignment): 2- Ln Rdwy Under 2 Trk	1.00	EA	1,668,692.62	/EA	1,668,693
	SS9		Morgan Hill & Gilroy: Viaduct (D. Gilroy)					
		10.01.001	Topsoil	84,525.00	CY	4.24	/CY	358,079
		10.01.002	Cut	4,272.00	CY	13.42	/CY	57,334
		10.01.004	Overbreak In Embankment	157,741.00	CY	19.91	/CY	3,141,154

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.005	Embankment	638,406.00	CY	22.60	/CY	14,429,906
		10.01.006	Overbreak Fill In Cut	8,698.00	CY	19.79	/CY	172,123
		10.01.007	Overbreak Fill In Embankment	158,741.00	CY	19.79	/CY	3,141,154
		10.01.008	Subballast	28,716.00	CY	59.35	/CY	1,704,286
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.49	R M	132,532,868.37	/R M	64,941,105
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.16	R M	133,487,810.81	/R M	21,358,050
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	4.80	R M	191,941,597.42	/R M	921,319,668
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.05	R M	148,026,114.00	/R M	7,401,306
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	5.15	R M	201,906,854.34	/R M	1,039,820,300
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	0.19	R M	211,185,096.11	/R M	40,125,168
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	0.07	R M	178,532,557.71	/R M	12,497,279
		10.01.226d	Elevated Structure - 2 Track (60' Avg. Pier Ht, 120' Span)	0.05	R M	146,943,394.80	/R M	7,347,170
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.03	R M	151,181,812.33	/R M	4,535,454
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	0.11	R M	174,483,139.27	/R M	19,193,145

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.242	Elevated Structure - 4 Track (20' Avg. Pier Ht) - 110' Spacing	0.27	R M	315,606,100.44	/R M	85,213,647
		10.01.243	Elevated Structure - 4 Track (30' Avg. Pier Ht) - 110' Spacing	0.18	R M	326,287,616.50	/R M	58,731,771
		10.01.248	Elevated Structure - 4 Track + 2 Platforms (20' Avg. Pier Ht)	0.17	R M	314,437,795.94	/R M	53,454,425
		10.02.032	BC - 110-220-110 Span - Llagas	0.08	R M	323,823,750.50	/R M	25,905,900
		10.02.053	BC - 130-260-260-260-130 Span - US101	0.20	R M	198,301,789.60	/R M	39,660,358
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.00	EA	295,126.59	/EA	295,127
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	5.00	EA	1,513,256.54	/EA	7,566,283
		10.09.120	Ballasted Track - 2 Track	6.71	R M	4,643,600.66	/R M	31,158,560
		10.09.920	Ballasted Trk Relocation - 1 Trk (Permanent)	2.91	R M	282,902.95	/R M	823,248
		10.10.110	Direct Fixation Track - 1 Track	1.78	R M	2,267,324.31	/R M	4,035,837
		10.10.120	Direct Fixation Track - 2 Track	7.50	R M	4,498,233.41	/R M	33,736,751
		10.14.100	Special Trackwork - Direct Fixation	6.00	EA	706,515.66	/EA	4,239,094
		10.14.135	Direct Fixation Crossover (80 MPH)	2.00	EA	2,119,546.96	/EA	4,239,094
		10.14.201	Ballasted Turnout #9	8.00	EA	127,172.82	/EA	1,017,383

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.203	Ballasted Turnout #11 & #14	6.00	EA	282,701.92	/EA	1,696,212
		10.14.206	Ballasted Turnout #20	2.00	EA	339,127.52	/EA	678,255
		10.14.305	Ballasted Crossover (80 MPH)	2.00	EA	1,602,377.51	/EA	3,204,755
		10.14.400	Terminal - Bumping Post	2.00	Ea	45,217.00	/Ea	90,434
		10.15.100	Wildlife Crossing	1.00	EA	28,260.63	/EA	28,261
		10.16.100	Drainage	65.00	EA	192,878.77	/EA	12,537,120
		10.16.101	Superficial drainage system for flood plain mitigation	3.80	R M	11,150,083.44	/R M	42,370,317
		20.02.215a	Downtown Gilroy Sta - Viaduct	1.00	LS	139,867,486.54	/LS	139,867,487
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	397,850.00	SF	170.36	/SF	67,775,749
		30.04.010a	MOWF Downtown Gilroy	1.00	EA	251,124,406.97	/EA	251,124,407
		40.02.001	Natural Gas/Oil, 4.5"-8"	270.00	LF	163.82	/LF	44,233
		40.02.003	Potable Water, 10"-16"	2,565.00	LF	307.18	/LF	787,919
		40.02.005	Utility Relocation Allowance, Level 5 Urban	190.00	LF	197.11	/LF	37,451
		40.02.010	Box Culvert, All Sizes	100.00	LF	2,457.45	/LF	245,745
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	18,475.00	LF	282.95	/LF	5,227,572
		40.02.014	Telecom/Fiber Optic OH, All Sizes	380.00	LF	282.95	/LF	107,522
		40.02.020	Electric OH, 115 kV	3,515.00	LF	244.82	/LF	860,555
		40.02.022	Electirc OH, unknown	4,555.00	LF	194.31	/LF	885,060
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	4,810.00	LF	244.82	/LF	1,177,602

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.024	Transmission Tower	1.00	EA	614,361.45	/EA	614,361
		40.02.030	Potable Water, 4"-9"	525.00	LF	66.35	/LF	34,835
		40.02.045	Electric OH & Telecom OH on JP, Unknown	3,005.00	LF	194.31	/LF	583,887
	SS99-1		Alternative 1 Complete					
		40.04.110	Environmental Mitigation Allowance, Heavy	1.00	LS	565,791,999.21	/LS	565,791,999
		40.06.100	Temporary facilities and other indirect costs during construction	1.00	LS	691,523,554.60	/LS	691,523,555
		40.07.100	ROW Procurement Acquisition	1.00	LS	3,577,024,000.00	/LS	3,577,024,000
		50.01.020	Wayside Protection - 2 Track	90.03	R M	2,164,042.47	/R M	194,828,744
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	90.03	R M	897,257.90	/R M	80,780,129
		50.07.020	Hazard Detectors	90.03	R M	623,278.90	/R M	56,113,800
		60.01.020	Traction power transmission: High voltage	90.03	R M	1,822,583.13	/R M	164,087,159
		60.01.030	Distribution Line Pacheco Pass	90.03	R M	763,146.66	/R M	68,706,094
		60.01.040	PG&E Construction Power Drop Sites	90.03	R M	16,359.17	/R M	1,472,816
		60.02.010	Traction Power, Supply Station Site Work	90.03	R M	2,218,839.55	/R M	199,762,125
		60.03.100	Traction Power Distribution - 2 Tracks	90.03	R M	2,660,904.66	/R M	239,561,246

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		60.04.100	Traction power control	90.03	R M	6,133.11	/R M	552,164
		80.00.00	Professional Services	1.00	LS	3,310,096,896.0 0	/LS	3,310,096,896
		90.00.00	Unallocated Contingency	1.00	LS	995,074,271.59	/LS	995,074,272
			Total					28,334,448,57 2
02			Alternative 02					
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmt(South of D. Gilroy thru Tunn					
		10.01.001	Topsoil	270,683.00	CY	4.24	/CY	1,146,709
		10.01.002	Cut	4,432,073.00	CY	13.42	/CY	59,477,076
		10.01.004	Overbreak In Embankment	178,617.00	CY	19.79	/CY	3,534,450
		10.01.005	Embankment	1,866,629.00	CY	22.60	/CY	42,191,483
		10.01.006	Overbreak Fill In Cut	55,866.00	CY	19.79	/CY	1,105,468
		10.01.007	Overbreak Fill In Embankment	178,617.00	CY	19.79	/CY	3,534,450
		10.01.008	Subballast	38,915.00	CY	59.35	/CY	2,309,595
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.11	R M	130,484,442.64	/R M	14,353,289
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.06	R M	133,704,872.67	/R M	8,022,292
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.25	R M	139,750,142.20	/R M	34,937,536

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	0.03	R M	130,446,730.00	/R M	3,913,402
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.71	R M	152,272,694.36	/R M	260,386,307
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.07	R M	148,443,678.86	/R M	10,391,058
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.20	R M	206,586,823.35	/R M	41,317,365
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	2.00	EA	191,832.26	/EA	383,665
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	4.00	EA	983,616.75	/EA	3,934,467
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	6.00	EA	2,864,326.53	/EA	17,185,959
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.00	EA	295,126.59	/EA	295,127
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	2.00	EA	1,513,256.52	/EA	3,026,513
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.57	R M	216,837,944.13	/R M	340,435,572
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.00	If	33,583.85	/If	33,583,852
		10.07.950	Allowance For Construction Monitoring	1.57	R M	271,616.00	/R M	426,437
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	4.04	R M	2,350,177.49	/R M	9,494,717
		10.09.120	Ballasted Track - 2 Track	0.84	R M	4,644,098.76	/R M	3,901,043
		10.10.110	Direct Fixation Track - 1 Track	3.74	R M	2,267,324.31	/R M	8,479,793
		10.16.100	Drainage	59.00	EA	192,878.77	/EA	11,379,848
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	124,230.00	SF	170.36	/SF	21,163,205
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	550.00	lf	3,839.76	/lf	2,111,867
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	582.00	LF	7,679.52	/LF	4,469,479
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	275.00	LF	9,215.42	/LF	2,534,241
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	240.00	LF	10,751.33	/LF	2,580,318
		40.05.028	Retaining Wall In Fill - 1 Wall (50' Avg. Height)	345.00	LF	12,287.23	/LF	4,239,094
		40.05.052	Retaining Wall In Cut - 1 Wall (30' Avg. Exc Depth)	684.00	LF	9,215.42	/LF	6,303,348

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	587.00	LF	12,297.69	/LF	7,218,747
		40.08.100.b	Rdwy Overxing HSR (Bloomfield Ave): 2-Ln Rdwy Over MF	1.00	EA	79,140,313.63	/EA	79,140,314
	SS14		Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.83	CY	4.24	/CY	3,568,083
		10.01.002	Cut	15,347,083.00	CY	13.42	/CY	205,953,215
		10.01.004	Overbreak In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.005	Embankment	8,768,515.00	CY	22.37	/CY	196,160,767
		10.01.006	Overbreak Fill In Cut	72,100.00	CY	19.79	/CY	1,426,706
		10.01.007	Overbreak Fill In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.008	Subballast	143,484.00	CY	59.35	/CY	8,515,772
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.58	R M	154,200,922.47	/R M	89,436,535
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.11	R M	156,620,053.18	/R M	17,228,206
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.08	R M	148,498,029.25	/R M	11,879,842
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.93	R M	168,597,657.12	/R M	156,795,821
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.38	R M	176,322,161.82	/R M	419,646,745

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.02	R M	170,351,048.50	/R M	3,407,021
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.07	R M	151,524,442.86	/R M	10,606,711
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.12	R M	171,400,316.42	/R M	20,568,038
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.11	R M	186,079,494.09	/R M	20,468,744
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.27	R M	196,606,822.67	/R M	53,083,842
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.27	R M	204,995,325.78	/R M	55,348,738
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.73	R M	210,460,755.08	/R M	153,636,351
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.19	R M	210,576,875.58	/R M	40,009,606
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.12	R M	203,677,321.58	/R M	24,441,279
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.10	R M	210,836,926.30	/R M	21,083,693
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.00	EA	191,832.29	/EA	767,329
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.00	EA	983,616.76	/EA	17,705,102
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.00	EA	2,864,326.53	/EA	57,286,531

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.00	EA	295,126.56	/EA	1,180,506
		10.05.320	Transition Wedge 1 Trk Embankment- Slab	4.00	EA	9,600.28	/EA	38,401
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.00	EA	11,513.91	/EA	46,056
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.00	EA	14,027.53	/EA	56,110
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.61	R M	216,837,944.12	/R M	2,951,164,419
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.00	lf	33,583.85	/lf	302,254,665
		10.07.850	Pumping Sta	1.00	EA	339,520.00	/EA	339,520
		10.07.920	Ventilation Equipment Allowance (INCLUDED w/10.07.902)	4.00	EA	173,849,447.78	/EA	695,397,791
		10.07.950	Allowance For Construction Monitoring	13.61	R M	271,616.00	/R M	3,696,694
		10.07.970	Fault Chamber	2.00	EA	166,409,372.87	/EA	332,818,746
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	4.24	R M	2,350,177.49	/R M	9,964,753

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.09.120	Ballasted Track - 2 Track	13.30	R M	4,644,098.77	/R M	61,766,514
		10.10.110	Direct Fixation Track - 1 Track	31.00	R M	2,267,324.31	/R M	70,287,054
		10.10.120	Direct Fixation Track - 2 Track	0.24	R M	4,520,631.83	/R M	1,084,952
		10.15.101	Wildlife Crossing	10.00	EA	71,301.56	/EA	713,016
		10.16.100	Drainage	2.00	EA	192,878.77	/EA	385,758
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	777,970.00	SF	170.36	/SF	132,531,103
		40.02.020	Electric OH, 115 kV	455.00	LF	244.82	/LF	111,395
		40.02.021	Electric OH, 230 kV	1,340.00	LF	194.31	/LF	260,369
		40.02.022	Electric OH, unknown	1,925.00	LF	194.31	/LF	374,037
		40.02.025	Potable Water, 120"	3,800.00	LF	7,679.52	/LF	29,182,168
		40.02.043	Drainage Canal, All Sizes	785.00	LF	502.07	/LF	394,121
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.00	LF	194.31	/LF	80,637
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.00	lf	3,839.76	/lf	6,254,967
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.00	LF	9,215.42	/LF	8,763,866
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.00	LF	10,751.33	/LF	7,278,647
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.00	LF	13,823.13	/LF	13,684,901
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.00	LF	18,430.84	/LF	19,462,970

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,089.84	LF	12,287.23	/LF	37,965,571
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.00	EA	725,071.18	/EA	725,071
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.00	EA	9,101.33	/EA	9,101
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.00	EA	41,939.97	/EA	41,940
	SS16		San Joaquin Valley					
		10.01.001	Topsoil	447,515.00	CY	4.24	/CY	1,895,411
		10.01.002	Cut	23,638.00	CY	13.42	/CY	317,217
		10.01.004	Overbreak In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.005	Embankment	2,531,377.00	CY	22.60	/CY	57,216,798
		10.01.006	Overbreak Fill In Cut	1,701.00	CY	19.79	/CY	33,657
		10.01.007	Overbreak Fill In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.008	Subballast	128,498.00	CY	59.21	/CY	7,608,550
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.71	R M	180,812,350.63	/R M	490,001,470
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.63	R M	189,953,839.66	/R M	309,624,759
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.67	R M	198,211,318.33	/R M	132,801,583
		10.02.036	BC - 150-275-150 - Cherokee	0.11	R M	224,216,722.18	/R M	24,663,839
		10.02.037	BC - 200-350-200 - San Luis	0.14	R M	178,203,214.43	/R M	24,948,450

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.038	BC - 120-220-120 Span - Los Banos	0.09	R M	262,414,325.78	/R M	23,617,289
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.00	EA	1,513,256.54	/EA	12,106,052
		10.09.110	Ballasted Track - 1 Track	0.55	R M	2,350,177.49	/R M	1,292,598
		10.09.120	Ballasted Track - 2 Track	12.75	R M	4,644,098.77	/R M	59,212,259
		10.10.120	Direct Fixation Track - 2 Track	5.37	R M	4,501,074.99	/R M	24,170,773
		10.14.206	Ballasted Turnout #20	3.00	EA	339,127.52	/EA	1,017,383
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	2,119,546.97	/EA	4,239,094
		10.14.305	Ballasted Crossover (80 MPH)	2.00	EA	1,602,377.51	/EA	3,204,755
		10.14.400	Terminal - Bumping Post	1.00	Ea	45,217.00	/Ea	45,217
		10.15.101	Wildlife Crossing	67.00	EA	71,301.56	/EA	4,777,205
		10.16.100	Drainage	42.00	EA	192,878.77	/EA	8,100,909
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	746,920.00	SF	170.36	/SF	127,241,579
		30.04.010c	MOIF Siding	1.00	EA	3,611,952.24	/EA	3,611,952
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.00	LF	282.95	/LF	1,498,241
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,225.00	LF	284.32	/LF	1,769,876
		40.02.019	Electric OH, 51-114 kV	3,770.00	LF	129.63	/LF	488,708
		40.02.022	Electirc OH, unknown	23,930.00	LF	194.31	/LF	4,649,723
		40.02.035	Potable Water Storage Tank	1.00	EA	76,795.18	/EA	76,795

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.043	Drainage Canal, All Sizes	29,515.00	LF	502.07	/LF	14,818,454
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.00	LF	194.31	/LF	2,383,153
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.66	lf	3,839.77	/lf	2,534
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	51,328,605.99	/EA	51,328,606
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	28,529,153.87	/EA	28,529,154
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	26,999,657.46	/EA	26,999,657
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	27,497,062.73	/EA	27,497,063
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys	1.00	EA	30,740,316.49	/EA	30,740,316
	SS2		San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)					
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.23	R M	191,434,988.91	/R M	44,030,047
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.16	R M	179,694,590.12	/R M	28,751,134
		10.01.222b	Elevated Structure - 2 Track (20' Avg. Pier Ht, 150' Span)	0.14	R M	172,149,269.79	/R M	24,100,898

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.29	R M	241,369,061.03	/R M	69,997,028
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.88	R M	200,848,292.20	/R M	176,746,497
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	0.31	R M	213,569,428.42	/R M	66,206,523
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	0.02	R M	251,516,157.50	/R M	5,030,323
		10.02.042	Scott-Diridon - 2 Trk over 3 Trk (30' Avg. Pier Ht) - 110' Spacing	0.23	R M	659,149,080.78	/R M	151,604,289
		10.02.043	Scott-Diridon - 2 Trk over 5 Trk (30' Avg. Pier Ht) - 110' Spacing	0.15	R M	729,926,080.27	/R M	109,488,912
		10.02.044	Scott-Diridon - 4 Trk over 3 Trk (60' Avg. Pier Ht) - 120' Spacing	0.29	R M	773,052,862.72	/R M	224,185,330
		10.02.045	Scott-Diridon - Diridon-Tamien - 4 Trk	0.19	R M	856,527,020.79	/R M	162,740,134
		10.02.046	Scott-Diridon - BC -160-220- 160 Span - Lafayette St	0.10	R M	230,392,863.20	/R M	23,039,286
		10.02.047	Scott-Diridon - BC -160-220- 160 Span - I-880	0.10	R M	158,284,448.40	/R M	15,828,445
		10.02.048	Scott-Diridon - BC -160-220- 160 Span - Taylor St	0.10	R M	145,875,957.00	/R M	14,587,596
		10.02.049	Scott-Diridon - BC-120-240- 120 Span - Santa Clara Sta	0.09	R M	239,189,150.67	/R M	21,527,024

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.051	Scott-Diridon - BC -180-180 span - SJ City Market, Wye S Trk	0.14	R M	124,084,901.43	/R M	17,371,886
		10.02.052	Scott-Diridon - 4 Trk BC-150-240-150 Span - Santa Clara Street	0.10	R M	318,439,484.30	/R M	31,843,948
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.74	R M	4,125,169.43	/R M	3,052,625
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	0.12	R M	7,223,465.00	/R M	866,816
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	1.20	R M	7,455,526.53	/R M	8,946,632
		10.06.240	At-Grade Track-Bed With Closed Drainage - 4 Track	0.77	R M	7,696,893.57	/R M	5,926,608
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.14	R M	15,224,244.36	/R M	2,131,394
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.20	R M	26,968,498.35	/R M	5,393,700
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.74	R M	1,575,935.77	/R M	1,166,192
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	0.46	R M	3,085,185.20	/R M	1,419,185
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	1.20	R M	4,713,558.05	/R M	5,656,270
		10.09.142	Ballasted Track (Track Laying Machine) - 4 Track	0.77	R M	6,238,735.13	/R M	4,803,826
		10.10.120	Direct Fixation Track - 2 Track	2.92	R M	4,494,477.06	/R M	13,123,873
		10.10.140	Direct Fixation Track - 4 Track	0.56	R M	9,101,994.29	/R M	5,097,117

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.321	Ballasted Crossover #10	1.00	EA	720,645.99	/EA	720,646
		10.14.322	Ballasted Crossover #11	3.00	EA	806,840.87	/EA	2,420,523
		10.14.323	Ballasted Crossover #14	4.00	EA	1,003,252.23	/EA	4,013,009
		10.14.324	Ballasted Crossover #20	1.00	EA	1,413,031.31	/EA	1,413,031
		10.14.400	Terminal - Bumping Post	2.00	Ea	45,217.01	/Ea	90,434
		20.02.225	San Jose (Diridon) Sta	1.00	LS	307,339,406.30	/LS	307,339,406
		20.06.120	Ped Access (Cut & Cover)	650.00	LF	35,942.13	/LF	23,362,383
		20.06.172	Ped Brdg Undercrossing HSR (Lafayette St) Alt2:	1.00	EA	3,575,460.29	/EA	3,575,460
		20.06.210	Parking, at Grade	242.00	stl	8,589.07	/stl	2,078,555
		20.07.010	Roadway Modification, New AC Paving	60,800.00	SF	170.36	/SF	10,357,586
		20.07.715	Access Road Entrance Point	1.00	EA	48,632.73	/EA	48,633
		40.02.002	Natural Gas/Oil, 9"-16"	472.00	LF	194.54	/LF	91,824
		40.02.003	Potable Water, 10"-16"	1,703.00	LF	307.18	/LF	523,129
		40.02.005	Utility Relocation Allowance, Level 5 Urban	1,650.00	LF	197.11	/LF	325,236
		40.02.006	Sanitary Sewer, 37"-48"	2,404.00	LF	399.33	/LF	960,001
		40.02.008	Storm Drain, 42"-54"	631.00	LF	348.65	/LF	220,000
		40.02.009	Storm Drain, 55"-72"	1,592.00	LF	371.69	/LF	591,733
		40.02.011	Pump Station (Storm)	2.00	EA	383,975.91	/EA	767,952
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	29,283.00	LF	282.95	/LF	8,285,737
		40.02.016	Electric UG	3,478.00	LF	309.85	/LF	1,077,674
		40.02.019	Electric OH, 51-114 kV	2,971.00	LF	129.63	/LF	385,133

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.020	Electric OH, 115 kV	7,511.00	LF	244.82	/LF	1,838,870
		40.08.200.ae	Rdwy Underxing HSR (West Hedding): 2-Ln Rdwy Under 5 Trk	1.00	EA	11,532,891.28	/EA	11,532,891
		40.08.200.ae1	Rdwy Overxing Rdwy - 2-Ln Rdwy Over 4-Ln Rdwy (Stockton St)				/EA	1,621,339
		40.08.200.ae2	Rdwy Overxing Rdwy- 10-Ln Rdwy Over 4-Ln Rdwy (Bellarmine Pking Lot 1)				/EA	3,715,259
		40.08.200.ae3	Rdwy Overxing Rdwy- 10-Ln Rdwy Over 4-Ln Rdwy (Bellarmine Pking Lot 2)				/EA	3,592,259
		40.08.200.ae4	RR Overxing Rdwy- 5 Trk Over 4-Ln Rdwy				/EA	3,401,167
		40.08.200.ae5	Trench Base Slab - Hedding				/EA	33,195,428
		40.08.200.af	Rdwy Uxing HSR (De La Cruz Blvd): 5-Ln, RF Rdwy Under 7 Trks/6-Ln Rdwy	1.00	EA	17,720,890.33	/EA	17,720,890
		40.08.200.af1	Rdwy Overxing Rdwy- 2 Ln Rdwy Over 1 Ln Rdwy De La Cruz Blvd (South)				/EA	2,264,553
		40.08.200.af2	Rdwy Overxing Rdwy- 1 Ln Rdwy Over 1 Ln Rdwy De La Cruz (North)				/EA	640,758
		40.08.200.af3	Rdwy Overxing Rdwy- 6 Ln Rdwy Over 4 Ln Rdwy De La Cruz (El Camino)				/EA	3,789,932
		40.08.200.af4	RR Overxing Rdwy- 3 Trk Over 4 Ln Rdwy (UPRR)				/EA	3,297,553

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.af5	RR Overxing Rdwy- 2 Trk Over 4 Ln Rdwy (JPB)				/EA	2,153,394
		40.08.200.af6	Trench Base Slab - De La Cruz				/EA	76,721,704
		40.08.200.ah	Rdwy Underxing UPRR (Lafayette St) - 1 Trk (Main) Over 4 Ln Rdwy	1.00	EA	2,008,348.72	/EA	2,008,349
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to					
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.14	R M	197,484,535.43	/R M	27,647,835
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.11	R M	209,654,303.55	/R M	23,061,973
		10.02.040	Diridon-Tamien - 2 Track	1.06	R M	198,673,112.12	/R M	210,593,499
		10.02.041	Diridon-Tamien - 4 Track	0.52	R M	482,156,229.19	/R M	250,721,239
		10.10.120	Direct Fixation Track - 2 Track	1.35	R M	4,495,391.84	/R M	6,068,779
		10.10.140	Direct Fixation Track - 4 Track	0.49	R M	9,005,693.18	/R M	4,412,790
		10.14.150	Direct Fixation Crossover #15				/EA	2,548,376
		20.06.211	Bike Path Realignment (Almaden Expy)	1.00	EA	22,305,800.88	/EA	22,305,801
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	9,800.00	SF	170.36	/SF	1,669,479

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.005	Utility Relocation Allowance, Level 5 Urban	750.00	LF	197.11	/LF	147,834
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,040.00	LF	282.95	/LF	577,226
		40.02.020	Electric OH, 115 kV	1,400.00	LF	244.82	/LF	342,753
		40.02.024	Transmission Tower	1.00	EA	614,361.45	/EA	614,361
	SS4		San Jose to Monterey Corridor:Alma Ave to Communication Hill					
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.20	R M	177,019,979.50	/R M	35,403,996
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.28	R M	4,050,193.68	/R M	1,134,054
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	2.16	R M	7,163,896.40	/R M	15,474,016
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	0.27	R M	7,317,025.74	/R M	1,975,597
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.14	R M	15,224,244.29	/R M	2,131,394
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.28	R M	27,466,208.18	/R M	7,690,538
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.28	R M	1,547,292.71	/R M	433,242
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	2.59	R M	3,075,034.35	/R M	7,964,339
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	0.27	R M	4,622,417.96	/R M	1,248,053
		10.10.120	Direct Fixation Track - 2 Track	0.19	R M	4,531,584.68	/R M	861,001

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.201	Ballasted Turnout #9	2.00	EA	127,172.82	/EA	254,346
		10.14.203	Ballasted Turnout #11 & #14	1.00	EA	155,433.45	/EA	155,433
		10.14.320	Ballasted Crossover	1.00	EA	593,473.15	/EA	593,473
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	53,020.00	SF	170.36	/SF	9,032,224
		40.02.002	Natural Gas/Oil, 9"-16"	1,480.00	LF	194.54	/LF	287,923
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	16,040.00	LF	282.95	/LF	4,538,580
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	2,520.00	LF	244.82	/LF	616,956
		40.08.100.r	Rdwy Overxing HSR (Curtner Ave): 4-Ln Rdwy Over 4 Trk	1.00	EA	16,901,318.54	/EA	16,901,319
		40.08.100.s	Rdwy Overxing HSR (Almaden Expr): 4-Ln Rdwy Over 4 Trk	1.00	EA	12,090,542.80	/EA	12,090,543
		40.08.200.ai	Rdwy Underxing HSR (SR87): 1-Ln Rdwy Under Eight-Ln Highway	1.00	EA	434,561.12	/EA	434,561
		40.08.200.aj	Rdwy Underxing HSR (Almaden Rd): 2-Ln Rdwy Under 4 Trk	1.00	EA	2,145,737.04	/EA	2,145,737
		40.08.200.aj1	HSR Underpass	1.00	EA	9,261,833.85	/EA	9,261,834
		40.08.200.aj2	Caltrain & UPRR Underpass	1.00	EA	2,150,156.81	/EA	2,150,157
	SS5810		Morgan Hill & Gilroy: Embkmt (Com Hill. Thru D. Gilroy)					
		10.01.001	Topsoil	299,423.00	CY	4.24	/CY	1,268,463
		10.01.002	Cut	491,804.00	CY	13.42	/CY	6,599,862

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.004	Overbreak In Embankment	372,489.00	CY	19.79	/CY	7,370,777
		10.01.005	Embankment	1,706,565.00	CY	22.60	/CY	38,573,556
		10.01.006	Overbreak Fill In Cut	167,879.00	CY	19.79	/CY	3,321,969
		10.01.007	Overbreak Fill In Embankment	372,489.00	CY	19.79	/CY	7,370,777
		10.01.008	Subballast	106,357.00	CY	59.35	/CY	6,312,315
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.56	R M	200,711,656.77	/R M	112,398,528
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	1.43	R M	212,410,841.33	/R M	303,747,503
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	0.34	R M	221,330,519.62	/R M	75,252,377
		10.02.022	BC - 205-205-205-205 Span - Capitol, Alt 2	0.16	R M	397,590,185.50	/R M	63,614,430
		10.05.121	At-Grade Track Bed in cut - 2 Track (5'Avg ExcDepth)	1.21	R M	8,092,553.86	/R M	9,791,990
		10.05.222	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.03	R M	7,620,433.67	/R M	228,613
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	5.00	EA	1,513,256.54	/EA	7,566,283
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	7.62	R M	7,154,145.23	/R M	54,514,587
		10.07.215a	Cut & Cover Box - 2 Track / 1 Box (50' Avg. Exc Depth)	0.20	R M	493,579,214.20	/R M	98,715,843
		10.08.221	Retained Cut, Trench - 2 Trk (10'Avg. Exc Depth)	0.28	R M	85,838,401.14	/R M	24,034,752
		10.08.222	Retained Cut, Trench - 2 Trk (20'Avg. Exc Depth)	0.38	R M	157,345,908.55	/R M	59,791,445

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.08.222a	Ret Cut, Trench - 2 Trk (20' Avg. Exc Depth)	0.10	R M	199,977,104.80	/R M	19,997,710
		10.08.223	Retained Cut, Trench - 2 Trk (30'Avg. Exc Depth)	0.23	R M	221,896,672.96	/R M	51,036,235
		10.08.223a	Ret Cut, Trench - 2 Trk (30' Avg. Exc Depth)	0.11	R M	262,867,524.18	/R M	28,915,428
		10.08.224a	Ret Cut, Staged Trench - 2 Trk (40' Avg. Exc Depth)	0.29	R M	399,720,155.55	/R M	115,918,845
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	11.95	R M	15,005,966.35	/R M	179,321,298
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	5.67	R M	27,245,458.96	/R M	154,481,752
		10.08.423	Ret Fill, Walls Both Sides - 2 Trk (30' Avg. Wall Ht)	0.63	R M	28,335,212.00	/R M	17,851,184
		10.09.110	Ballasted Track - 1 Track	1.80	R M	2,347,704.66	/R M	4,225,868
		10.09.120	Ballasted Track - 2 Track	13.18	R M	4,644,739.43	/R M	61,217,666
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	27.11	R M	3,077,097.47	/R M	83,420,112
		10.09.920	Ballasted Trk Relocation - 1 Trk (Permanent)	3.29	R M	282,902.95	/R M	930,751
		10.10.120	Direct Fixation Track - 2 Track	2.54	R M	4,504,028.44	/R M	11,440,232
		10.14.100	Special Trackwork - Direct Fixation	2.00	EA	706,515.66	/EA	1,413,031
		10.14.130	Direct Fixation Crossover (60 MPH)	1.00	EA	2,119,546.96	/EA	2,119,547
		10.14.200	Ballasted Turnout (60 MPH)	8.00	EA	642,929.25	/EA	5,143,434

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.300	Ballasted Crossover (60 MPH)	1.00	EA	2,119,546.96	/EA	2,119,547
		10.14.305	Ballasted Crossover (80 MPH)	4.00	EA	1,602,377.51	/EA	6,409,510
		10.14.400	Terminal - Bumping Post	2.00	Ea	45,217.01	/Ea	90,434
		10.14.500	Ballasted Turnout Caltrain #9	10.00	EA	45,217.00	/EA	452,170
		10.14.600	Ballasted Crossover Caltrain	2.00	EA	45,217.01	/EA	90,434
		10.15.100	Wildlife Crossing	6.00	EA	28,260.62	/EA	169,564
		10.15.102	Wildlife Crossing - 30' wide	2.00	EA	393,387.93	/EA	786,776
		10.15.103	Wildlife Crossing - 40' wide	6.00	EA	722,115.52	/EA	4,332,693
		10.16.100	Drainage	17.00	EA	192,878.78	/EA	3,278,939
		10.16.101	Superficial drainage system for flood plain mitigation	3.80	R M	11,150,083.44	/R M	42,370,317
		20.02.215b	Downtown Gilroy Sta - At Grade	1.00	LS	163,259,298.37	/LS	163,259,298
		20.06.170	Ped Brdg Overcrossing HSR (Branham Ln):	1.00	EA	18,328,886.76	/EA	18,328,887
		20.06.171	Ped Brdg Overcrossing HSR (Blossom Hill Sta):	1.00	EA	7,928,800.99	/EA	7,928,801
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	144,860.00	SF	170.36	/SF	24,677,630
		30.04.010a	MOWF Downtown Gilroy	1.00	EA	251,124,406.96	/EA	251,124,407
		40.02.001	Natural Gas/Oil, 4.5"-8"	1,410.00	LF	256.77	/LF	362,053
		40.02.002	Natural Gas/Oil, 9"-16"	1,570.00	LF	194.54	/LF	305,432
		40.02.003	Potable Water, 10"-16"	1,800.00	LF	307.18	/LF	552,925
		40.02.004	Potable Water, 72"	1,550.00	LF	921.54	/LF	1,428,390

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.005	Utility Relocation Allowance, Level 5 Urban	12,140.00	LF	197.11	/LF	2,392,947
		40.02.006	Sanitary Sewer, 37"-48"	8,910.00	LF	399.33	/LF	3,558,074
		40.02.007	Sanitary Sewer, 49"-54"	8,010.00	LF	436.20	/LF	3,493,983
		40.02.008	Storm Drain, 42"-54"	5,120.00	LF	348.65	/LF	1,785,104
		40.02.011	Pump Station (Storm)	23.00	EA	383,975.90	/EA	8,831,446
		40.02.012	Pump Station (Sanitary)	7.00	EA	560,604.81	/EA	3,924,234
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	194,340.00	LF	282.95	/LF	54,989,250
		40.02.014	Telecom/Fiber Optic OH, All Sizes	12,290.00	LF	282.95	/LF	3,477,503
		40.02.015	Telecommunication Facility	1.00	EA	460,771.10	/EA	460,771
		40.02.019	Electric OH, 51-114 kV	2,430.00	LF	129.63	/LF	315,003
		40.02.020	Electric OH, 115 kV	3,430.00	LF	244.82	/LF	839,745
		40.02.021	Electric OH, 230 kV	2,540.00	LF	194.31	/LF	493,535
		40.02.022	Electirc OH, unknown	101,405.00	LF	194.31	/LF	19,703,516
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	25,770.00	LF	244.82	/LF	6,309,105
		40.02.024	Transmission Tower	3.00	EA	614,361.44	/EA	1,843,084
		40.02.030	Potable Water, 4"-9"	2,305.00	LF	66.35	/LF	152,943
		40.02.045	Electric OH & Telecom OH on JP, Unknown	1,875.00	LF	194.31	/LF	364,322
		40.05.310	Intrusion Protection Barrier	120,815.00	LF	3,245.17	/LF	392,064,675
		40.08.100.l	Rdwy Overxing HSR (Palm Ave): 2-Ln Rdwy Over 4 Trk & 4-Ln Rdwy	1.00	EA	26,269,090.89	/EA	26,269,091

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.100.m	Rdwy Overxing HSR (Live Oak Ave): 2-Ln Rdwy Over 4 Trk & 4-Ln Rdwy	1.00	EA	28,610,048.59	/EA	28,610,049
		40.08.100.n	Rdwy Overxing HSR (E. Middle Ave): 2-Ln Rdwy Over 3 Trk & 4-Ln Rdwy	1.00	EA	48,511,025.19	/EA	48,511,025
		40.08.100.o	Rdwy Overxing HSR (Church Ave): 4-Ln Rdwy Over 3 Trk & 4-Ln Rdwy	1.00	EA	25,672,409.70	/EA	25,672,410
		40.08.100.p	Rdwy Overxing HSR (US101 - NB):	1.00	EA	17,881,473.68	/EA	17,881,474
		40.08.100.q	Rdwy Overxing HSR (US101 - SB):	1.00	EA	29,378,479.37	/EA	29,378,479
		40.08.100.t	Rdwy Overxing HSR (Capitol Expr): 4-Ln Rdwy Over 4-Ln Rdwy	1.00	EA	10,037,908.97	/EA	10,037,909
		40.08.100.u	Rdwy Overxing HSR (Butterfield Blvd): 4-Ln Rdwy Over 2-Ln Rdwy	1.00	EA	9,421,592.04	/EA	9,421,592
		40.08.200.aa	Rdwy Underxing HSR (9Th Street): 2-Ln Rdwy Under 6 Trk	1.00	EA	2,001,300.47	/EA	2,001,300
		40.08.200.aa1	HSR Underpass	1.00	EA	8,634,713.70	/EA	8,634,714
		40.08.200.aa2	UPRR Underpass	1.00	EA	10,233,969.53	/EA	10,233,970
		40.08.200.ab	Rdwy Underxing HSR (10Th Street): 4-Ln Rdwy Under 7 Trk	1.00	EA	3,174,802.55	/EA	3,174,803
		40.08.200.ab1	HSR Underpass	1.00	EA	6,845,042.65	/EA	6,845,043
		40.08.200.ab2	UPRR Underpass	1.00	EA	8,636,944.12	/EA	8,636,944

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.ao	Rdwy Underxing HSR (Cohansey): 4-Ln Rdwy Under 3 Trk	1.00	EA	408,979.97	/EA	408,980
		40.08.200.ao1	HSR Underpass	1.00	EA	4,658,744.77	/EA	4,658,745
		40.08.200.ao2	UPRR Underpass	1.00	EA	3,246,309.01	/EA	3,246,309
		40.08.200.ap	Rdwy Underxing HSR (Casey): 4-Ln Rdwy Under 3 Trk	1.00	EA	460,394.40	/EA	460,394
		40.08.200.ap1	HSR Underpass	1.00	EA	2,942,531.49	/EA	2,942,531
		40.08.200.ap2	UPRR Underpass	1.00	EA	2,769,231.43	/EA	2,769,231
		40.08.200.aq	Rdwy Underxing HSR (Monterey Rd At Morgan Hill): Exist Rd Under 2 Trk	1.00	EA	3,859,766.65	/EA	3,859,767
		40.08.200.as1	HSR Underpass	1.00	EA	4,163,317.51	/EA	4,163,318
		40.08.200.as2	UPRR Underpass	1.00	EA	6,322,757.67	/EA	6,322,758
		40.08.200.b	Rdwy Uxing HSR (Skyway Dr Opt A): 4 Ln, RF Rdwy Under 4 Trks/4 Ln Rdwy	1.00	EA	9,323,700.27	/EA	9,323,700
		40.08.200.b1	HSR Underpass	1.00	EA	2,913,281.41	/EA	2,913,281
		40.08.200.b2	UPRR Underpass	1.00	EA	6,507,867.63	/EA	6,507,868
		40.08.200.b3	Rdwy Underpass	1.00	EA	8,018,804.56	/EA	8,018,805
		40.08.200.c	Rdwy Underxing HSR (Monterey Rd At Skyway Drive): 4-Ln, Ret Fill Rdwy	1.00	EA	17,957,828.62	/EA	17,957,829
		40.08.200.d	Rdwy Underxing HSR (Branham Ln): 4-Ln, Ret Fill Rdwy Under 4 Trk	1.00	EA	9,433,060.75	/EA	9,433,061
		40.08.200.d1	HSR Underpass	1.00	EA	4,981,169.04	/EA	4,981,169

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.d2	UPRR Underpass	1.00	EA	7,049,503.64	/EA	7,049,504
		40.08.200.e	Rdwy Underxing HSR (Monterey Rd At Branham Ln): 4-Ln, Ret Fill Rdwy	1.00	EA	14,359,464.25	/EA	14,359,464
		40.08.200.f	Rdwy Underxing HSR (Chynoweth Ave): 5-Ln, Ret Fill Rdwy Under 4 Trk	1.00	EA	5,895,080.99	/EA	5,895,081
		40.08.200.f1	HSR Underpass	1.00	EA	4,466,492.02	/EA	4,466,492
		40.08.200.f2	UPRR Underpass	1.00	EA	8,380,443.15	/EA	8,380,443
		40.08.200.g	Rdwy Underxing HSR (Monterey Rd At Chynoweth Ave): 4-Ln, Ret Fill Rdwy	1.00	EA	10,856,559.53	/EA	10,856,560
		40.08.200.h	Rdwy Underxing HSR (Madr1 Parkway): 5-Ln Rdwy Under 4 Trk & 4-Ln Rdwy	1.00	EA	13,532,374.73	/EA	13,532,375
		40.08.200.h1	HSR Underpass	1.00	EA	3,515,066.52	/EA	3,515,067
		40.08.200.h2	UPRR Underpass	1.00	EA	4,055,219.45	/EA	4,055,219
		40.08.200.h3	Rdwy Underpass	1.00	EA	11,228,104.96	/EA	11,228,105
		40.08.200.i	Rdwy Underxing HSR (Main Ave): 4-Ln Rdwy Under 3 Trk	1.00	EA	4,470,174.54	/EA	4,470,175
		40.08.200.i1	HSR Underpass	1.00	EA	4,952,515.56	/EA	4,952,516
		40.08.200.i2	UPRR Underpass	1.00	EA	3,989,244.90	/EA	3,989,245
		40.08.200.j	Rdwy Underxing HSR (E. Dunne Ave): 4-Ln Rdwy Under 3 Trk	1.00	EA	5,835,731.64	/EA	5,835,732
		40.08.200.j1	HSR Underpass	1.00	EA	5,105,277.34	/EA	5,105,277
		40.08.200.j2	UPRR Underpass	1.00	EA	4,074,885.10	/EA	4,074,885

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.k	Rdwy Underxing HSR (San Pedro Ave): 2-Ln Rdwy Under 3 Trk	1.00	EA	10,121,703.97	/EA	10,121,704
		40.08.200.k1	HSR Underpass	1.00	EA	4,857,804.11	/EA	4,857,804
		40.08.200.k2	UPRR Underpass	1.00	EA	3,636,061.04	/EA	3,636,061
		40.08.200.k3	Rdwy Underpass (Church St)	1.00	EA	4,517,490.78	/EA	4,517,491
		40.08.200.l	Rdwy Underxing HSR (Tennant Ave): 4-Ln Rdwy Under 3 Trk	1.00	EA	22,746,973.44	/EA	22,746,973
		40.08.200.l1	HSR Underpass	1.00	EA	5,222,234.44	/EA	5,222,234
		40.08.200.l2	UPRR Underpass	1.00	EA	8,592,014.83	/EA	8,592,015
		40.08.200.m	Rdwy Uxing HSR (Monterey Rd/E. Middle Rd): 4-Ln Rdwy Under 2-Ln Rdwy	1.00	EA	5,818,481.13	/EA	5,818,481
		40.08.200.m1	HSR Underpass	1.00	EA	7,341,795.19	/EA	7,341,795
		40.08.200.m2	UPRR Underpass	1.00	EA	5,628,886.75	/EA	5,628,887
		40.08.200.m3	Rdwy Underpass (Monterey Over Llagas)	1.00	EA	32,751,007.95	/EA	32,751,008
		40.08.200.n	Rdwy Uxing HSR (W. San Martin Ave): 2-Ln Rdwy Under 3 Trks/4-Ln Rdwy	1.00	EA	6,715,008.39	/EA	6,715,008
		40.08.200.n1	HSR Underpass	1.00	EA	3,153,081.90	/EA	3,153,082
		40.08.200.n2	UPRR Underpass	1.00	EA	3,060,252.49	/EA	3,060,252
		40.08.200.n3	Rdwy Underpass (Monterey Over San Martin)	1.00	EA	11,862,916.87	/EA	11,862,917
		40.08.200.n4	Rdwy Underpass (Depot Over San Martin)	1.00	EA	5,322,989.86	/EA	5,322,990

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.n5	Rdwy Underpass (San Martin Over Llagas)	1.00	EA	7,621,515.96	/EA	7,621,516
		40.08.200.o	Rdwy Underxing HSR (Mas10 Ave): 4-Ln Rdwy Under 3 Trk & 4-Ln Rdwy	1.00	EA	21,056,757.10	/EA	21,056,757
		40.08.200.o1	HSR Underpass	1.00	EA	4,115,862.92	/EA	4,115,863
		40.08.200.o2	UPRR Underpass	1.00	EA	5,857,675.90	/EA	5,857,676
		40.08.200.p	Rdwy Underxing HSR (Monterey Rd At Mas10 Ave): 4-Ln Rdwy	1.00	EA	13,222,454.31	/EA	13,222,454
		40.08.200.q	Rdwy Underxing HSR (Rucker Ave): 2-Ln Rdwy Under 3 Trk & 4-Ln Rdwy	1.00	EA	11,170,301.99	/EA	11,170,302
		40.08.200.q1	HSR Underpass	1.00	EA	3,074,118.46	/EA	3,074,118
		40.08.200.q2	UPRR Underpass	1.00	EA	2,765,275.25	/EA	2,765,275
		40.08.200.q3	Rdwy Underpass	1.00	EA	6,659,190.59	/EA	6,659,191
		40.08.200.r	Rdwy Underxing HSR (Buena Vista Ave): 4-Ln Rdwy Under 3 Trk	1.00	EA	13,785,656.61	/EA	13,785,657
		40.08.200.r1	HSR Underpass	1.00	EA	4,308,534.42	/EA	4,308,534
		40.08.200.r2	UPRR Underpass	1.00	EA	6,308,336.87	/EA	6,308,337
		40.08.200.s	Rdwy Underxing HSR (Monterey Rd At Buena Vista Ave): 4-Ln Rdwy	1.00	EA	12,707,868.48	/EA	12,707,868
		40.08.200.t1	HSR Underpass	1.00	EA	2,409,690.63	/EA	2,409,691
		40.08.200.t2	UPRR Underpass	1.00	EA	1,696,871.69	/EA	1,696,872
		40.08.200.v	Rdwy Underxing HSR (Leavesley Rd): 4-Ln Rdwy Under 3 Trk	1.00	EA	5,286,464.13	/EA	5,286,464

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.v1	HSR Underpass	1.00	EA	5,234,670.97	/EA	5,234,671
		40.08.200.v2	UPRR Underpass	1.00	EA	4,800,000.56	/EA	4,800,001
		40.08.200.w	Rdwy Underxing HSR (Loof Ave): 4-Ln Rdwy Under 3 Trk	1.00	EA	4,829,024.80	/EA	4,829,025
		40.08.200.w1	HSR Underpass	1.00	EA	3,258,645.90	/EA	3,258,646
		40.08.200.w2	UPRR Underpass	1.00	EA	2,940,312.40	/EA	2,940,312
		40.08.200.x	Rdwy Underxing HSR (Lewis Street): 2-Ln Rdwy Under 3 Trk	1.00	EA	2,309,171.40	/EA	2,309,171
		40.08.200.x1	HSR Underpass	1.00	EA	3,040,081.20	/EA	3,040,081
		40.08.200.x2	UPRR Underpass	1.00	EA	2,940,312.39	/EA	2,940,312
		40.08.200.y	Rdwy Underxing HSR (6Th Street): 2-Ln Rdwy Under 5 Trk	1.00	EA	2,384,492.84	/EA	2,384,493
		40.08.200.y1	HSR Underpass	1.00	EA	5,882,299.72	/EA	5,882,300
		40.08.200.y2	UPRR Underpass	1.00	EA	5,726,032.56	/EA	5,726,033
		40.08.200.z	Rdwy Underxing HSR (Old Gilroy Street): 2-Ln Rdwy Under 6 Trk	1.00	EA	2,902,128.22	/EA	2,902,128
		40.08.200.z1	HSR Underpass	1.00	EA	5,173,019.57	/EA	5,173,020
		40.08.200.z2	UPRR Underpass	1.00	EA	5,854,180.05	/EA	5,854,180
	SS99-2		Alternative 2 Complete					
		40.04.110	Environmental Mitigation Allowance, Heavy	1.00	LS	456,097,316.64	/LS	456,097,317
		40.06.100	Temporary facilities and other indirect costs during construction	1.00	LS	557,452,275.89	/LS	557,452,276

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.07.100	ROW Procurement Acquisition	1.00	LS	4,657,625,000.00	/LS	4,657,625,000
		50.01.020	Wayside Protection - 2 Track	90.80	R M	2,273,228.44	/R M	206,409,142
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	90.80	R M	899,813.87	/R M	81,703,099
		50.07.020	Hazard Detectors	90.80	R M	624,185.08	/R M	56,676,006
		60.01.020	Traction power transmission: High voltage	90.80	R M	1,807,127.31	/R M	164,087,159
		60.01.030	Distribution Line Pacheco Pass	90.80	R M	757,449.78	/R M	68,776,440
		60.01.040	PG&E Construction Power Drop Sites	90.80	R M	24,355.56	/R M	2,211,485
		60.02.010	Traction Power, Supply Station Site Work	90.80	R M	2,339,284.14	/R M	212,407,000
		60.03.100	Traction Power Distribution - 2 Tracks	90.80	R M	2,649,002.37	/R M	240,529,416
		60.04.100	Traction power control	90.80	R M	6,068.04	/R M	550,978
		80.00.00	Professional Services	1.00	LS	2,708,647,236.39	/LS	2,708,647,236
		90.00.00	Unallocated Contingency	1.00	LS	873,273,107.28	/LS	873,273,107
			Total					25,078,647,419
03			Alternative 03					
	SS1113		Morgan Hill & Gilroy: Viaduct thru E Gilroy					
		10.01.001	Topsoil	566,208.00	CY	4.24	/CY	2,398,660

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.002	Cut	4,419,287.00	CY	13.42	/CY	59,305,497
		10.01.004	Overbreak In Embankment	535,090.00	CY	19.79	/CY	10,588,311
		10.01.005	Embankment	4,482,346.00	CY	22.60	/CY	101,314,615
		10.01.006	Overbreak Fill In Cut	64,223.00	CY	19.79	/CY	1,270,840
		10.01.007	Overbreak Fill In Embankment	535,090.00	CY	19.79	/CY	10,588,311
		10.01.008	Subballast	114,129.00	CY	59.35	/CY	6,773,540
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	6.10	R M	132,426,082.91	/R M	807,799,106
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.44	R M	136,625,209.68	/R M	60,115,092
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.68	R M	143,137,797.81	/R M	97,333,703
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.14	R M	133,411,888.50	/R M	18,677,664
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	1.33	R M	147,393,638.23	/R M	196,033,539
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.45	R M	152,524,623.12	/R M	221,160,704
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.12	R M	159,249,929.50	/R M	19,109,992
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.06	R M	200,136,576.83	/R M	12,008,195

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	2.55	R M	201,725,946.90	/R M	514,401,165
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	0.08	R M	2,128,745,614.4 7	/R M	161,784,667
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	0.92	R M	220,785,455.97	/R M	203,122,619
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	0.05	R M	223,695,550.00	/R M	11,184,778
		10.02.039	BC - 220-220 Span - US101 - HSR	0.08	R M	192,925,933.62	/R M	15,434,075
		10.02.039a	BC - 220-220 Span - US101 - UPRR	0.08	R M	177,257,624.62	/R M	14,180,610
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	20.00	EA	191,832.27	/EA	3,836,645
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.00	EA	983,616.76	/EA	7,868,934
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	2.00	EA	2,864,326.54	/EA	5,728,653
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	7.00	EA	1,513,256.54	/EA	10,592,796
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.57	R M	216,837,944.13	/R M	340,435,572
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.00	lf	33,583.85	/lf	33,583,852
		10.07.950	Allowance For Construction Monitoring	1.57	R M	271,616.00	/R M	426,437

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	11.34	R M	2,349,737.87	/R M	26,646,027
		10.09.120	Ballasted Track - 2 Track	6.54	R M	4,643,533.92	/R M	30,368,712
		10.10.110	Direct Fixation Track - 1 Track	4.75	R M	6,262,223.63	/R M	29,745,562
		10.10.120	Direct Fixation Track - 2 Track	3.34	R M	4,498,471.62	/R M	15,024,895
		10.14.200	Ballasted Turnout (60 MPH)	6.00	EA	642,929.25	/EA	3,857,575
		10.14.300	Ballasted Crossover (60 MPH)	1.00	EA	2,119,546.96	/EA	2,119,547
		10.14.305	Ballasted Crossover (80 MPH)	4.00	EA	1,602,377.51	/EA	6,409,510
		10.14.400	Terminal - Bumping Post	2.00	Ea	45,217.00	/Ea	90,434
		10.15.100	Wildlife Crossing	2.00	EA	28,260.63	/EA	56,521
		10.16.100	Drainage	108.00	EA	192,878.77	/EA	20,830,908
		10.16.101	Superficial drainage system for flood plain mitigation	5.39	R M	11,154,752.51	/R M	60,124,116
		20.02.215c	East Gilroy Sta	1.00	LS	138,052,080.33	/LS	138,052,080
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	801,740.00	SF	170.36	/SF	136,580,442

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		30.04.010b	Comb. MOWF & LMF - East Gly	1.00	EA	295,540,600.71	/EA	295,540,601
		40.02.001	Natural Gas/Oil, 4.5"-8"	250.00	LF	163.82	/LF	40,956
		40.02.002	Natural Gas/Oil, 9"-16"	290.00	LF	194.54	/LF	56,417
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,000.00	LF	282.95	/LF	565,908
		40.02.022	Electirc OH, unknown	17,290.00	LF	194.31	/LF	3,359,536
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	3,320.00	LF	244.82	/LF	812,814
		40.02.045	Electric OH & Telecom OH on JP, Unknown	20,145.00	LF	194.31	/LF	3,914,278
		40.08.100.a	Rdwy Overxing HSR (SR152): 4-Ln Rdwy Over MF	1.00	EA	147,341,111.90	/EA	147,341,112
		40.08.100.h	Rdwy Overxing HSR (Las Animas Ave): 2-Ln Rdwy Over 2 Trk - Alt 3	1.00	EA	22,735,306.79	/EA	22,735,307
		40.08.100.k	Rdwy Overxing HSR (Leavesley Rd): 4-Ln Rdwy Over 2 Trk - Alt 3	1.00	EA	34,199,854.51	/EA	34,199,855
		40.08.200.ak	Rdwy Underxing HSR (Holsclaw Farm Rd): 2-Ln Rdwy Under 2 Trk	1.00	EA	269,424.49	/EA	269,424
	SS14		Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.83	CY	4.24	/CY	3,568,083
		10.01.002	Cut	15,347,083.0 0	CY	13.42	/CY	205,953,215
		10.01.004	Overbreak In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.005	Embankment	8,678,515.00	CY	22.60	/CY	196,160,767

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.006	Overbreak Fill In Cut	72,100.00	CY	19.79	/CY	1,426,706
		10.01.007	Overbreak Fill In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.008	Subballast	143,484.00	CY	59.35	/CY	8,515,772
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.58	R M	154,200,922.47	/R M	89,436,535
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.11	R M	156,620,053.09	/R M	17,228,206
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.08	R M	148,498,029.12	/R M	11,879,842
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.93	R M	168,597,657.13	/R M	156,795,821
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.38	R M	176,322,161.82	/R M	419,646,745
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.02	R M	170,351,049.00	/R M	3,407,021
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.07	R M	151,524,442.86	/R M	10,606,711
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.12	R M	171,400,316.50	/R M	20,568,038
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.11	R M	186,079,494.00	/R M	20,468,744
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.27	R M	196,606,822.59	/R M	53,083,842

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.27	R M	204,995,325.85	/R M	55,348,738
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.73	R M	210,460,755.07	/R M	153,636,351
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.19	R M	210,576,875.68	/R M	40,009,606
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.12	R M	203,677,321.58	/R M	24,441,279
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.10	R M	210,836,926.20	/R M	21,083,693
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.00	EA	191,832.28	/EA	767,329
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.00	EA	983,616.76	/EA	17,705,102
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.00	EA	2,864,326.54	/EA	57,286,531
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.00	EA	295,126.56	/EA	1,180,506
		10.05.320	Transition Wedge 1 Trk Embankment- Slab	4.00	EA	9,600.28	/EA	38,401
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.00	EA	11,513.90	/EA	46,056
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.00	EA	14,027.54	/EA	56,110
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.61	R M	216,837,944.12	/R M	2,951,164,419
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.00	lf	33,583.85	/lf	302,254,665

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.07.850	Pumping Sta	1.00	EA	339,520.00	/EA	339,520
		10.07.920	Ventilation Equipment Allowance (INCLUDED w/10.07.902)	4.00	EA	173,849,447.78	/EA	695,397,791
		10.07.950	Allowance For Construction Monitoring	13.61	R M	271,616.00	/R M	3,696,694
		10.07.970	Fault Chamber	2.00	EA	166,409,372.87	/EA	332,818,746
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	4.24	R M	2,350,177.49	/R M	9,964,753
		10.09.120	Ballasted Track - 2 Track	13.30	R M	4,644,098.78	/R M	61,766,514
		10.10.110	Direct Fixation Track - 1 Track	31.00	R M	2,267,324.31	/R M	70,287,054
		10.10.120	Direct Fixation Track - 2 Track	0.24	R M	4,520,631.83	/R M	1,084,952
		10.15.101	Wildlife Crossing	10.00	EA	71,301.56	/EA	713,016
		10.16.100	Drainage	2.00	EA	192,878.77	/EA	385,758
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	777,970.00	SF	170.36	/SF	132,531,103
		40.02.020	Electric OH, 115 kV	455.00	LF	244.82	/LF	111,395

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.021	Electric OH, 230 kV	1,340.00	LF	194.31	/LF	260,369
		40.02.022	Electirc OH, unknown	1,925.00	LF	194.31	/LF	374,037
		40.02.025	Potable Water, 120"	3,800.00	LF	7,679.52	/LF	29,182,168
		40.02.043	Drainage Canal, All Sizes	785.00	LF	502.07	/LF	394,121
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.00	LF	194.31	/LF	80,637
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.00	lf	3,839.76	/lf	6,254,967
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.00	LF	9,215.42	/LF	8,763,866
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.00	LF	10,751.33	/LF	7,278,647
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.00	LF	13,823.13	/LF	13,684,901
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.00	LF	18,430.84	/LF	19,462,970
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,089.00	LF	12,290.57	/LF	37,965,571
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.00	EA	725,071.17	/EA	725,071
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.00	EA	9,101.33	/EA	9,101
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.00	EA	41,939.99	/EA	41,940
	SS16		San Joaquin Valley					
		10.01.001	Topsoil	447,415.00	CY	4.24	/CY	1,895,411
		10.01.002	Cut	23,638.00	CY	13.42	/CY	317,217

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.004	Overbreak In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.005	Embankment	2,531,377.00	CY	22.60	/CY	57,216,798
		10.01.006	Overbreak Fill In Cut	1,701.00	CY	19.79	/CY	33,657
		10.01.007	Overbreak Fill In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.008	Subballast	128,198.00	CY	59.35	/CY	7,608,550
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.70	R M	181,482,026.00	/R M	490,001,470
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.63	R M	189,953,839.65	/R M	309,624,759
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.67	R M	198,211,318.34	/R M	132,801,583
		10.02.036	BC - 150-275-150 - Cherokee	0.11	R M	224,216,722.18	/R M	24,663,839
		10.02.037	BC - 200-350-200 - San Luis	0.14	R M	178,203,214.43	/R M	24,948,450
		10.02.038	BC - 120-220-120 Span - Los Banos	0.09	R M	262,414,325.67	/R M	23,617,289
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.00	EA	1,513,256.55	/EA	12,106,052
		10.09.110	Ballasted Track - 1 Track	0.55	R M	2,350,177.51	/R M	1,292,598
		10.09.120	Ballasted Track - 2 Track	12.75	R M	4,644,098.77	/R M	59,212,259
		10.10.120	Direct Fixation Track - 2 Track	5.37	R M	4,501,074.99	/R M	24,170,773
		10.14.206	Ballasted Turnout #20	3.00	EA	339,127.52	/EA	1,017,383
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	2,119,546.97	/EA	4,239,094

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.305	Ballasted Crossover (80 MPH)	2.00	EA	1,602,377.51	/EA	3,204,755
		10.14.400	Terminal - Bumping Post	1.00	Ea	45,217.00	/Ea	45,217
		10.15.101	Wildlife Crossing	67.00	EA	71,301.56	/EA	4,777,205
		10.16.100	Drainage	42.00	EA	192,878.77	/EA	8,100,909
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	746,920.00	SF	170.36	/SF	127,241,579
		30.04.010c	MOIF Siding	1.00	EA	3,611,952.23	/EA	3,611,952
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.00	LF	282.95	/LF	1,498,241
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,255.00	LF	282.95	/LF	1,769,876
		40.02.019	Electric OH, 51-114 kV	3,770.00	LF	129.63	/LF	488,708
		40.02.022	Electirc OH, unknown	23,930.00	LF	194.31	/LF	4,649,723
		40.02.035	Potable Water Storage Tank	1.00	EA	76,795.19	/EA	76,795
		40.02.043	Drainage Canal, All Sizes	295,151.00	LF	50.21	/LF	14,818,454
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.00	LF	194.31	/LF	2,383,153
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.66	lf	3,839.76	/lf	2,534
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	51,328,605.98	/EA	51,328,606
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	28,529,153.90	/EA	28,529,154

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	26,999,657.44	/EA	26,999,657
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	27,497,062.75	/EA	27,497,063
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys	1.00	EA	30,740,316.47	/EA	30,740,316
	SS2		San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)					
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.23	R M	191,434,988.91	/R M	44,030,047
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.16	R M	179,694,590.19	/R M	28,751,134
		10.01.222b	Elevated Structure - 2 Track (20' Avg. Pier Ht, 150' Span)	0.14	R M	172,149,269.57	/R M	24,100,898
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.29	R M	241,369,061.10	/R M	69,997,028
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.88	R M	200,848,292.19	/R M	176,746,497
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	0.31	R M	213,569,428.48	/R M	66,206,523
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	0.02	R M	251,516,156.50	/R M	5,030,323
		10.02.042	Scott-Diridon - 2 Trk over 3 Trk (30' Avg. Pier Ht) - 110' Spacing	0.23	R M	659,149,080.87	/R M	151,604,289

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.043	Scott-Diridon - 2 Trk over 5 Trk (30' Avg. Pier Ht) - 110' Spacing	0.15	R M	729,926,080.13	/R M	109,488,912
		10.02.044	Scott-Diridon - 4 Trk over 3 Trk (60' Avg. Pier Ht) - 120' Spacing	0.29	R M	773,052,862.72	/R M	224,185,330
		10.02.045	Scott-Diridon - Diridon-Tamien - 4 Trk	0.19	R M	856,527,020.84	/R M	162,740,134
		10.02.046	Scott-Diridon - BC -160-220-160 Span - Lafayette St	0.10	R M	230,392,863.10	/R M	23,039,286
		10.02.047	Scott-Diridon - BC -160-220-160 Span - I-880	0.10	R M	158,284,448.50	/R M	15,828,445
		10.02.048	Scott-Diridon - BC -160-220-160 Span - Taylor St	0.10	R M	145,875,956.90	/R M	14,587,596
		10.02.049	Scott-Diridon - BC-120-240-120 Span - Santa Clara Sta	0.09	R M	239,189,150.67	/R M	21,527,024
		10.02.051	Scott-Diridon - BC -180-180 span - SJ City Market, Wye S Trk	0.14	R M	124,084,901.50	/R M	17,371,886
		10.02.052	Scott-Diridon - 4 Trk BC-150-240-150 Span - Santa Clara Street	0.10	R M	318,439,484.20	/R M	31,843,948
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.74	R M	4,125,169.45	/R M	3,052,625
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	0.12	R M	7,223,464.92	/R M	866,816
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	1.20	R M	7,455,526.54	/R M	8,946,632
		10.06.240	At-Grade Track-Bed With Closed Drainage - 4 Track	0.77	R M	7,696,893.56	/R M	5,926,608

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.14	R M	15,224,244.29	/R M	2,131,394
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20' Avg. Wall Ht)	0.20	R M	26,968,498.40	/R M	5,393,700
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.74	R M	1,575,935.76	/R M	1,166,192
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	0.46	R M	3,085,185.20	/R M	1,419,185
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	1.20	R M	4,713,558.06	/R M	5,656,270
		10.09.142	Ballasted Track (Track Laying Machine) - 4 Track	0.77	R M	6,238,735.10	/R M	4,803,826
		10.10.120	Direct Fixation Track - 2 Track	2.92	R M	4,494,477.06	/R M	13,123,873
		10.10.140	Direct Fixation Track - 4 Track	0.56	R M	9,101,994.32	/R M	5,097,117
		10.14.321	Ballasted Crossover #10	1.00	EA	720,645.97	/EA	720,646
		10.14.322	Ballasted Crossover #11	3.00	EA	806,840.88	/EA	2,420,523
		10.14.323	Ballasted Crossover #14	4.00	EA	1,003,252.23	/EA	4,013,009
		10.14.324	Ballasted Crossover #20	1.00	EA	1,413,031.31	/EA	1,413,031
		10.14.400	Terminal - Bumping Post	2.00	Ea	45,217.00	/Ea	90,434
		20.02.225	San Jose (Diridon) Sta	1.00	LS	307,339,406.30	/LS	307,339,406
		20.06.120	Ped Access (Cut & Cover)	650.00	LF	35,942.13	/LF	23,362,383
		20.06.172	Ped Brdg Undercrossing HSR (Lafayette St) Alt2:	1.00	EA	3,575,460.29	/EA	3,575,460
		20.06.210	Parking, at Grade	242.00	stl	8,589.07	/stl	2,078,555

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		20.07.010	Roadway Modification, New AC Paving	60,800.00	SF	170.36	/SF	10,357,586
		20.07.715	Access Road Entrance Point	1.00	EA	48,632.73	/EA	48,633
		40.02.002	Natural Gas/Oil, 9"-16"	472.00	LF	194.54	/LF	91,824
		40.02.003	Potable Water, 10"-16"	1,703.00	LF	307.18	/LF	523,129
		40.02.005	Utility Relocation Allowance, Level 5 Urban	1,650.00	LF	197.11	/LF	325,236
		40.02.006	Sanitary Sewer, 37"-48"	2,404.00	LF	399.33	/LF	960,001
		40.02.008	Storm Drain, 42"-54"	631.00	LF	348.65	/LF	220,000
		40.02.009	Storm Drain, 55"-72"	1,592.00	LF	371.69	/LF	591,733
		40.02.011	Pump Station (Storm)	2.00	EA	383,975.90	/EA	767,952
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	29,238.00	LF	283.39	/LF	8,285,737
		40.02.016	Electric UG	3,478.00	LF	309.85	/LF	1,077,674
		40.02.019	Electric OH, 51-114 kV	2,971.00	LF	129.63	/LF	385,133
		40.02.020	Electric OH, 115 kV	7,511.00	LF	244.82	/LF	1,838,870
		40.08.200.ae	Rdwy Underxing HSR (West Hedding): 2-Ln Rdwy Under 5 Trk	1.00	EA	11,532,891.27	/EA	11,532,891
		40.08.200.ae1	Rdwy Overxing Rdwy - 2-Ln Rdwy Over 4-Ln Rdwy (Stockton St)	1.00	EA	1,621,338.71	/EA	1,621,339
		40.08.200.ae2	Rdwy Overxing Rdwy- 10-Ln Rdwy Over 4-Ln Rdwy (Bellarmine Pking Lot 1)	1.00	EA	3,715,258.83	/EA	3,715,259
		40.08.200.ae3	Rdwy Overxing Rdwy- 10-Ln Rdwy Over 4-Ln Rdwy (Bellarmine Pking Lot 2)	1.00	EA	3,592,258.81	/EA	3,592,259

Alternativ	Subsection	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.ae4	RR Overxing Rdwy- 5 Trk Over 4-Ln Rdwy	1.00	EA	3,401,166.87	/EA	3,401,167
		40.08.200.ae5	Trench Base Slab - Hedding	1.00	EA	33,195,427.77	/EA	33,195,428
		40.08.200.af	Rdwy Uxing HSR (De La Cruz Blvd): 5-Ln, RF Rdwy Under 7 Trks/6-Ln Rdwy	1.00	EA	17,720,890.33	/EA	17,720,890
		40.08.200.af1	Rdwy Overxing Rdwy- 2 Ln Rdwy Over 1 Ln Rdwy De La Cruz Blvd (South)	1.00	EA	2,264,553.13	/EA	2,264,553
		40.08.200.af2	Rdwy Overxing Rdwy- 1 Ln Rdwy Over 1 Ln Rdwy De La Cruz (North)	1.00	EA	640,758.25	/EA	640,758
		40.08.200.af3	Rdwy Overxing Rdwy- 6 Ln Rdwy Over 4 Ln Rdwy De La Cruz (El Camino)	1.00	EA	3,789,932.49	/EA	3,789,932
		40.08.200.af4	RR Overxing Rdwy- 3 Trk Over 4 Ln Rdwy (UPRR)	1.00	EA	3,297,552.94	/EA	3,297,553
		40.08.200.af5	RR Overxing Rdwy- 2 Trk Over 4 Ln Rdwy (JPB)	1.00	EA	2,153,393.62	/EA	2,153,394
		40.08.200.af6	Trench Base Slab - De La Cruz	1.00	EA	76,721,703.65	/EA	76,721,704
		40.08.200.ah	Rdwy Underxing UPRR (Lafayette St) - 1 Trk (Main) Over 4 Ln Rdwy	1.00	EA	2,008,348.73	/EA	2,008,349
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to					
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.14	R M	197,484,535.50	/R M	27,647,835

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.10	R M	230,619,733.80	/R M	23,061,973
		10.02.040	Diridon-Tamien - 2 Track	1.06	R M	198,673,112.13	/R M	210,593,499
		10.02.041	Diridon-Tamien - 4 Track	0.52	R M	482,156,229.17	/R M	250,721,239
		10.10.120	Direct Fixation Track - 2 Track	1.35	R M	4,495,391.84	/R M	6,068,779
		10.10.140	Direct Fixation Track - 4 Track	0.48	R M	9,193,311.79	/R M	4,412,790
		10.14.150	Direct Fixation Crossover #15	1.00	EA	2,548,376.00	/EA	2,548,376
		20.06.211	Bike Path Realignment (Almaden Expy)	1.00	EA	22,305,800.86	/EA	22,305,801
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	9,800.00	SF	170.36	/SF	1,669,479
		40.02.005	Utility Relocation Allowance, Level 5 Urban	750.00	LF	197.11	/LF	147,834
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,040.00	LF	282.95	/LF	577,226
		40.02.020	Electric OH, 115 kV	1,400.00	LF	244.82	/LF	342,753
		40.02.024	Transmission Tower	1.00	EA	614,361.44	/EA	614,361
	SS4		San Jose to Monterey Corridor:Alma Ave to Communication Hill					
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.20	R M	177,019,979.60	/R M	35,403,996
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	0.28	R M	4,050,193.61	/R M	1,134,054

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	2.16	R M	7,163,896.40	/R M	15,474,016
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	0.27	R M	7,317,025.70	/R M	1,975,597
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.14	R M	15,224,244.36	/R M	2,131,394
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.28	R M	27,466,208.18	/R M	7,690,538
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.28	R M	1,547,292.68	/R M	433,242
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	2.59	R M	3,075,034.35	/R M	7,964,339
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	0.27	R M	4,622,417.93	/R M	1,248,053
		10.10.120	Direct Fixation Track - 2 Track	0.19	R M	4,531,584.68	/R M	861,001
		10.14.201	Ballasted Turnout #9	2.00	EA	127,172.82	/EA	254,346
		10.14.203	Ballasted Turnout #11 & #14	1.00	EA	155,433.46	/EA	155,433
		10.14.320	Ballasted Crossover	1.00	EA	593,473.14	/EA	593,473
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	53,020.00	SF	170.36	/SF	9,032,224
		40.02.002	Natural Gas/Oil, 9"-16"	1,480.00	LF	194.54	/LF	287,923
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	16,040.00	LF	282.95	/LF	4,538,580
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	2,520.00	LF	244.82	/LF	616,956
		40.08.100.r	Rdwy Overxing HSR (Curtner Ave): 4-Ln Rdwy Over 4 Trk	1.00	EA	16,901,318.53	/EA	16,901,319

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.100.s	Rdwy Overxing HSR (Almaden Expr): 4-Ln Rdwy Over 4 Trk	1.00	EA	12,090,542.80	/EA	12,090,543
		40.08.200.ai	Rdwy Underxing HSR (SR87): 1-Ln Rdwy Under Eight-Ln Highway	1.00	EA	434,561.12	/EA	434,561
		40.08.200.aj	Rdwy Underxing HSR (Almaden Rd): 2-Ln Rdwy Under 4 Trk	1.00	EA	2,145,737.05	/EA	2,145,737
		40.08.200.aj1	HSR Underpass	1.00	EA	9,261,833.85	/EA	9,261,834
		40.08.200.aj2	Caltrain & UPRR Underpass	1.00	EA	2,150,156.81	/EA	2,150,157
	SS67		Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)					
		10.01.001	Topsoil	25,218.00	CY	4.24	/CY	106,834
		10.01.002	Cut	12,217.00	CY	13.42	/CY	163,948
		10.01.004	Overbreak In Embankment	32,019.00	CY	19.79	/CY	633,584
		10.01.005	Embankment	157,306.00	CY	22.60	/CY	3,555,588
		10.01.006	Overbreak Fill In Cut	6,300.00	CY	19.79	/CY	124,655
		10.01.007	Overbreak Fill In Embankment	32,019.00	CY	19.79	/CY	633,584
		10.01.008	Subballast	7,424.00	CY	59.35	/CY	440,603
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	1.77	R M	192,509,396.51	/R M	340,741,632
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.09	R M	237,498,371.33	/R M	21,374,853
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	7.05	R M	201,892,892.46	/R M	1,423,344,892

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.05	R M	151,524,442.80	/R M	7,576,222
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.04	R M	177,019,975.00	/R M	7,080,799
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	3.72	R M	211,660,245.98	/R M	787,376,115
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.16	R M	204,737,338.25	/R M	32,757,974
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.11	R M	182,229,568.45	/R M	20,045,253
		10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht)	0.07	R M	303,601,025.14	/R M	21,252,072
		10.01.225a	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 90' Spacing	0.02	R M	203,223,639.50	/R M	4,064,473
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	1.78	R M	222,164,554.02	/R M	395,452,906
		10.01.225c	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 120' Spacing	0.34	R M	209,447,595.82	/R M	71,212,183
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	0.06	R M	293,401,745.67	/R M	17,604,105
		10.01.226a	Elevated Structure - 2 Track (60' Avg. Pier Ht, 90' Span)	0.15	R M	270,658,585.67	/R M	40,598,788
		10.01.226b	Elevated Structure - 2 Track (60' Avg. Pier Ht, 100' Span)	0.08	R M	234,910,454.00	/R M	18,792,836

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	1.59	R M	230,923,039.21	/R M	367,167,632
		10.01.226d	Elevated Structure - 2 Track (60' Avg. Pier Ht, 120' Span)	0.05	R M	197,175,132.20	/R M	9,858,757
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.08	R M	203,233,643.75	/R M	16,258,692
		10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht)	0.06	R M	303,550,783.50	/R M	18,213,047
		10.01.227a	Elevated Structure - 2 Track (70' Avg. Pier Ht, 90' Span)	0.13	R M	291,489,892.69	/R M	37,893,686
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	1.17	R M	240,572,161.56	/R M	281,469,429
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.06	R M	200,047,339.67	/R M	12,002,840
		10.02.020	BC - 225-225-225-225 - UPRR	0.04	R M	545,286,857.50	/R M	21,811,474
		10.02.021	BC - 155-310-155 Span - Monterey	0.12	R M	253,495,539.42	/R M	30,419,465
		10.02.023	BC - 90-180'-90 Span - Capitol	0.07	R M	304,571,505.86	/R M	21,320,005
		10.02.024	BC - 110-220-220-110 Span - Blossom	0.13	R M	232,033,483.31	/R M	30,164,353
		10.02.025	BC - 205-410-205 Span - Sr85	0.16	R M	195,415,373.00	/R M	31,266,460
		10.02.026	BC - 115-230-115 Span - Bernal	0.09	R M	253,589,522.89	/R M	22,823,057
		10.02.027	BC - 110-220-110 Span - Bailey	0.08	R M	276,816,082.13	/R M	22,145,287

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.028	BC - 260-260 - Cochrane 1	0.10	R M	214,733,967.70	/R M	21,473,397
		10.02.029	BC - 233-233-233-233 - Cochrane 2	0.18	R M	295,980,656.28	/R M	53,276,518
		10.02.030	BC - 260-260 - Dunne	0.10	R M	204,818,595.40	/R M	20,481,860
		10.02.031	BC - 240-240 - Tennant	0.09	R M	244,571,439.89	/R M	22,011,430
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	1.00	EA	1,513,256.50	/EA	1,513,257
		10.09.110	Ballasted Track - 1 Track	0.30	R M	2,373,916.60	/R M	712,175
		10.09.120	Ballasted Track - 2 Track	0.71	R M	4,627,003.06	/R M	3,285,172
		10.09.920	Ballasted Trk Relocation - 1 Trk (Permanent)	1.61	R M	282,902.94	/R M	455,474
		10.10.120	Direct Fixation Track - 2 Track	9.90	R M	9,049,337.56	/R M	89,588,442
		10.14.200	Ballasted Turnout (60 MPH)	1.00	EA	642,929.24	/EA	642,929
		10.14.202	Ballasted Turnout #10	5.00	EA	138,477.07	/EA	692,385
		10.14.203	Ballasted Turnout #11 & #14	5.00	EA	155,433.44	/EA	777,167
		10.15.102	Wildlife Crossing - 30' wide	2.00	EA	393,387.92	/EA	786,776
		10.15.103	Wildlife Crossing - 40' wide	2.00	EA	722,115.53	/EA	1,444,231
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	100,240.00	SF	170.36	/SF	17,076,388
		40.01.110	Demolition Allowance, Asphalt Pavement	392,200.00	SY	13.58	/SY	5,324,725

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.01.810	Demolition Allowance, Remove Railroad Tracks	1.61	R M	307,562.31	/R M	495,175
		40.02.001	Natural Gas/Oil, 4.5"-8"	760.00	LF	163.82	/LF	124,507
		40.02.002	Natural Gas/Oil, 9"-16"	830.00	LF	194.54	/LF	161,471
		40.02.007	Sanitary Sewer, 49"-54"	15,980.00	LF	436.20	/LF	6,970,517
		40.02.008	Storm Drain, 42"-54"	1,080.00	LF	348.65	/LF	376,545
		40.02.009	Storm Drain, 55"-72"	320.00	LF	371.69	/LF	118,941
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	43,280.00	LF	282.95	/LF	12,246,242
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,265.00	LF	282.95	/LF	1,772,706
		40.02.015	Telecommunication Facility	1.00	EA	460,771.09	/EA	460,771
		40.02.019	Electric OH, 51-114 kV	230.00	LF	129.63	/LF	29,815
		40.02.020	Electric OH, 115 kV	2,600.00	LF	244.82	/LF	636,541
		40.02.021	Electric OH, 230 kV	5,465.00	LF	194.31	/LF	1,061,878
		40.02.022	Electirc OH, unknown	5,320.00	LF	194.31	/LF	1,033,704
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	8,280.00	LF	244.82	/LF	2,027,140
		40.02.047	Recycled Water, All Sizes	10,050.00	LF	148.54	/LF	1,492,827
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	4,375.00	LF	9,215.42	/LF	40,317,470
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	3,735.00	LF	10,751.33	/LF	40,156,200
		40.08.200.a	Rdwy Underxing HSR (NB Monterey Rd Realignment): 2- Ln Rdwy Under 2 Trk	1.00	EA	1,668,692.62	/EA	1,668,693
	SS99-3		Alternative 3 Complete					

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.04.110	Environmental Mitigation Allowance, Heavy	1.00	LS	582,625,058.39	/LS	582,625,058
		40.06.100	Temporary facilities and other indirect costs during construction	1.00	LS	712,097,293.59	/LS	712,097,294
		40.07.100	ROW Procurement Acquisition	1.00	LS	3,242,620,000.00	/LS	3,242,620,000
		50.01.020	Wayside Protection - 2 Track	88.12	R M	2,203,046.85	/R M	194,132,488
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	88.12	R M	909,763.83	/R M	80,168,388
		50.07.020	Hazard Detectors	88.12	R M	628,519.28	/R M	55,385,119
		60.01.020	Traction power transmission: High voltage	88.12	R M	1,862,087.60	/R M	164,087,159
		60.01.030	Distribution Line Pacheco Pass	88.12	R M	734,581.93	/R M	64,731,360
		60.01.040	PG&E Construction Power Drop Sites	88.12	R M	16,720.28	/R M	1,473,391
		60.02.010	Traction Power, Supply Station Site Work	88.12	R M	2,287,080.26	/R M	201,537,512
		60.03.100	Traction Power Distribution - 2 Tracks	88.12	R M	2,704,507.83	/R M	238,321,230
		60.04.100	Traction power control	88.12	R M	5,917.58	/R M	521,457
		80.00.00	Professional Services	1.00	LS	3,402,158,227.04	/LS	3,402,158,227
		90.00.00	Unallocated Contingency	1.00	LS	1,007,465,335.77	/LS	1,007,465,336

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
			Total					28,698,173,403
04			Alternative 04					
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmt(South of D. Gilroy thru Tunn					
		10.01.001	Topsoil	270,683.00	CY	4.24	/CY	1,146,709
		10.01.002	Cut	4,432,073.00	CY	13.42	/CY	59,477,076
		10.01.004	Overbreak In Embankment	178,617.00	CY	19.79	/CY	3,534,450
		10.01.005	Embankment	1,866,629.00	CY	22.60	/CY	42,191,483
		10.01.006	Overbreak Fill In Cut	55,866.00	CY	19.79	/CY	1,105,468
		10.01.007	Overbreak Fill In Embankment	178,617.00	CY	19.79	/CY	3,534,450
		10.01.008	Subballast	38,910.11	CY	59.36	/CY	2,309,595
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.11	R M	130,484,442.64	/R M	14,353,289
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.06	R M	133,704,872.67	/R M	8,022,292
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.25	R M	139,750,142.20	/R M	34,937,536
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	0.03	R M	130,446,730.00	/R M	3,913,402
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.71	R M	152,272,694.36	/R M	260,386,307

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.07	R M	148,443,678.86	/R M	10,391,058
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.20	R M	206,586,823.40	/R M	41,317,365
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	2.00	EA	191,832.25	/EA	383,665
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	4.00	EA	983,616.75	/EA	3,934,467
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	6.00	EA	2,864,326.53	/EA	17,185,959
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.00	EA	295,126.59	/EA	295,127
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	2.00	EA	1,513,256.52	/EA	3,026,513
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.57	R M	216,837,944.13	/R M	340,435,572
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.00	lf	33,583.85	/lf	33,583,852
		10.07.950	Allowance For Construction Monitoring	1.57	R M	271,616.00	/R M	426,437
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.09.110	Ballasted Track - 1 Track	4.04	R M	2,350,177.49	/R M	9,494,717
		10.09.120	Ballasted Track - 2 Track	0.84	R M	4,644,098.76	/R M	3,901,043
		10.10.110	Direct Fixation Track - 1 Track	3.74	R M	2,267,324.31	/R M	8,479,793
		10.16.100	Drainage	59.00	EA	192,878.77	/EA	11,379,848
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	124,230.00	SF	170.36	/SF	21,163,205
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	550.00	lf	3,839.76	/lf	2,111,867
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	582.00	LF	7,679.52	/LF	4,469,479
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	275.00	LF	9,215.42	/LF	2,534,241
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	240.00	LF	10,751.33	/LF	2,580,318
		40.05.028	Retaining Wall In Fill - 1 Wall (50' Avg. Height)	345.00	LF	12,287.23	/LF	4,239,094
		40.05.052	Retaining Wall In Cut - 1 Wall (30' Avg. Exc Depth)	684.00	LF	9,215.42	/LF	6,303,348
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	587.00	LF	12,297.69	/LF	7,218,747
		40.08.100.b	Rdwy Overxing HSR (Bloomfield Ave): 2-Ln Rdwy Over MF	1.00	EA	79,140,313.63	/EA	79,140,314
	SS14		Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.00	CY	4.24	/CY	3,568,083

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.002	Cut	15,647,083.00	CY	13.16	/CY	205,953,215
		10.01.004	Overbreak In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.005	Embankment	8,678,514.60	CY	22.60	/CY	196,160,767
		10.01.006	Overbreak Fill In Cut	72,100.00	CY	19.79	/CY	1,426,706
		10.01.007	Overbreak Fill In Embankment	784,014.86	CY	19.79	/CY	15,514,011
		10.01.008	Subballast	143,484.00	CY	59.35	/CY	8,515,772
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.58	R M	154,200,922.47	/R M	89,436,535
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.11	R M	156,620,053.18	/R M	17,228,206
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.08	R M	148,498,029.25	/R M	11,879,842
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.93	R M	168,597,657.12	/R M	156,795,821
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.38	R M	176,322,161.82	/R M	419,646,745
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.02	R M	170,351,048.50	/R M	3,407,021
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.07	R M	151,524,442.71	/R M	10,606,711
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.12	R M	171,400,316.50	/R M	20,568,038

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.11	R M	186,079,494.09	/R M	20,468,744
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.27	R M	196,606,822.67	/R M	53,083,842
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.27	R M	204,995,325.74	/R M	55,348,738
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.73	R M	210,460,755.10	/R M	153,636,351
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.19	R M	210,576,875.58	/R M	40,009,606
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.12	R M	203,677,321.58	/R M	24,441,279
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.10	R M	210,836,926.40	/R M	21,083,693
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.00	EA	191,832.28	/EA	767,329
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.00	EA	983,616.76	/EA	17,705,102
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.00	EA	2,864,326.53	/EA	57,286,531
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.00	EA	295,126.56	/EA	1,180,506
		10.05.320	Transition Wedge 1 Trk Embankment- Slab	4.00	EA	9,600.28	/EA	38,401
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.00	EA	11,513.90	/EA	46,056
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.00	EA	14,027.54	/EA	56,110

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.61	R M	216,837,944.12	/R M	2,951,164,419
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.00	If	33,583.85	/If	302,254,665
		10.07.850	Pumping Sta	1.00	EA	339,520.00	/EA	339,520
		10.07.920	Ventilation Equipment Allowance (INCLUDED w/10.07.902)	4.00	EA	173,849,447.78	/EA	695,397,791
		10.07.950	Allowance For Construction Monitoring	13.61	R M	271,616.00	/R M	3,696,694
		10.07.970	Fault Chamber	2.00	EA	166,409,372.87	/EA	332,818,746
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	4.24	R M	2,350,177.49	/R M	9,964,753
		10.09.120	Ballasted Track - 2 Track	13.30	R M	4,644,098.77	/R M	61,766,514
		10.10.110	Direct Fixation Track - 1 Track	31.00	R M	2,267,324.31	/R M	70,287,054
		10.10.120	Direct Fixation Track - 2 Track	0.24	R M	4,520,631.83	/R M	1,084,952
		10.15.101	Wildlife Crossing	10.00	EA	71,301.56	/EA	713,016

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.16.100	Drainage	2.00	EA	192,878.77	/EA	385,758
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	777,970.00	SF	170.36	/SF	132,531,103
		40.02.020	Electric OH, 115 kV	455.00	LF	244.82	/LF	111,395
		40.02.021	Electric OH, 230 kV	1,340.00	LF	194.31	/LF	260,369
		40.02.022	Electric OH, unknown	1,925.00	LF	194.31	/LF	374,037
		40.02.025	Potable Water, 120"	3,800.00	LF	7,679.52	/LF	29,182,168
		40.02.043	Drainage Canal, All Sizes	785.00	LF	502.07	/LF	394,121
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.00	LF	194.31	/LF	80,637
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.00	lf	3,839.76	/lf	6,254,967
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.00	LF	9,215.42	/LF	8,763,866
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.00	LF	10,751.33	/LF	7,278,647
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.00	LF	13,823.13	/LF	13,684,901
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.00	LF	18,430.84	/LF	19,462,970
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,086.00	LF	12,302.52	/LF	37,965,571
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.00	EA	725,071.17	/EA	725,071
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.00	EA	9,101.33	/EA	9,101

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.00	EA	41,939.98	/EA	41,940
	SS16		San Joaquin Valley					
		10.01.001	Topsoil	447,415.00	CY	4.24	/CY	1,895,411
		10.01.002	Cut	23,638.00	CY	13.42	/CY	317,217
		10.01.004	Overbreak In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.005	Embankment	2,531,377.00	CY	22.60	/CY	57,216,798
		10.01.006	Overbreak Fill In Cut	1,701.00	CY	19.79	/CY	33,657
		10.01.007	Overbreak Fill In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.008	Subballast	128,198.00	CY	59.35	/CY	7,608,550
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.71	R M	180,812,350.63	/R M	490,001,470
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.63	R M	189,953,839.65	/R M	309,624,759
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.67	R M	198,211,318.31	/R M	132,801,583
		10.02.036	BC - 150-275-150 - Cherokee	0.11	R M	224,216,722.27	/R M	24,663,839
		10.02.037	BC - 200-350-200 - San Luis	0.14	R M	178,203,214.50	/R M	24,948,450
		10.02.038	BC - 120-220-120 Span - Los Banos	0.09	R M	262,414,325.67	/R M	23,617,289
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.00	EA	1,513,256.54	/EA	12,106,052
		10.09.110	Ballasted Track - 1 Track	0.55	R M	2,350,177.53	/R M	1,292,598

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.09.120	Ballasted Track - 2 Track	12.75	R M	4,644,098.77	/R M	59,212,259
		10.10.120	Direct Fixation Track - 2 Track	5.37	R M	4,501,074.99	/R M	24,170,773
		10.14.206	Ballasted Turnout #20	3.00	EA	339,127.51	/EA	1,017,383
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	2,119,546.96	/EA	4,239,094
		10.14.305	Ballasted Crossover (80 MPH)	2.00	EA	1,602,377.51	/EA	3,204,755
		10.14.400	Terminal - Bumping Post	1.00	Ea	45,217.00	/Ea	45,217
		10.15.101	Wildlife Crossing	67.00	EA	71,301.56	/EA	4,777,205
		10.16.100	Drainage	42.00	EA	192,878.77	/EA	8,100,909
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	746,920.00	SF	170.36	/SF	127,241,579
		30.04.010c	MOIF Siding	1.00	EA	3,611,952.24	/EA	3,611,952
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.00	LF	282.95	/LF	1,498,241
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,255.00	LF	282.95	/LF	1,769,876
		40.02.019	Electric OH, 51-114 kV	3,770.00	LF	129.63	/LF	488,708
		40.02.022	Electirc OH, unknown	23,930.00	LF	194.31	/LF	4,649,723
		40.02.035	Potable Water Storage Tank	1.00	EA	76,795.18	/EA	76,795
		40.02.043	Drainage Canal, All Sizes	29,515.00	LF	502.07	/LF	14,818,454
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.00	LF	194.31	/LF	2,383,153
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.66	lf	3,839.79	/lf	2,534

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	51,328,605.98	/EA	51,328,606
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	28,529,153.87	/EA	28,529,154
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	26,999,657.46	/EA	26,999,657
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	27,497,062.73	/EA	27,497,063
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys	1.00	EA	30,740,316.48	/EA	30,740,316
	SS401		Scott Blvd to Diridon Station					
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	14.00	EA	191,832.41	/EA	2,685,654
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	6.00	EA	688,628.70	/EA	4,131,772
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	1.30	R M	4,101,237.16	/R M	5,331,608
		10.09.110	Ballasted Track - 1 Track	1.30	R M	2,350,177.47	/R M	3,055,231
		10.14.201	Ballasted Turnout #9	2.00	EA	127,172.82	/EA	254,346
		10.14.202	Ballasted Turnout #10	2.00	EA	138,477.08	/EA	276,954
		10.14.320	Ballasted Crossover	3.00	EA	652,820.46	/EA	1,958,461
		10.14.321	Ballasted Crossover #10	3.00	EA	720,645.97	/EA	2,161,938
		10.14.323	Ballasted Crossover #14	2.00	EA	1,003,252.23	/EA	2,006,504

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		20.02.225	San Jose (Diridon) Sta	1.00	LS	142,766,396.57	/LS	142,766,397
		20.02.297	College Park Station	1.00	LS	1,636,316.65	/LS	1,636,317
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	10,800.00	SF	170.36	/SF	1,839,834
		40.02.011	Pump Station (Storm)	1.00	EA	383,975.90	/EA	383,976
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	11,505.00	LF	282.95	/LF	3,255,384
		40.02.016	Electric UG	300.00	LF	309.85	/LF	92,956
		40.02.020	Electric OH, 115 kV	920.00	LF	244.82	/LF	225,238
		40.02.024	Transmission Tower	1.00	EA	614,361.45	/EA	614,361
		40.02.039	Storm Drain, 6"-18"	70.00	LF	217.15	/LF	15,201
		40.02.040	Storm Drain, 19"-30"	620.00	LF	316.39	/LF	196,162
		40.08.200.au	Rdwy Underxing UPRR (Taylor St): Exist Rd Under 1 Trk	1.00	EA	3,575,691.71	/EA	3,575,692
	SS402		Diridon Station to Alma Ave					
		10.01.001	Topsoil	14,929.00	CY	4.24	/CY	63,245
		10.01.002	Cut	27,305.00	CY	13.42	/CY	366,425
		10.01.004	Overbreak In Embankment	8,515.00	CY	19.79	/CY	168,494
		10.01.005	Embankment	27,994.00	CY	22.60	/CY	632,749
		10.01.006	Overbreak Fill In Cut	17,083.00	CY	19.79	/CY	338,037
		10.01.007	Overbreak Fill In Embankment	8,515.00	CY	19.79	/CY	168,494
		10.01.008	Subballast	11,250.00	CY	59.35	/CY	667,688
		10.02.055	Steel Through Girder - I-280	1.00	EA	11,543,530.26	/EA	11,543,530

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.056	Concrete Through Girder - SR-87	1.00	EA	17,998,862.53	/EA	17,998,863
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	1.95	R M	4,101,224.07	/R M	7,997,387
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	1.79	R M	7,151,138.46	/R M	12,800,538
		10.09.110	Ballasted Track - 1 Track	1.95	R M	2,350,177.48	/R M	4,582,846
		10.09.120	Ballasted Track - 2 Track	1.79	R M	4,644,098.79	/R M	8,312,937
		10.14.202	Ballasted Turnout #10	7.00	EA	138,477.07	/EA	969,339
		10.14.323	Ballasted Crossover #14	3.00	EA	1,003,252.23	/EA	3,009,757
		20.06.211	Bike Path Realignment (Almaden Expy)	1.00	EA	22,305,800.85	/EA	22,305,801
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	6,100.00	SF	170.36	/SF	1,039,166
		20.07.801	Quad Gate Prototype A	2.00	EA	2,498,464.50	/EA	4,996,929
		40.02.011	Pump Station (Storm)	2.00	EA	383,975.90	/EA	767,952
		40.02.022	Electirc OH, unknown	370.00	LF	194.31	/LF	71,893
		40.02.045	Electric OH & Telecom OH on JP, Unknown	1,150.00	LF	194.31	/LF	223,451
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	4,584.00	LF	7,679.69	/LF	35,203,678
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	237.94	LF	9,215.42	/LF	2,192,717
		40.05.050	Retaining Wall In Cut - 1 Wall (10' Avg. Exc Depth)	1,966.25	LF	3,071.81	/LF	6,039,941

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.av	Rdwy Underxing HSR (Guadalupe River): Creek Under 1 Trk	1.00	EA	7,794,403.18	/EA	7,794,403
		40.08.200.aw 1	Southbound Underpass				/EA	4,245,620
		40.08.200.aw 2	Northbound Underpass				/EA	4,913,498
		40.08.200.ax	Rdwy Underxing HSR (Delmas Ave): Exist Rd Under 3 Trk	1.00	EA	4,077,704.11	/EA	4,077,704
		40.08.200.ay	Rdwy Underxing HSR (Prevost St): Exist Rd Under 1 Trk	1.00	EA	1,922,821.52	/EA	1,922,822
		40.08.200.az	Rdwy Underxing HSR (Willow St): Exist Rd Under 1 Trk	1.00	EA	3,617,322.48	/EA	3,617,322
		40.08.200.ba	Rdwy Underxing HSR (Alma Ave): Exist Rd Under 2 Trk	1.00	EA	3,493,536.63	/EA	3,493,537
	SS403		Alma Ave to Gilroy					
		10.01.001	Topsoil	137,499.00	CY	4.24	/CY	582,495
		10.01.002	Cut	1,850,893.00	CY	13.42	/CY	24,838,425
		10.01.004	Overbreak In Embankment	328,081.00	CY	19.79	/CY	6,492,036
		10.01.005	Embankment	1,960,300.00	CY	22.60	/CY	44,308,729
		10.01.006	Overbreak Fill In Cut	1,004,358.00	CY	19.79	/CY	19,874,140
		10.01.007	Overbreak Fill In Embankment	328,081.00	CY	19.79	/CY	6,492,036
		10.01.008	Subballast	375,555.00	CY	59.35	/CY	22,289,207
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.33	R M	133,830,205.55	/R M	44,163,968

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.06	R M	162,043,916.50	/R M	9,722,635
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.50	R M	192,495,002.96	/R M	96,247,501
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.03	R M	207,647,111.67	/R M	6,229,413
		10.01.222b	Elevated Structure - 2 Track (20' Avg. Pier Ht, 150' Span)	0.03	R M	160,726,264.33	/R M	4,821,788
		10.02.057	2-Track Steel Truss Over 3 Tracks	1.00	EA	44,373,041.82	/EA	44,373,042
		10.02.057a	1-Track Steel Truss Over 3 Tracks	1.00	EA	27,844,683.19	/EA	27,844,683
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	6.00	EA	191,832.42	/EA	1,150,995
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.00	EA	188,855.19	/EA	755,421
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	5.00	EA	1,513,256.59	/EA	7,566,283
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	34.63	R M	4,096,740.41	/R M	141,870,120
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	32.87	R M	7,151,230.25	/R M	235,060,938
		10.09.110	Ballasted Track - 1 Track	34.63	R M	2,350,177.49	/R M	81,386,646
		10.09.120	Ballasted Track - 2 Track	32.87	R M	4,644,098.77	/R M	152,651,527
		10.14.202	Ballasted Turnout #10	10.00	EA	138,477.07	/EA	1,384,771
		10.14.203a	Ballasted Turnout #14	7.00	EA	155,433.44	/EA	1,088,034

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.206	Ballasted Turnout #20	1.00	EA	339,127.50	/EA	339,128
		10.14.300	Ballasted Crossover (60 MPH)	1.00	EA	2,119,546.97	/EA	2,119,547
		10.14.305	Ballasted Crossover (80 MPH)	2.00	EA	1,602,377.51	/EA	3,204,755
		10.14.321	Ballasted Crossover #10	3.00	EA	720,645.97	/EA	2,161,938
		10.14.324	Ballasted Crossover #20	12.00	EA	1,413,031.31	/EA	16,956,376
		10.14.352	Ballasted Double Crossover #10	1.00	EA	866,404.11	/EA	866,404
		10.14.400	Terminal - Bumping Post	9.00	Ea	45,217.00	/Ea	406,953
		10.15.100	Wildlife Crossing	3.00	EA	28,260.63	/EA	84,782
		10.15.102	Wildlife Crossing - 30' wide	2.00	EA	393,387.92	/EA	786,776
		10.15.103	Wildlife Crossing - 40' wide	6.00	EA	722,115.52	/EA	4,332,693
		10.16.100	Drainage	8.00	EA	192,878.77	/EA	1,543,030
		20.02.216d	Gilroy Station	1.00	LS	68,930,704.80	/LS	68,930,705
		20.07.010	Roadway Modification, New AC Paving	270,900.00	SF	170.36	/SF	46,149,178
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	578,550.00	SF	170.36	/SF	98,558,903
		20.07.021	OCS Portal Protection	1.00	EA	168,949.40	/EA	168,949
		20.07.801	Quad Gate Prototype A	11.00	EA	2,498,464.50	/EA	27,483,110
		20.07.802	Quad Gate Prototype A1	2.00	EA	3,539,157.58	/EA	7,078,315
		20.07.803	Quad Gate Prototype B	1.00	EA	5,742,551.83	/EA	5,742,552
		20.07.804	Quad Gate Prototype C	2.00	EA	3,960,322.10	/EA	7,920,644
		20.07.805	Quad Gate Prototype C1	2.00	EA	6,186,577.53	/EA	12,373,155
		20.07.806	Quad Gate Prototype C2	6.00	EA	3,371,494.10	/EA	20,228,965

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		20.07.807	Quad Gate Prototype D	2.00	EA	6,110,065.02	/EA	12,220,130
		20.07.808	Quad Gate Prototype D1	1.00	EA	6,427,184.97	/EA	6,427,185
		30.04.010d	Comb. MOWF & LMF - Dwtn Gly	1.00	EA	275,196,638.23	/EA	275,196,638
		40.02.001	Natural Gas/Oil, 4.5"-8"	75.00	LF	163.82	/LF	12,287
		40.02.005	Utility Relocation Allowance, Level 5 Urban	5,555.00	LF	197.11	/LF	1,094,960
		40.02.009	Storm Drain, 55"-72"	30.00	LF	371.69	/LF	11,151
		40.02.011	Pump Station (Storm)	13.00	EA	383,975.90	/EA	4,991,687
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	1,179,805.00	LF	282.95	/LF	333,830,362
		40.02.014	Telecom/Fiber Optic OH, All Sizes	1,590.00	LF	282.95	/LF	449,897
		40.02.019	Electric OH, 51-114 kV	380.00	LF	129.63	/LF	49,260
		40.02.020	Electric OH, 115 kV	3,620.00	LF	244.82	/LF	886,262
		40.02.022	Electirc OH, unknown	15,550.00	LF	194.31	/LF	3,021,445
		40.02.030	Potable Water, 4"-9"	480.00	LF	66.35	/LF	31,849
		40.02.036	Sanitary Sewer, 6"-15"	4,130.00	LF	92.15	/LF	380,597
		40.02.039	Storm Drain, 6"-18"	1,770.00	LF	217.15	/LF	384,357
		40.02.040	Storm Drain, 19"-30"	370.00	LF	316.39	/LF	117,064
		40.02.043	Drainage Canal, All Sizes	2,030.00	LF	502.07	/LF	1,019,192
		40.02.045	Electric OH & Telecom OH on JP, Unknown	11,300.00	LF	194.31	/LF	2,195,648
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	7,806.00	LF	7,679.68	/LF	59,947,546

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.05.050	Retaining Wall In Cut - 1 Wall (10' Avg. Exc Depth)	3,020.00	LF	3,072.69	/LF	9,279,530
		40.05.051	Retaining Wall In Cut - 1 Wall (20' Avg. Exc Depth)	4,316.00	LF	7,760.83	/LF	33,495,754
		40.08.200.ar1	HSR Underpass	1.00	EA	9,425,975.54	/EA	9,425,976
		40.08.200.ar2	UPRR Underpass	1.00	EA	5,657,006.88	/EA	5,657,007
		40.08.200.at	Rdwy Underxing HSR (Upper Llagas Creek): Creek Under 3 Trk	1.00	EA	13,059,592.00	/EA	13,059,592
		40.08.200.bb	Rdwy Underxing HSR (Almaden Rd): Exist Rd Under 3 Trk	1.00	EA	7,395,211.99	/EA	7,395,212
		40.08.200.bc	Rdwy Modification (Perimeter Rd): New AC Paving	1.00	EA	672,932.43	/EA	672,932
		40.08.200.bd	Rdwy Modification (Richmond Ave): New AC Paving	1.00	EA	824,368.00	/EA	824,368
		40.08.200.be	Rdwy Modification (Diane Ave): New AC Paving	1.00	EA	44,516.45	/EA	44,516
	SS403R		Gilroy/MOWF to South of D. Gilroy					
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	2.80	R M	191,819,218.21	/R M	537,093,811
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	61,370.00	SF	170.36	/SF	10,454,688
		40.02.020	Electric OH, 115 kV	555.00	LF	244.82	/LF	135,877
		40.02.032	Potable Water, 25"-36"	835.00	LF	423.80	/LF	353,873
	SS99-4		Alternative 04 Complete					

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.04.110	Environmental Mitigation Allowance, Heavy	1.00	LS	369,137,420.85	/LS	369,137,421
		40.06.100	Temporary facilities and other indirect costs during construction	1.00	LS	451,167,958.82	/LS	451,167,959
		40.07.100	ROW Procurement Acquisition	1.00	LS	2,381,700,000.00	/LS	2,381,700,000
		50.01.020	Wayside Protection - 2 Track	89.12	R M	2,277,233.55	/R M	202,947,054
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	89.12	R M	892,764.35	/R M	79,563,159
		50.07.020	Hazard Detectors	89.12	R M	610,093.67	/R M	54,371,548
		60.01.020	Traction power transmission: High voltage	89.12	R M	1,841,193.44	/R M	164,087,159
		60.01.030	Distribution Line Pacheco Pass	89.12	R M	769,779.14	/R M	68,602,717
		60.01.040	PG&E Construction Power Drop Sites	89.12	R M	16,501.34	/R M	1,470,599
		60.02.010	Traction Power, Supply Station Site Work	89.12	R M	1,872,823.25	/R M	166,906,008
		60.03.100	Traction Power Distribution - 2 Tracks	89.12	R M	2,693,285.14	/R M	240,025,572
		60.04.100	Traction power control	89.12	R M	6,353.94	/R M	566,263
		80.00.00	Professional Services	1.00	LS	2,217,975,116.50	/LS	2,217,975,117
		90.00.00	Unallocated Contingency	1.00	LS	656,646,914.34	/LS	656,646,914

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
			Total					18,964,168,162
05			Alternative 04 - Diridon Design Variant					
	SS DV1		Diridon Design Variant 1					
		10.09.142	Ballasted Track (Track Laying Machine) - 4 Track	0.51	R M	10,385,657.71	/R M	5,296,685
		10.09.912	Ballasted Track Relocation - 1 Track (Permanent) 1'-10'	1.82	R M	1,248,681.95	/R M	2,272,601
		10.14.202	Ballasted Turnout #10	11.00	EA	138,477.07	/EA	1,523,248
		10.14.320	Ballasted Crossover	1.00	EA	652,820.47	/EA	652,820
		10.14.321	Ballasted Crossover #10	5.00	EA	720,645.97	/EA	3,603,230
		10.14.323	Ballasted Crossover #14	1.00	EA	1,003,252.21	/EA	1,003,252
		20.02.225	San Jose (Diridon) Sta	1.00	LS	6,106,752.71	/LS	6,106,753
		20.06.210	Parking, at Grade	61.00	stl	8,589.07	/stl	523,933
		20.06.210b2	Parking - Deck Structure (1 story, additional 31 stalls)	1.00	LS		/LS	
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmt(South of D. Gilroy thru Tunn					
		10.01.001	Topsoil	270,683.00	CY	4.24	/CY	1,146,709
		10.01.002	Cut	4,432,073.00	CY	13.42	/CY	59,477,076
		10.01.004	Overbreak In Embankment	178,617.00	CY	19.79	/CY	3,534,450
		10.01.005	Embankment	1,866,629.00	CY	22.60	/CY	42,191,483
		10.01.006	Overbreak Fill In Cut	55,866.00	CY	19.79	/CY	1,105,468
		10.01.007	Overbreak Fill In Embankment	178,617.00	CY	19.79	/CY	3,534,450

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.008	Subballast	38,915.00	CY	59.35	/CY	2,309,595
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.11	R M	130,484,442.55	/R M	14,353,289
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.06	R M	133,704,872.67	/R M	8,022,292
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.25	R M	139,750,142.16	/R M	34,937,536
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	0.03	R M	130,446,730.33	/R M	3,913,402
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.71	R M	152,272,694.36	/R M	260,386,307
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.07	R M	148,443,679.00	/R M	10,391,058
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.20	R M	206,586,823.30	/R M	41,317,365
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	2.00	EA	191,832.26	/EA	383,665
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	4.00	EA	983,616.74	/EA	3,934,467
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	6.00	EA	2,864,326.53	/EA	17,185,959
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.00	EA	295,126.59	/EA	295,127

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	2.00	EA	1,513,256.52	/EA	3,026,513
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.57	R M	216,837,944.12	/R M	340,435,572
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.00	lf	33,583.85	/lf	33,583,852
		10.07.950	Allowance For Construction Monitoring	1.57	R M	271,616.00	/R M	426,437
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	4.04	R M	2,350,177.49	/R M	9,494,717
		10.09.120	Ballasted Track - 2 Track	0.84	R M	4,644,098.76	/R M	3,901,043
		10.10.110	Direct Fixation Track - 1 Track	3.74	R M	2,267,324.31	/R M	8,479,793
		10.16.100	Drainage	59.00	EA	192,878.77	/EA	11,379,848
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	124,230.00	SF	170.36	/SF	21,163,205
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	550.00	lf	3,839.76	/lf	2,111,867

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	582.00	LF	7,679.52	/LF	4,469,479
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	275.00	LF	9,215.42	/LF	2,534,241
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	240.00	LF	10,751.33	/LF	2,580,318
		40.05.028	Retaining Wall In Fill - 1 Wall (50' Avg. Height)	345.00	LF	12,287.23	/LF	4,239,094
		40.05.052	Retaining Wall In Cut - 1 Wall (30' Avg. Exc Depth)	684.00	LF	9,215.42	/LF	6,303,348
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	587.00	LF	12,297.69	/LF	7,218,747
		40.08.100.b	Rdwy Overxing HSR (Bloomfield Ave): 2-Ln Rdwy Over MF	1.00	EA	79,140,313.65	/EA	79,140,314
	SS14		Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.00	CY	4.24	/CY	3,568,083
		10.01.002	Cut	15,347,083.00	CY	13.42	/CY	205,953,215
		10.01.004	Overbreak In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.005	Embankment	8,678,514.60	CY	22.60	/CY	196,160,767
		10.01.006	Overbreak Fill In Cut	72,100.00	CY	19.79	/CY	1,426,706
		10.01.007	Overbreak Fill In Embankment	784,015.00	CY	19.79	/CY	15,514,011
		10.01.008	Subballast	143,484.00	CY	59.35	/CY	8,515,772
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.58	R M	154,200,922.48	/R M	89,436,535

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.11	R M	156,620,053.18	/R M	17,228,206
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	0.08	R M	148,498,029.13	/R M	11,879,842
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.93	R M	168,597,657.14	/R M	156,795,821
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.38	R M	176,322,161.82	/R M	419,646,745
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.02	R M	170,351,048.50	/R M	3,407,021
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.07	R M	151,524,443.00	/R M	10,606,711
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.12	R M	171,400,316.33	/R M	20,568,038
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.11	R M	186,079,494.09	/R M	20,468,744
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.27	R M	196,606,822.67	/R M	53,083,842
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.27	R M	204,995,325.78	/R M	55,348,738
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.73	R M	210,460,755.08	/R M	153,636,351
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.19	R M	210,576,875.58	/R M	40,009,606

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.12	R M	203,677,321.58	/R M	24,441,279
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.10	R M	210,836,926.50	/R M	21,083,693
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.00	EA	191,832.28	/EA	767,329
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.00	EA	983,616.75	/EA	17,705,102
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.00	EA	2,864,326.53	/EA	57,286,531
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.00	EA	295,126.56	/EA	1,180,506
		10.05.320	Transition Wedge 1 Trk Embankment- Slab	4.00	EA	9,600.28	/EA	38,401
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.00	EA	11,513.90	/EA	46,056
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.00	EA	14,027.53	/EA	56,110
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.61	R M	216,837,944.12	/R M	2,951,164,419
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.00	lf	33,583.85	/lf	302,254,665
		10.07.850	Pumping Sta	1.00	EA	339,520.00	/EA	339,520
		10.07.920	Ventilation Equipment Allowance (INCLUDED w/10.07.902)	4.00	EA	173,849,447.78	/EA	695,397,791
		10.07.950	Allowance For Construction Monitoring	13.61	R M	271,616.00	/R M	3,696,694

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.07.970	Fault Chamber	2.00	EA	166,409,372.87	/EA	332,818,746
		10.07.971	Radio Antenna Area	20,000.00	SF	40.74	/SF	814,848
		10.07.972	Emergency Vehicle Area	22,500.00	SF	81.48	/SF	1,833,408
		10.07.973	Water Supply Area	20,000.00	SF	40.74	/SF	814,848
		10.07.974	Rescue Area	10,000.00	SF	40.74	/SF	407,424
		10.07.975	Traction Power SubSta Area	3,640.00	SF	115.44	/SF	420,190
		10.07.976	Traction Power Facility Area	80,000.00	SF	115.44	/SF	9,234,944
		10.09.110	Ballasted Track - 1 Track	4.24	R M	2,350,177.50	/R M	9,964,753
		10.09.120	Ballasted Track - 2 Track	13.30	R M	4,644,098.77	/R M	61,766,514
		10.10.110	Direct Fixation Track - 1 Track	21.00	R M	3,347,002.55	/R M	70,287,054
		10.10.120	Direct Fixation Track - 2 Track	0.24	R M	4,520,631.83	/R M	1,084,952
		10.15.101	Wildlife Crossing	10.00	EA	71,301.56	/EA	713,016
		10.16.100	Drainage	2.00	EA	192,878.77	/EA	385,758
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	777,970.00	SF	170.36	/SF	132,531,103
		40.02.020	Electric OH, 115 kV	455.00	LF	244.82	/LF	111,395
		40.02.021	Electric OH, 230 kV	1,340.00	LF	194.31	/LF	260,369
		40.02.022	Electirc OH, unknown	1,925.00	LF	194.31	/LF	374,037
		40.02.025	Potable Water, 120"	3,800.00	LF	7,679.52	/LF	29,182,168
		40.02.043	Drainage Canal, All Sizes	785.00	LF	502.07	/LF	394,121

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.00	LF	194.31	/LF	80,637
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.00	lf	3,839.76	/lf	6,254,967
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.00	LF	9,215.42	/LF	8,763,866
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.00	LF	10,751.33	/LF	7,278,647
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.00	LF	13,823.13	/LF	13,684,901
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.00	LF	18,430.84	/LF	19,462,970
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,086.00	LF	12,302.52	/LF	37,965,571
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.00	EA	725,071.17	/EA	725,071
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.00	EA	9,101.33	/EA	9,101
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.00	EA	41,939.98	/EA	41,940
	SS16		San Joaquin Valley					
		10.01.001	Topsoil	447,415.00	CY	4.24	/CY	1,895,411
		10.01.002	Cut	23,638.00	CY	13.42	/CY	317,217
		10.01.004	Overbreak In Embankment	615,491.00	CY	19.79	/CY	12,179,286
		10.01.005	Embankment	2,531,377.00	CY	22.60	/CY	57,216,798
		10.01.006	Overbreak Fill In Cut	1,701.00	CY	19.79	/CY	33,657
		10.01.007	Overbreak Fill In Embankment	615,491.00	CY	19.79	/CY	12,179,286

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.01.008	Subballast	128,198.00	CY	59.35	/CY	7,608,550
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.71	R M	180,812,350.63	/R M	490,001,470
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.63	R M	189,953,839.65	/R M	309,624,759
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.67	R M	198,211,318.33	/R M	132,801,583
		10.02.036	BC - 150-275-150 - Cherokee	0.11	R M	224,216,722.18	/R M	24,663,839
		10.02.037	BC - 200-350-200 - San Luis	0.14	R M	178,203,214.57	/R M	24,948,450
		10.02.038	BC - 120-220-120 Span - Los Banos	0.09	R M	262,414,325.56	/R M	23,617,289
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.00	EA	1,513,256.54	/EA	12,106,052
		10.09.110	Ballasted Track - 1 Track	0.55	R M	2,350,177.53	/R M	1,292,598
		10.09.120	Ballasted Track - 2 Track	12.75	R M	4,644,098.77	/R M	59,212,259
		10.10.120	Direct Fixation Track - 2 Track	5.37	R M	4,501,074.99	/R M	24,170,773
		10.14.206	Ballasted Turnout #20	3.00	EA	339,127.51	/EA	1,017,383
		10.14.300	Ballasted Crossover (60 MPH)	2.00	EA	2,119,546.96	/EA	4,239,094
		10.14.305	Ballasted Crossover (80 MPH)	2.00	EA	1,602,377.52	/EA	3,204,755
		10.14.400	Terminal - Bumping Post	1.00	Ea	45,217.01	/Ea	45,217
		10.15.101	Wildlife Crossing	67.00	EA	71,301.56	/EA	4,777,205
		10.16.100	Drainage	42.00	EA	192,878.77	/EA	8,100,909

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	746,920.00	SF	170.36	/SF	127,241,579
		30.04.010c	MOIF Siding	1.00	EA	3,611,952.24	/EA	3,611,952
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.00	LF	282.95	/LF	1,498,241
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,255.00	LF	282.95	/LF	1,769,876
		40.02.019	Electric OH, 51-114 kV	3,770.00	LF	129.63	/LF	488,708
		40.02.022	Electirc OH, unknown	23,930.00	LF	194.31	/LF	4,649,723
		40.02.035	Potable Water Storage Tank	1.00	EA	76,795.17	/EA	76,795
		40.02.043	Drainage Canal, All Sizes	29,515.00	LF	502.07	/LF	14,818,454
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.00	LF	194.31	/LF	2,383,153
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.66	lf	3,839.76	/lf	2,534
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	51,328,605.99	/EA	51,328,606
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.00	EA	28,529,153.87	/EA	28,529,154
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	26,999,657.45	/EA	26,999,657
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.00	EA	27,497,062.75	/EA	27,497,063

Alternativ	Subsection	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys	1.00	EA	30,740,316.47	/EA	30,740,316
	SS401		Scott Blvd to Diridon Station					
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	14.00	EA	191,832.41	/EA	2,685,654
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	6.00	EA	688,628.69	/EA	4,131,772
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	1.30	R M	4,101,237.15	/R M	5,331,608
		10.09.110	Ballasted Track - 1 Track	1.30	R M	2,350,177.48	/R M	3,055,231
		10.14.201	Ballasted Turnout #9	2.00	EA	127,172.82	/EA	254,346
		10.14.202	Ballasted Turnout #10	2.00	EA	138,477.07	/EA	276,954
		10.14.320	Ballasted Crossover	3.00	EA	652,820.46	/EA	1,958,461
		10.14.321	Ballasted Crossover #10	3.00	EA	720,645.97	/EA	2,161,938
		10.14.323	Ballasted Crossover #14	2.00	EA	1,003,252.22	/EA	2,006,504
		20.02.225	San Jose (Diridon) Sta	1.00	LS	142,766,396.57	/LS	142,766,397
		20.02.297	College Park Station	1.00	LS	1,636,316.64	/LS	1,636,317
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	10,800.00	SF	170.36	/SF	1,839,834
		40.02.011	Pump Station (Storm)	1.00	EA	383,975.89	/EA	383,976
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	11,505.00	LF	282.95	/LF	3,255,384
		40.02.016	Electric UG	300.00	LF	309.85	/LF	92,956
		40.02.020	Electric OH, 115 kV	920.00	LF	244.82	/LF	225,238

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.024	Transmission Tower	1.00	EA	614,361.45	/EA	614,361
		40.02.039	Storm Drain, 6"-18"	70.00	LF	217.15	/LF	15,201
		40.02.040	Storm Drain, 19"-30"	620.00	LF	316.39	/LF	196,162
		40.08.200.au	Rdwy Underxing UPRR (Taylor St): Exist Rd Under 1 Trk	1.00	EA	3,575,691.70	/EA	3,575,692
	SS402		Diridon Station to Alma Ave					
		10.01.001	Topsoil	14,929.00	CY	4.24	/CY	63,245
		10.01.002	Cut	27,305.00	CY	13.42	/CY	366,425
		10.01.004	Overbreak In Embankment	8,515.00	CY	19.79	/CY	168,494
		10.01.005	Embankment	27,994.00	CY	22.60	/CY	632,749
		10.01.006	Overbreak Fill In Cut	17,083.00	CY	19.79	/CY	338,037
		10.01.007	Overbreak Fill In Embankment	8,515.00	CY	19.79	/CY	168,494
		10.01.008	Subballast	11,250.00	CY	59.35	/CY	667,688
		10.02.055	Steel Through Girder - I-280	1.00	EA	11,543,530.28	/EA	11,543,530
		10.02.056	Concrete Through Girder - SR-87	1.00	EA	17,998,862.53	/EA	17,998,863
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	1.95	R M	4,101,224.07	/R M	7,997,387
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	1.79	R M	7,151,138.45	/R M	12,800,538
		10.09.110	Ballasted Track - 1 Track	1.95	R M	2,350,177.49	/R M	4,582,846
		10.09.120	Ballasted Track - 2 Track	1.79	R M	4,644,098.78	/R M	8,312,937
		10.14.202	Ballasted Turnout #10	7.00	EA	138,477.07	/EA	969,339

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.323	Ballasted Crossover #14	3.00	EA	1,003,252.23	/EA	3,009,757
		20.06.211	Bike Path Realignment (Almaden Expy)	3.00	EA	7,435,266.95	/EA	22,305,801
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	1.00	SF	1,039,165.70	/SF	1,039,166
		20.07.801	Quad Gate Prototype A	6,100.00	EA	819.17	/EA	4,996,929
		40.02.011	Pump Station (Storm)	2.00	EA	383,975.90	/EA	767,952
		40.02.022	Electric OH, unknown	370.00	LF	194.31	/LF	71,893
		40.02.045	Electric OH & Telecom OH on JP, Unknown	1,150.00	LF	194.31	/LF	223,451
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	4,584.00	LF	7,679.69	/LF	35,203,678
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	237.94	LF	9,215.42	/LF	2,192,717
		40.05.050	Retaining Wall In Cut - 1 Wall (10' Avg. Exc Depth)	1,966.25	LF	3,071.81	/LF	6,039,941
		40.08.200.av	Rdwy Underxing HSR (Guadalupe River): Creek Under 1 Trk	1.00	EA	7,794,403.19	/EA	7,794,403
		40.08.200.aw 1	Southbound Underpass				/EA	4,245,620
		40.08.200.aw 2	Northbound Underpass				/EA	4,913,498
		40.08.200.ax	Rdwy Underxing HSR (Delmas Ave): Exist Rd Under 3 Trk	1.00	EA	4,077,704.11	/EA	4,077,704

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.ay	Rdwy Underxing HSR (Prevost St): Exist Rd Under 1 Trk	1.00	EA	1,922,821.52	/EA	1,922,822
		40.08.200.az	Rdwy Underxing HSR (Willow St): Exist Rd Under 1 Trk	1.00	EA	3,617,322.48	/EA	3,617,322
		40.08.200.ba	Rdwy Underxing HSR (Alma Ave): Exist Rd Under 2 Trk	1.00	EA	3,493,536.63	/EA	3,493,537
	SS403		Alma Ave to Gilroy					
		10.01.001	Topsoil	137,499.00	CY	4.24	/CY	582,495
		10.01.002	Cut	1,850,893.00	CY	13.42	/CY	24,838,425
		10.01.004	Overbreak In Embankment	328,081.00	CY	19.79	/CY	6,492,036
		10.01.005	Embankment	1,960,300.00	CY	22.60	/CY	44,308,729
		10.01.006	Overbreak Fill In Cut	1,004,358.00	CY	19.79	/CY	19,874,140
		10.01.007	Overbreak Fill In Embankment	328,081.00	CY	19.79	/CY	6,492,036
		10.01.008	Subballast	375,555.00	CY	59.35	/CY	22,289,207
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.33	R M	133,830,205.58	/R M	44,163,968
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.06	R M	162,043,916.50	/R M	9,722,635
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	0.50	R M	192,495,002.96	/R M	96,247,501
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.03	R M	207,647,111.67	/R M	6,229,413
		10.01.222b	Elevated Structure - 2 Track (20' Avg. Pier Ht, 150' Span)	0.03	R M	160,726,264.33	/R M	4,821,788

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.02.057	2-Track Steel Truss Over 3 Tracks	1.00	EA	44,373,041.82	/EA	44,373,042
		10.02.057a	1-Track Steel Truss Over 3 Tracks	1.00	EA	27,844,683.19	/EA	27,844,683
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	6.00	EA	191,832.42	/EA	1,150,994
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.00	EA	188,855.20	/EA	755,421
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	5.00	EA	1,513,256.59	/EA	7,566,283
		10.06.210	At-Grade Track Bed in Fill - 2 Track (10'Avg fill ht)	34.63	R M	4,096,740.41	/R M	141,870,120
		10.06.220	At-Grade Track Bed w/ closed Drainage - 2 Track	32.87	R M	7,151,230.25	/R M	235,060,938
		10.09.110	Ballasted Track - 1 Track	34.63	R M	2,350,177.49	/R M	81,386,646
		10.09.120	Ballasted Track - 2 Track	32.87	R M	4,644,098.77	/R M	152,651,527
		10.14.202	Ballasted Turnout #10	10.00	EA	138,477.07	/EA	1,384,771
		10.14.203a	Ballasted Turnout #14	7.00	EA	155,433.44	/EA	1,088,034
		10.14.206	Ballasted Turnout #20	1.00	EA	339,127.51	/EA	339,128
		10.14.300	Ballasted Crossover (60 MPH)	1.00	EA	2,119,546.96	/EA	2,119,547
		10.14.305	Ballasted Crossover (80 MPH)	2.00	EA	1,602,377.51	/EA	3,204,755
		10.14.321	Ballasted Crossover #10	3.00	EA	720,645.97	/EA	2,161,938
		10.14.324	Ballasted Crossover #20	12.00	EA	1,413,031.31	/EA	16,956,376
		10.14.352	Ballasted Double Crossover #10	1.00	EA	866,404.11	/EA	866,404

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		10.14.400	Terminal - Bumping Post	9.00	Ea	45,217.00	/Ea	406,953
		10.15.100	Wildlife Crossing	3.00	EA	28,260.63	/EA	84,782
		10.15.102	Wildlife Crossing - 30' wide	2.00	EA	393,387.92	/EA	786,776
		10.15.103	Wildlife Crossing - 40' wide	6.00	EA	722,115.52	/EA	4,332,693
		10.16.100	Drainage	8.00	EA	192,878.77	/EA	1,543,030
		20.02.216d	Gilroy Station	1.00	LS	68,930,704.80	/LS	68,930,705
		20.07.010	Roadway Modification, New AC Paving	270,900.00	SF	170.36	/SF	46,149,178
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	575,550.00	SF	171.24	/SF	98,558,903
		20.07.021	OCS Portal Protection	1.00	EA	168,949.39	/EA	168,949
		20.07.801	Quad Gate Prototype A	11.00	EA	2,498,464.50	/EA	27,483,110
		20.07.802	Quad Gate Prototype A1	2.00	EA	3,539,157.58	/EA	7,078,315
		20.07.803	Quad Gate Prototype B	1.00	EA	5,742,551.83	/EA	5,742,552
		20.07.804	Quad Gate Prototype C	2.00	EA	3,960,322.10	/EA	7,920,644
		20.07.805	Quad Gate Prototype C1	2.00	EA	6,186,577.53	/EA	12,373,155
		20.07.806	Quad Gate Prototype C2	6.00	EA	3,371,494.10	/EA	20,228,965
		20.07.807	Quad Gate Prototype D	2.00	EA	6,110,065.01	/EA	12,220,130
		20.07.808	Quad Gate Prototype D1	1.00	EA	6,427,184.98	/EA	6,427,185
		30.04.010d	Comb. MOWF & LMF - Dwtn Gly	1.00	EA	275,196,638.23	/EA	275,196,638
		40.02.001	Natural Gas/Oil, 4.5"-8"	75.00	LF	163.82	/LF	12,287
		40.02.005	Utility Relocation Allowance, Level 5 Urban	5,555.00	LF	197.11	/LF	1,094,960
		40.02.009	Storm Drain, 55"-72"	30.00	LF	371.69	/LF	11,151

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.02.011	Pump Station (Storm)	13.00	EA	383,975.90	/EA	4,991,687
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	1,179,805.00	LF	282.95	/LF	333,830,362
		40.02.014	Telecom/Fiber Optic OH, All Sizes	1,590.00	LF	282.95	/LF	449,897
		40.02.019	Electric OH, 51-114 kV	380.00	LF	129.63	/LF	49,260
		40.02.020	Electric OH, 115 kV	3,260.00	LF	271.86	/LF	886,262
		40.02.022	Electirc OH, unknown	15,550.00	LF	194.31	/LF	3,021,445
		40.02.030	Potable Water, 4"-9"	480.00	LF	66.35	/LF	31,849
		40.02.036	Sanitary Sewer, 6"-15"	4,130.00	LF	92.15	/LF	380,597
		40.02.039	Storm Drain, 6"-18"	1,770.00	LF	217.15	/LF	384,357
		40.02.040	Storm Drain, 19"-30"	370.00	LF	316.39	/LF	117,064
		40.02.043	Drainage Canal, All Sizes	2,030.00	LF	502.07	/LF	1,019,192
		40.02.045	Electric OH & Telecom OH on JP, Unknown	11,300.00	LF	194.31	/LF	2,195,648
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	7,806.00	LF	7,679.68	/LF	59,947,546
		40.05.050	Retaining Wall In Cut - 1 Wall (10' Avg. Exc Depth)	3,020.00	LF	3,072.69	/LF	9,279,530
		40.05.051	Retaining Wall In Cut - 1 Wall (20' Avg. Exc Depth)	4,316.00	LF	7,760.83	/LF	33,495,754
		40.08.200.ar1	HSR Underpass	1.00	EA	9,425,975.54	/EA	9,425,976
		40.08.200.ar2	UPRR Underpass	1.00	EA	5,657,006.88	/EA	5,657,007
		40.08.200.at	Rdwy Underxing HSR (Upper Llagas Creek): Creek Under 3 Trk	1.00	EA	13,059,592.00	/EA	13,059,592

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		40.08.200.bb	Rdwy Underxing HSR (Almaden Rd): Exist Rd Under 3 Trk	1.00	EA	7,395,211.99	/EA	7,395,212
		40.08.200.bc	Rdwy Modification (Perimeter Rd): New AC Paving	1.00	EA	672,932.42	/EA	672,932
		40.08.200.bd	Rdwy Modification (Richmond Ave): New AC Paving	1.00	EA	824,368.01	/EA	824,368
		40.08.200.be	Rdwy Modification (Diane Ave): New AC Paving	1.00	EA	44,516.45	/EA	44,516
	SS403R		Gilroy/MOWF to South of D. Gilroy					
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	2.80	R M	191,819,218.21	/R M	537,093,811
		20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	61,370.00	SF	170.36	/SF	10,454,688
		40.02.020	Electric OH, 115 kV	555.00	LF	244.82	/LF	135,877
		40.02.032	Potable Water, 25"-36"	835.00	LF	423.80	/LF	353,873
	SS99-5		Alternative 04-DV1 Complete					
		40.04.110	Environmental Mitigation Allowance, Heavy	1.00	LS	369,777,659.51	/LS	369,777,660
		40.06.100	Temporary facilities and other indirect costs during construction	1.00	LS	451,950,472.73	/LS	451,950,473
		40.07.100	ROW Procurement Acquisition	1.00	LS	2,383,700,999.99	/LS	2,383,701,000
		50.01.020	Wayside Protection - 2 Track	89.12	R M	2,277,233.55	/R M	202,947,054

Alternati v	Subsectio n	UPE	Description	Takeoff Quantity		Grand Total Price		Grand Total Amount
		50.05.010	Communications (w/Fiber Optic Backbone) - 2 Track	89.12	R M	892,764.35	/R M	79,563,159
		50.07.020	Hazard Detectors	89.12	R M	610,093.67	/R M	54,371,548
		60.01.020	Traction power transmission: High voltage	89.12	R M	1,841,193.44	/R M	164,087,159
		60.01.030	Distribution Line Pacheco Pass	89.12	R M	769,779.14	/R M	68,602,717
		60.01.040	PG&E Construction Power Drop Sites	89.12	R M	16,501.34	/R M	1,470,599
		60.02.010	Traction Power, Supply Station Site Work	89.12	R M	1,872,823.25	/R M	166,906,008
		60.03.100	Traction Power Distribution - 2 Tracks	89.12	R M	2,693,285.14	/R M	240,025,572
		60.04.100	Traction power control	89.12	R M	6,353.94	/R M	566,263
		80.00.00	Professional Services	1.00	LS	2,221,514,569.17	/LS	2,221,514,569
		90.00.00	Unallocated Contingency	1.00	LS	657,672,491.23	/LS	657,672,491
			Total					18,993,139,465

Detail Cost Budget Data (By Major Task)

ALT	Sub Section	SCC Major	Description	Grand Total
01			Alternative 01	
	SS1		San Jose Diridon Sta Approach: Viaduct to I-880 (Scott to Diridon Sta)	
		10.00	Track Structure & Track	643,168,413
		20.00	Stations, Terminal, Intermodal	343,205,672
		40.00	Sitework, Right of Way, Land, Existing Conditions	67,949,196
			SS1 San Jose Diridon Sta Approach: Viaduct to I-880 (Scott to Diridon Sta)	1,054,323,281
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	
		10.00	Track Structure & Track	932,673,132
		20.00	Stations, Terminal, Intermodal	21,163,205
		40.00	Sitework, Right of Way, Land, Existing Conditions	108,597,409
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	1,062,433,746
	SS14		Pacheco Pass Deep Tunnel	
		10.00	Track Structure & Track	6,064,773,315
		20.00	Stations, Terminal, Intermodal	132,531,103
		40.00	Sitework, Right of Way, Land, Existing Conditions	124,589,763
			SS14 Pacheco Pass Deep Tunnel	6,321,894,181
	SS16		San Joaquin Valley	
		10.00	Track Structure & Track	1,215,253,838
		20.00	Stations, Terminal, Intermodal	127,241,579
		30.00	Support Facilities, Yards, and Shops	3,611,952
		40.00	Sitework, Right of Way, Land, Existing Conditions	190,782,281
			SS16 San Joaquin Valley	1,536,889,651
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to	
		10.00	Track Structure & Track	525,054,491
		20.00	Stations, Terminal, Intermodal	23,975,280
		40.00	Sitework, Right of Way, Land, Existing Conditions	1,682,175
			SS3 San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to	550,711,946
	SS4		San Jose to Monterey Corridor:Alma Ave to Communication Hill	
		10.00	Track Structure & Track	75,319,483
		20.00	Stations, Terminal, Intermodal	9,032,224
		40.00	Sitework, Right of Way, Land, Existing Conditions	48,427,609
			SS4 San Jose to Monterey Corridor:Alma Ave to Communication Hill	132,779,315
	SS67		Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)	
		10.00	Track Structure & Track	4,354,889,294
		20.00	Stations, Terminal, Intermodal	17,076,388

		40.00	Sitework, Right of Way, Land, Existing Conditions	116,475,867
			SS67 Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)	4,488,441,549
	SS9		Morgan Hill & Gilroy: Viaduct (D. Gilroy)	
		10.00	Track Structure & Track	2,572,225,512
		20.00	Stations, Terminal, Intermodal	207,643,235
		30.00	Support Facilities, Yards, and Shops	251,124,407
		40.00	Sitework, Right of Way, Land, Existing Conditions	10,606,742
			SS9 Morgan Hill & Gilroy: Viaduct (D. Gilroy)	3,041,599,897
	SS99-1		Alternative 1 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	4,834,339,554
		50.00	Communications & Signaling	331,722,672
		60.00	Electric Traction	674,141,605
		80.00	Professional Services	3,310,096,896
		90.00	Unallocated Contingency	995,074,272
			SS99-1 Alternative 1 Complete	10,145,374,998
			01 Alternative 01	28,334,448,564
02			Alternative 02	
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	
		10.00	Track Structure & Track	932,673,132
		20.00	Stations, Terminal, Intermodal	21,163,205
		40.00	Sitework, Right of Way, Land, Existing Conditions	108,597,409
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	1,062,433,746
	SS14		Pacheco Pass Deep Tunnel	
		10.00	Track Structure & Track	6,064,773,315
		20.00	Stations, Terminal, Intermodal	132,531,103
		40.00	Sitework, Right of Way, Land, Existing Conditions	124,589,763
			SS14 Pacheco Pass Deep Tunnel	6,321,894,181
	SS16		San Joaquin Valley	
		10.00	Track Structure & Track	1,215,253,838
		20.00	Stations, Terminal, Intermodal	127,241,579
		30.00	Support Facilities, Yards, and Shops	3,611,952
		40.00	Sitework, Right of Way, Land, Existing Conditions	190,782,281
			SS16 San Joaquin Valley	1,536,889,651
	SS2		San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)	
		10.00	Track Structure & Track	1,253,321,181
		20.00	Stations, Terminal, Intermodal	346,762,023
		40.00	Sitework, Right of Way, Land, Existing Conditions	180,722,765
			SS2 San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)	1,780,805,970
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to	
		10.00	Track Structure & Track	525,054,491

		20.00	Stations, Terminal, Intermodal	23,975,280
		40.00	Sitework, Right of Way, Land, Existing Conditions	1,682,175
			SS3 San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to	550,711,946
	SS4		San Jose to Monterey Corridor:Alma Ave to Communication Hill	
		10.00	Track Structure & Track	75,319,483
		20.00	Stations, Terminal, Intermodal	9,032,224
		40.00	Sitework, Right of Way, Land, Existing Conditions	48,427,609
			SS4 San Jose to Monterey Corridor:Alma Ave to Communication Hill	132,779,315
	SS5810		Morgan Hill & Gilroy: Embkmt (Com Hill. Thru D. Gilroy)	
		10.00	Track Structure & Track	1,678,007,547
		20.00	Stations, Terminal, Intermodal	214,194,616
		30.00	Support Facilities, Yards, and Shops	251,124,407
		40.00	Sitework, Right of Way, Land, Existing Conditions	1,263,360,377
			SS5810 Morgan Hill & Gilroy: Embkmt (Com Hill. Thru D. Gilroy)	3,406,686,946
	SS99-2		Alternative 2 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	5,671,174,593
		50.00	Communications & Signaling	344,788,247
		60.00	Electric Traction	688,562,479
		80.00	Professional Services	2,708,647,236
		90.00	Unallocated Contingency	873,273,107
			SS99-2 Alternative 2 Complete	10,286,445,662
			02 Alternative 02	25,078,647,417
03			Alternative 03	
	SS1113		Morgan Hill & Gilroy: Viaduct thru E Gilroy	
		10.00	Track Structure & Track	3,155,858,040
		20.00	Stations, Terminal, Intermodal	274,632,522
		30.00	Support Facilities, Yards, and Shops	295,540,601
		40.00	Sitework, Right of Way, Land, Existing Conditions	213,295,608
			SS1113 Morgan Hill & Gilroy: Viaduct thru E Gilroy	3,939,326,770
	SS14		Pacheco Pass Deep Tunnel	
		10.00	Track Structure & Track	6,064,773,315
		20.00	Stations, Terminal, Intermodal	132,531,103
		40.00	Sitework, Right of Way, Land, Existing Conditions	124,589,763
			SS14 Pacheco Pass Deep Tunnel	6,321,894,181
	SS16		San Joaquin Valley	
		10.00	Track Structure & Track	1,215,253,838
		20.00	Stations, Terminal, Intermodal	127,241,579
		30.00	Support Facilities, Yards, and Shops	3,611,952
		40.00	Sitework, Right of Way, Land, Existing Conditions	190,782,281
			SS16 San Joaquin Valley	1,536,889,651

	SS2		San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)	
		10.00	Track Structure & Track	1,253,321,181
		20.00	Stations, Terminal, Intermodal	346,762,023
		40.00	Sitework, Right of Way, Land, Existing Conditions	180,722,765
			SS2 San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)	1,780,805,970
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to	
		10.00	Track Structure & Track	525,054,491
		20.00	Stations, Terminal, Intermodal	23,975,280
		40.00	Sitework, Right of Way, Land, Existing Conditions	1,682,175
			SS3 San Jose to Monterey Corridor:Diridon Sta to Alma Ave Diridon Sta to	550,711,946
	SS4		San Jose to Monterey Corridor:Alma Ave to Communication Hill	
		10.00	Track Structure & Track	75,319,483
		20.00	Stations, Terminal, Intermodal	9,032,224
		40.00	Sitework, Right of Way, Land, Existing Conditions	48,427,609
			SS4 San Jose to Monterey Corridor:Alma Ave to Communication Hill	132,779,315
	SS67		Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)	
		10.00	Track Structure & Track	4,354,889,294
		20.00	Stations, Terminal, Intermodal	17,076,388
		40.00	Sitework, Right of Way, Land, Existing Conditions	116,475,867
			SS67 Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)	4,488,441,549
	SS99-3		Alternative 3 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	4,537,342,352
		50.00	Communications & Signaling	329,685,995
		60.00	Electric Traction	670,672,109
		80.00	Professional Services	3,402,158,227
		90.00	Unallocated Contingency	1,007,465,336
			SS99-3 Alternative 3 Complete	9,947,324,019
			03 Alternative 03	28,698,173,401
04			Alternative 04	
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	
		10.00	Track Structure & Track	932,673,132
		20.00	Stations, Terminal, Intermodal	21,163,205
		40.00	Sitework, Right of Way, Land, Existing Conditions	108,597,409
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	1,062,433,746
	SS14		Pacheco Pass Deep Tunnel	
		10.00	Track Structure & Track	6,064,773,315
		20.00	Stations, Terminal, Intermodal	132,531,103
		40.00	Sitework, Right of Way, Land, Existing Conditions	124,589,763

			SS14 Pacheco Pass Deep Tunnel	6,321,894,181
	SS16		San Joaquin Valley	
		10.00	Track Structure & Track	1,215,253,838
		20.00	Stations, Terminal, Intermodal	127,241,579
		30.00	Support Facilities, Yards, and Shops	3,611,952
		40.00	Sitework, Right of Way, Land, Existing Conditions	190,782,281
			SS16 San Joaquin Valley	1,536,889,651
	SS401		Scott Blvd to Diridon Station	
		10.00	Track Structure & Track	21,862,468
		20.00	Stations, Terminal, Intermodal	146,242,548
		40.00	Sitework, Right of Way, Land, Existing Conditions	8,358,970
			SS401 Scott Blvd to Diridon Station	176,463,986
	SS402		Diridon Station to Alma Ave	
		10.00	Track Structure & Track	69,620,328
		20.00	Stations, Terminal, Intermodal	28,341,896
		40.00	Sitework, Right of Way, Land, Existing Conditions	74,564,539
			SS402 Diridon Station to Alma Ave	172,526,763
	SS403		Alma Ave to Gilroy	
		10.00	Track Structure & Track	1,013,997,214
		20.00	Stations, Terminal, Intermodal	313,281,790
		30.00	Support Facilities, Yards, and Shops	275,196,638
		40.00	Sitework, Right of Way, Land, Existing Conditions	488,278,452
			SS403 Alma Ave to Gilroy	2,090,754,094
	SS403R		Gilroy/MOWF to South of D. Gilroy	
		10.00	Track Structure & Track	537,093,811
		20.00	Stations, Terminal, Intermodal	10,454,688
		40.00	Sitework, Right of Way, Land, Existing Conditions	489,750
			SS403R Gilroy/MOWF to South of D. Gilroy	548,038,249
	SS99-4		Alternative 04 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	3,202,005,380
		50.00	Communications & Signaling	336,881,761
		60.00	Electric Traction	641,658,319
		80.00	Professional Services	2,217,975,117
		90.00	Unallocated Contingency	656,646,914
			SS99-4 Alternative 04 Complete	7,055,167,490
			04 Alternative 04	18,964,168,159
05			Alternative 04 - Diridon Design Variant	
	SS DV1		Diridon Design Variant 1	
		10.00	Track Structure & Track	14,351,837
		20.00	Stations, Terminal, Intermodal	6,630,686
			SS DV1 Diridon Design Variant 1	20,982,523
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmt(South of D. Gilroy thru Tunn	
		10.00	Track Structure & Track	932,673,132
		20.00	Stations, Terminal, Intermodal	21,163,205

		40.00	Sitework, Right of Way, Land, Existing Conditions	108,597,409
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmt(South of D. Gilroy thru Tunn Pacheco Pass Deep Tunnel	1,062,433,746
	SS14			
		10.00	Track Structure & Track	6,064,773,315
		20.00	Stations, Terminal, Intermodal	132,531,103
		40.00	Sitework, Right of Way, Land, Existing Conditions	124,589,763
			SS14 Pacheco Pass Deep Tunnel	6,321,894,181
	SS16		San Joaquin Valley	
		10.00	Track Structure & Track	1,215,253,838
		20.00	Stations, Terminal, Intermodal	127,241,579
		30.00	Support Facilities, Yards, and Shops	3,611,952
		40.00	Sitework, Right of Way, Land, Existing Conditions	190,782,281
			SS16 San Joaquin Valley	1,536,889,651
	SS401		Scott Blvd to Diridon Station	
		10.00	Track Structure & Track	21,862,468
		20.00	Stations, Terminal, Intermodal	146,242,548
		40.00	Sitework, Right of Way, Land, Existing Conditions	8,358,970
			SS401 Scott Blvd to Diridon Station	176,463,986
	SS402		Diridon Station to Alma Ave	
		10.00	Track Structure & Track	69,620,328
		20.00	Stations, Terminal, Intermodal	28,341,896
		40.00	Sitework, Right of Way, Land, Existing Conditions	74,564,539
			SS402 Diridon Station to Alma Ave	172,526,763
	SS403		Alma Ave to Gilroy	
		10.00	Track Structure & Track	1,013,997,214
		20.00	Stations, Terminal, Intermodal	313,281,790
		30.00	Support Facilities, Yards, and Shops	275,196,638
		40.00	Sitework, Right of Way, Land, Existing Conditions	488,278,452
			SS403 Alma Ave to Gilroy	2,090,754,094
	SS403R		Gilroy/MOWF to South of D. Gilroy	
		10.00	Track Structure & Track	537,093,811
		20.00	Stations, Terminal, Intermodal	10,454,688
		40.00	Sitework, Right of Way, Land, Existing Conditions	489,750
			SS403R Gilroy/MOWF to South of D. Gilroy	548,038,249
	SS99-5		Alternative 04-DV1 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	3,205,429,132
		50.00	Communications & Signaling	336,881,761
		60.00	Electric Traction	641,658,319
		80.00	Professional Services	2,221,514,569
		90.00	Unallocated Contingency	657,672,491
			SS99-5 Alternative 04-DV1 Complete	7,063,156,273
			05 Alternative 04 - Diridon Design Variant	18,993,139,465

APPENDIX D LIST OF DOCUMENTS

The following documents were provided.

- JM 2021_PEPD_AppA-Qty-v11_20211108
- JM-ENG-RS-RPRT-RW-20211011JM-ENG-RS-RPRT-RW-20211011