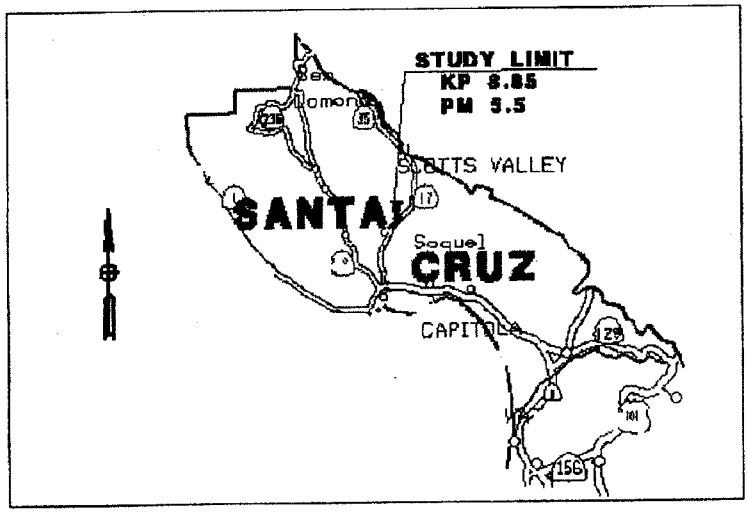
Caltrans Metric

05-SCr-17-KP 8.85 (PM 5.5)
05-49380K
Regional Improvement Program 075.600
February, 2004

# PROJECT STUDY REPORT
# (PROJECT DEVELOPMENT SUPPORT)

**This document can be used to program only the Engineering and Environmental Support for Project Approval and Environmental Document components. The remaining support and capital components of the project are preliminary estimates and are not suitable for programming purposes. Either a Supplement PSR or a Project Report would serve as the programming document for the remaining support and capital component of the project.**




**ON ROUTE** 17 at Granite Creek Rd Overcrossing
**Between** Glenwood Drive-SB Ramps
**And** Granite Creek Road

**APPROVAL RECOMMENDED BY:**

*LUIS DUAZO*
PROJECT MANAGER

**APPROVED:**

*GREGG ALBRIGHT*
*District Director-05*

6/01/04
DATE

**CONCURRENCE:**

*JAY NORVELL*
*Acting District Director-06*

**PROJECT SCOPE & TECHNICAL DATA ARE VALID THROUGH** **6/1/07**
**Cost & Work Plan must be updated prior to use for programming** **DATE**

This Project Study Report (Project Development Support) has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein the engineering data upon which recommendations, conclusions, and decisions are based.

Eric Karlson
*REGISTERED CIVIL ENGINEER*

2/10/04
*DATE*

## 1. INTRODUCTION

This project proposes to reconstruct the Granite Creek Road Interchange on Route 17 in the City of Scotts Valley. The proposed project would reduce congestion and traffic delays at the intersection of Scotts Valley and Granite Creek Road and at the intersection of Santa's Village Road and Granite Creek Road. Four alternatives have been considered in preparing this study. Alternative 1 is a standard partial cloverleaf interchange with a current (2004) construction cost between $8,500,000 and $11,000,000 and an escalated (2012) right-of-way cost with a range of $51,000,000 to $54,000,000. Alternative 2 proposes a compact diamond interchange with a current construction cost between $7,500,000 and $10,000,000 and an escalated (2012) right-of-way cost between $26,000,000 and $28,000,000. Alternative 3 is a non-standard partial cloverleaf with a current construction cost in the range of $7,500,000 to $10,000,000 and an escalated (2012) right-of-way cost between $50,000,000 and $53,000,000. Alternative 4 is a no build alternative. This report is for the purpose of programming the Project Approval/Environmental Document (PA/ED) support cost of $1,195,000. It is anticipated that the funding would come from the 2004 Regional Improvement Program, project code 075.600.

## 2. BACKGROUND

The Granite Creek Road Interchange lies in Segment "A" of Route 17. Segment "A" begins at the Route 1 junction in Santa Cruz and proceeds through Scotts Valley to the Santa Cruz/Santa Clara County lines. There is a very heavy northbound commute volume in the morning. The segment also serves as a recreational route between the City of Santa Cruz and the Santa Clara Valley.

In 1989, the City of Scotts Valley commissioned a consultant, Nolte and Associates, to develop interchange improvement alternatives for the Granite Creek Road interchange. Several alternative interchange concepts were developed. Through a public hearing in August of 1989 two alternatives were favored: a standard compact diamond interchange and a single point urban interchange. Due to the high peak ramp volumes the single point interchange was not feasible.

Route 17 is a 4-lane freeway with a 10.5 meter median connecting the Cities of Watsonville, Capitola, Santa Cruz and Scotts Valley. From Scotts Valley to the highly urbanized portion of Santa Clara County the Route is a two-lane conventional highway with a narrow median and little to no shoulders. Route 17 provides the primary access for Santa Cruz County residents and commuters, who work in Santa Clara County. It also provides access for recreational traffic from Santa Clara and the Bay Area to Santa Cruz beaches and for trucks carrying goods into and out of Santa Cruz County. Currently, Granite Creek Road consists of a narrow 6.6 meter two-lane overcrossing with 1.2 meter sidewalks. Hook ramps are located north of the structure. In previous studies it was stated that the existing structure could not be widened over Route 17 due to a vertical clearance of only 4.5 meters.

## 3. NEED AND PURPOSE

The purpose of this project is to reduce congestion and traffic delays at intersections and on local streets around the interchange.

The offset alignment between the overcrossing and the hook ramps require motorists to make a series of turning movements through several major intersections when exiting or entering the freeway. The Granite Creek Interchange is one of only two interchanges for residents and business owners to gain access to Route 17. For residents that reside in northern Scotts Valley the interchange has become heavily congested during the morning and evening commutes. The interchange is the only place to cross Route 17 in Scotts Valley, which further concentrates traffic in the area.

Currently, the primary travel demand in the morning peak period is from cities south on SR 17 to employment and retail centers on Scotts Valley Drive, south of the Granite Creek interchange. A motorist exiting Route 17 northbound (NB) must turn right at Granite Creek Road onto the overpass, then left at Scotts Valley Drive. This movement is reversed in the evening peak period when motorists desiring to return to southbound (SB) Route 17 must pass through the Scotts Valley/Granite Creek intersection to reach the SB on-ramp, 60 meters to the north, opposite of Glenwood Drive. The close proximity of Scotts Valley/Glenwood-Route 17 SB ramps and Scotts Valley/Granite Creek reduces the capacity of these intersections because of the overlap in traffic movements.

While traffic has increased in step with population, there have been no capacity increases at the Granite Creek Interchange. Currently, Annual Average Daily Traffic (AADT) along Route 17 and Granite Creek Interchange is 62,000. The ramp peak hour volumes for 2000 and 2035 are shown on Attachment I. Traffic volumes have increased to the point that the existing interchange design is no longer adequate. The AMBAG travel-forecasting model projects that the 2035 Annual Average Daily Traffic (AADT) volumes in the study area would be 90,800.

Currently, the intersections in question; Scotts Valley Road/Granite Creek Road and Santa's Village Road/Granite Creek Road operate at a Level of Service LOS "C" and "D", respectively. The City of Scotts Valley and the Santa Cruz County Regional Transportation Commission (SCCRTC) have an operational goal of LOS "C" (Nolte and Associates, July, 1989). Based on peak hour turning movement counts taken in September 2000, the existing and 2025-peak hour intersection Level of Service are shown in the tables below and on attachments C and E. The traffic volumes and turning movements are shown in Attachment I.

| Location and Direction | Type of Control | Current Average signal control delay/vehicle/sec | Current Level of Service (PM) | 2025 Average signal control delay/vehicle/sec | 2025 Level of Service (PM) |
|---|---|---|---|---|---|
| SCr 17 SB ramps & Scotts Valley Drive | | | | | |
| Intersection | Signal | 24.7 | C (B) | 42.6 | D (C) |
| SEL | | 42.4 | D (D) | 73.5 | E (D) |
| Private Driveway & Scotts Valley Drive | | | | | |
| Intersection | Signal | 32.9 | C (B) | 97.9 | F (C) |
| WBT | | 79 | E (E) | 153.8 | F (E) |
| SCr 17 NB ramps & Santa's Village Road | | | | | |
| Intersection | Signal | 52.0 | D (D) | 27.3 | C (F) |
| NBL | | 80.1 | F (E) | 65.5 | E (F) |

SEL = South East Left
WBT = Westbound Turn
NBL = Northbound Left

The traffic analysis was completed for the year 2025 and the design year is 2035. It is expected that these LOS values would not change drastically from 2025 and 2035. For this study the values shown convey the difference in each of the alternatives.

The interchange at Granite Creek Road Overcrossing is heavily congested as shown in the Level of Service tables above. The accident history for the ramps in the southbound direction from post mile 5.4 to 5.6 for the past three years (from October 1, 1999 to September 30, 2002) as shown on TASAS "B" indicates that the total accident rate is below the statewide average rate. The following tables compare the actual accident rates in accidents/million vehicle miles to the average statewide for the mainline and ramps.

| | ACTUAL | | | AVERAGE | | |
|---|---|---|---|---|---|---|
| | FAT | F+I | TOT | FAT | F+I | TOT |
| SOUTHBOUND (Mainline) | 0.0 | 0.26 | 0.44 | 0.003 | 0.30 | 0.88 |
| NORTHBOUND (Mainline) | 0.0 | 0.0 | 0.61 | 0.003 | 0.30 | 0.88 |
| | ACTUAL | | | AVERAGE | | |
| | FAT | F+I | TOT | FAT | F+I | TOT |
| NB OFFRAMP | 0.0 | 0.0 | 0.61 | 0.005 | 0.39 | 1.15 |
| SB ONRAMP | 0.0 | 0.0 | 0.37 | 0.002 | 0.20 | 0.60 |
| NB ONRAMP | 0.0 | 0.0 | 0.0 | 0.002 | 0.20 | 0.60 |
| SB OFFRAMP | 0.0 | 0.26 | 0.51 | 0.005 | 0.39 | 1.15 |

A total of 7 accidents (0-Fatal, 1-injury, 6 PDO) occurred within the proposed project limits. The types of accidents were 1 -sideswipe, 2 –broadside and 4 -hit object. Accident data for adjacent local streets and intersections is not available at this time.

## 4. ALTERNATIVES

Four alternatives have been proposed for this project. The three build alternatives endeavor to meet the project purpose by adding lanes at intersections, reducing the number of intersections, and increasing spacing between intersections. None of the alternatives propose Route 17 mainline modifications except for correction of nonstandard clearance below the overcrossing and relocation of the ramp connections. A design speed of 75 km/h is proposed for Granite Creek Road in all of the alternatives. The proposed 31.2 meter six-lane structure over Route 17 is needed to meet the current traffic demands. In addition, Granite Creek Road would be widened east of Route 17 to accommodate the width of the structure and transition from six lanes back to two lanes. This would also require a bridge widening or replacement over Carbonera Creek. In all alternatives the Level of Service for each intersection would meet the operational goal LOS C. The "Concurrence by the Project Development Coordinator for further study of the viable alternatives included in this PSR (PDS) does not constitute approval of any non-standard features identified currently or in the future. Separate documentation and approvals would be required as per Chapter 21 of the Project Development Procedures Manual"

All alternatives have been escalated to 2012. The right of way data sheet was only escalated to 2011. The three page estimate and the cost given in each alternative reflect the current schedule of 2012.

### Alternative No. 1

This alternative proposes a standard Type L-7, cloverleaf interchange, in the northbound direction and a Type L-1, compact diamond, in the southbound direction. This alternative would eliminate access to Meadow Way and Santa's Village Road to allow for standard access control. A new local road would be constructed from El Camino Avenue to Club Drive, which would restore access to Santa's Village Road. In addition, two bridges would be constructed over Carbonera Creek. The first one is along Granite Creek Road and the other is along the proposed El Camino Avenue. To provide a standard alternative it is also necessary to realign Glenwood Avenue. The new alignment would allow for greater spacing between signals located at Glenwood Avenue and Granite Creek Way on Scotts Valley Road. Increased spacing would reduce congestion due to left turn movements from Scotts Valley Road onto Glenwood Avenue and from Scotts Valley Road onto Granite Creek Road. The overall intersections LOS would improve to a LOS 'B' with the exception of Granite Creek and Scotts Valley which would improve to a LOS 'C'.

This is alternative is the standard alternative and does not require a mandatory design exception. It does however require an advisory design exception for not meeting the 160-meter distance between the ramp intersection and the local road intersection.

This alternative requires extensive right-of-way acquisition mainly for the loop ramp and the required width of Granite Creek Road. The construction cost for this alternative is between $8,500,000 and $11,000,000 and the escalated (2012) right-of-way cost is between $51,000,000 and $54,000,000.

**Alternative No. 2**

This alternative proposes a compact diamond interchange, which consists of constructing a new intersection at the southbound off ramps and Glenwood Avenue. Glenwood Avenue would be reconstructed to meet the minimum design skew of 75 degrees. This alternative would eliminate the existing intersection at Granite Creek Road and Scotts Valley Drive. This alternative requires the least amount of right-of-way. However, this alternative requires a mandatory design exception for the 125 meter distance required between the local intersection and the ramp intersection. It also requires an advisory standard for access control at Meadow way. The construction cost for this alternative is between $7,500,000 and $10,000,000 and the escalated (2012) right-of-way cost is between $26,000,000 and $28,000,000. In this alternative the minimum 2025 LOS would be a LOS 'C' and the No Build alternative has a LOS 'C' as well. However, this alternative eliminates one of the intersections allowing for more uniform traffic movements around the interchange.

**Alternative No. 3**

Similar to Alternative 1, this alternative proposes a Type L-7 cloverleaf interchange northbound and a compact diamond in the southbound direction. As with Alternative 1, this alternative proposes to close Meadow Way. However, Santa's Village Road would be realigned slightly to align with the northbound ramps and would remain connected to Granite Creek Road. As in Alternative 1, Glenwood Avenue would need to be realigned to the north to allow for greater intersection spacing to meet operational goals at each intersection. The intersection would be improved to a slightly higher LOS than in Alternative 1 due to the direct access to Santa's Village Road. The access control opposite the northbound offramp would require a mandatory design exception.

This alternative requires a mandatory design exception for not having access control opposite the ramp intersection. In this alternative Santa's Village Road will intersect at the ramp terminus. Therefor requiring a mandatory design exception. An advisory design exception is also required for not meeting the 160-meter distance between the ramp intersection and the local road intersection.

This alternative requires extensive right-of-way acquisition for the loop ramp and for Granite Creek Road widening. The construction cost for this alternative is between $7,500,000 and $10,000,000 and the escalated (2012) right-of-way cost is between $50,000,000 and $53,000,000.

**Alternative No. 4**

Under the "no-build" alternative, no improvements would be constructed and the stated need would remain. As a result, operations around the Granite Creek Road interchange would continue to deteriorate with more queuing and delay. The level of service at intersections around the interchange would not meet local operational goals.

## 5. SYSTEM PLANNING

The Granite Creek Road Interchange lies in Segment "A" of Route 17. Segment "A" begins at the Route 1 junction in Santa Cruz and proceeds through Scotts Valley to the Santa Cruz/Santa Clara county line. The Route 17 Transportation Concept Report calls for improving Route 17 from Scotts Valley to the Santa Cruz / Santa Clara County line to a 4-lane divided facility with passing lanes. Since future demand cannot be met by widening Route 17, alternate modes of transportation must be considered. A combination of highways and transit is needed to meet demand. An effort should be made to improve the existing road to meet safety standards wherever possible. This proposal is consistent with planning because no capacity is added to Route 17. The proposed improvements would reduce delay and congestion on local streets around the Granite Creek Interchange.

This project is found on the Santa Cruz County Regional Transportation Commission (SCCRTC) 2001 Regional Transportation Plan (RTP) constrained list as follows:

| Project Title | ID | Description/Scope | Estimated | Constrained |
|---|---|---|---|---|
| | | | (Cost in $1000) | |
| Granite Cr IC Reconstruction | SV-P8 | Realign/reconfigure the Granite Creek OC, add bike lanes & sidewalks | $10,300 | $5,000 |

The project is also found in the 'Projects that Need New Funds' list as needing $5,300,000. Other relevant projects that are included in that list are shown below:

| Project Title | ID | Description/Scope | Estimated | Constrained |
|---|---|---|---|---|
| | | | (Cost in $1000) | |
| Emergency access Granite Cr/Rte 17 | SV-P24 | Connect Granite Cr Rd to Rte 17 via Navarra Dr to Sucinto Dr for emergency access | $550 | $550 |
| Glenwood Dr Bike lanes | SV-P39 | Widen road to accommodate bike lanes from Scotts Valley HS to city limits. | $310 | $310 |
| Midtown IC | SV-P1 | New Rte 17 IC midway between Mt Hermon & Granite Creek | $11,500 | $11,500 |
| Navarra Dr - Sucinto Dr Bike lanes | SV-P34 | Add bike lanes to developing area behind commercial | $400 | 400 |

## 6. ENVIRONMENTAL DETERMINATION

The expected environmental document for the project is an Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The Federal Highway Administration and the California Department of Transportation would act as lead agencies in the preparation of a joint CEQA/NEPA (California Environmental Quality Act/National Environmental Policy Act) environmental document.

The project proposes to impact 8.7 acres. If any impacted land would be suitable habitat for sensitive species, mitigation replacement would be required at a ratio of 3:1. Mitigation acreage required could be up to 26.1 acres. The anticipated permits are the 401 permit coordination, 404, 1601, City/Council Coastal Permit Coordination and a NPDES. All of the Alternatives will require mitigation ranging from 500,000 to 1,000,000. The final environmental determination is projected to occur 56 months from the start of environmental studies. Assuming a start date of October 2004, project approval and the environmental document would be expected by May 2009.

## 7. RIGHT OF WAY

For the proposed improvements new right-of-way is required. The escalated (2012) estimated right-of-way cost for Alternative1 is between $51,000,000 and $54,000,000 where 62 parcels would be affected. The escalated (2012) estimated right-of-way cost for Alternative 2 is $26,000,000 to $28,000,000 where 41 parcels would be affected. The escalated (2012) estimated right-of-way cost for Alternative 3 is between $50,000,000 and $53,000,000 where 62 parcels would be affected. It is anticipated that the following utilities would be impacted, PG&E, Pacific Bell and the public utilities of Scotts Valley. Additionally, during subsequent project development stages and based on further studies, there may be a need to acquire additional right-of-way.

## 8. FUNDING/SCHEDULING

### Capital Outlay Support Estimate for PA/ED

| Fiscal Year | STIP PY's/$'s | | Other Funding Sources PY's/$'s | |
|---|---|---|---|---|
| | PY's | $'s (x1000) | PY's | $'s |
| 04/05 | 2 | 164 | | |
| 05/06 | 2 | 205 | | |
| 06/07 | 2 | 209 | | |
| 07/08 | 2 | 214 | | |
| 08/09 | 3 | 367 | | |
| 09/10 | 0.1 | 14 | | |
| 10/11 | 0.1 | 15 | | |
| 11/12 | 0.1 | 14 | | |
| Total Support Cost | 11 | 1202 | | |

- Other funding sources have not been identified at this time.

### Capital Outlay Estimate

| | Range for Total Cost | STIP Funds | Fund Source "A" |
|---|---|---|---|
| Minimum Build Alternative | $33.5 to 38 M | $33.5 to 38 M | $0 |
| Ultimate Build Alternative | $59.5 to 65 M | $59.5 to 65 M | $0 |

**The level of detail available to develop these capital cost estimates is only accurate to within the above ranges and are useful for long range planning purposes only. The capital costs should not be used to program or commit capital funds. The Project Report will serve as the appropriate document from which the remaining support and capital components of the project will be programmed.**

**Tentative Project Schedule**

| Milestone | Fiscal Year |
|---|---|
| | |
| Circulate Draft Project Report/ Draft ED | 01/09 |
| Public Hearing | 01/09 |
| PA/ED | 05/09 |
| PS&E | 03/12 |
| Construction Completion | 10/14 |

**Only the "PA/ED" milestone is to be used for programming commitments. All other milestones are used to indicate relative time frames for planning purposes.**

## 9. RECOMMENDATION

It is recommended that this Project Study Report -Project Development Support be approved and that the Santa Cruz County Regional Transportation Commission's Regional Transportation Plan be modified to reflect the scope and cost described herein. If the modified RTP shows this project as a high priority by placing on the constrained list, then it should be a candidate for funding at the next available opportunity.

## 10. DISTRICT CONTACT

CALTRANS PERSONEL:

| | | |
|---|---|---|
| Luis Duazo | Project Manager | (805) 542-4678 |
| Shahin A. Mansour | Project Development | (559) 230-3114 |
| Eric Karlson | Project Development | (559) 243-3116 |
| Paul McClintic | Traffic Operations | (805) 549-3473 |
| Steven Croteau | Environmental | (559) 243-8161 |

## 11. ATTACHMENTS

Attachment A..... Map

Attachment B.....Alternative 1 Layout

Attachment C.....Alternative 1 Cost Estimate

Attachment D.....Alternative 2 Layout

Attachment E.....Alternative 2 Cost Estimate

Attachment F.....Alternative 3 Layout

Attachment G.....Alternative 3 Cost Estimate

Attachment H.....Ramp Volumes/Intersection PHV

Attachment I-K.....Right of Way Data Sheet

Attachment L.....Preliminary Environmental Analysis Report

Attachment M.....Storm Water Data Report

Cc:
Division of Design (2)
Transp. Prog. (2) – Jim Nicholas
FHWA – Dominic Hoang
Hdq. Environmental – Katrina Pierce
Project Manger (2) – Luis Duazo
Design Engineer (3) - Original + 2 cc's
Res. Engr. (held by Design Engineer)
District Maintenance. – Mike Giuliano
District Traffic – Nevin Sams
Traffic Design Stockton - Hassan Harei
Traffic Opperations – Paul McClintic
Materials – Ron Sekhon
Environmental – Kristen Helton
R/W – John Maddux
Planning – Sara Chesebro
PPM – Teresa Rix
Surveys – Bob Davies
DES/OPPM-Andrew Tan (Stuctures)
Records Resource Center – Victoria Pozuelo
Drafting Room – Tami Cox SCCRTC (2)

| DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| | | | | | |

Caltrans Metric

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov


VICINITY MAP

| DATE | REVISED BY |
|---|---|
| | DATE REVISED |

CALCULATED/ DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

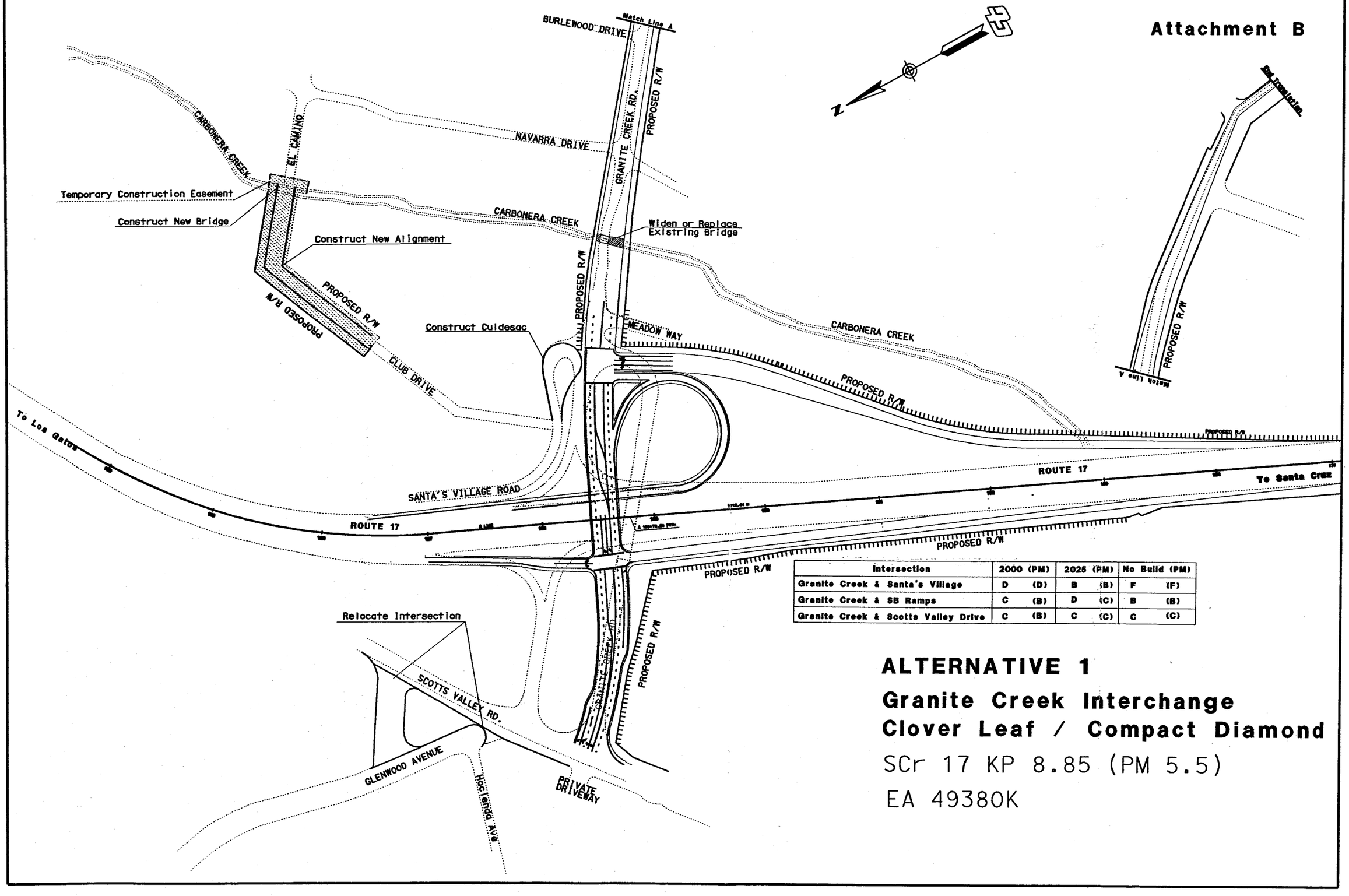
RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => t6ekarl

LAST REVISION 00-00-00

DATE PLOTTED => 23-APR-2004

**Attachment B**




| Intersection | 2000 (PM) | 2025 (PM) | No Build (PM) |
|---|---|---|---|
| Granite Creek & Santa's Village | D (D) | B (B) | F (F) |
| Granite Creek & SB Ramps | C (B) | D (C) | B (B) |
| Granite Creek & Scotts Valley Drive | C (B) | C (C) | C (C) |

## ALTERNATIVE 1

## Granite Creek Interchange
## Clover Leaf / Compact Diamond

SCr 17 KP 8.85 (PM 5.5)

EA 49380K

# Project Study Report – Project Development Support Cost Estimate

District-County-Route 05-SCr-17

KP(PM) 8.85(5.50)

EA 05-49380K

Program Code 20.XX.075.600

PROJECT DESCRIPTION:

Limits Granite Creek Road Interchange SCr-17

Proposed Improvement (Scope) Construct a New Interchange

Alternate 1 – Cloverleaf / Compact Diamond

## SUMMARY OF PROJECT COST ESTIMATE

| | |
|---|---|
| TOTAL ROADWAY ITEMS | $ 3.5M-4.5M |
| TOTAL STRUCTURE ITEMS | $ 4.5M-5.5M |
| TOTAL ENVIRONMENTAL MITIGATION ITEMS | $ 0.5M-1M |
| SUBTOTAL CONSTRUCTION COSTS (2003) | $ 8.5M-11M |
| TOTAL RIGHT OF WAY ITEMS (Escalated 2012) | $ 51M-54M |
| TOTAL PROJECT CAPITAL OUTLAY COSTS | $ 59.5M-65M |

I. ROADWAY ITEMS

| | Average Cost per Lane KM | Number of KMs | Total Cost |
|---|---|---|---|
| Total Cost of Lane KMs | $3.5M-4.5M | 1 | $3.5M-4.5M |

Built into the Cost per lane KM are the earthwork, class 2 Base Asphalt Concrete, AC removal, Metal Beam guard Railing, Concrete Barrier, and Electrical work. Also included are contingencies for Drainage Items, Traffic Items and Minor Items along with Mobilization. (A more detailed estimate is in the project files)

II. STRUCTURES ITEMS

| | Structure (1) | Structure (2) | Structure (3) |
|---|---|---|---|
| Granite Creek Interchange | 1400 $m^2$ | 295 $m^2$ | 122 $m^2$ |
| Total Cost for Structure | $3M-3.5M | $750,000 | $300,000 |

TOTAL STRUCTURES ITEMS $4.5M-5.5M
(Sum of Total Cost for Structures)

Included in our structure items is a reinforced concrete box girder bridge, type 25 bridge rail and sidewalk. We assumed a width of 31.2 m and span length of 45 m.

III. ENVIRONMENTAL MITIGATION

| | Quantity | Unit | Unit Price | Item Cost |
|---|---|---|---|---|
| A Phase III Data Recovery | 1 | LS | $750,000 | $750,000 |
| Visual Resources | 1 | LS | $100,000 | $100,000 |
| Hazardous Waste | 1 | LS | $25,000 | $25,000 |
| | | | TOTAL | $875,000 |

The Environmental Mitigation includes the mitigation of several species of trees that would be removed during construction. Several archaeological sites have been found within the project limits and will require extensive mitigation. Also within the project limits is a gas station that may have potential hazardous material.

IV. RIGHT OF WAY ITEMS — ESCALATED VALUE

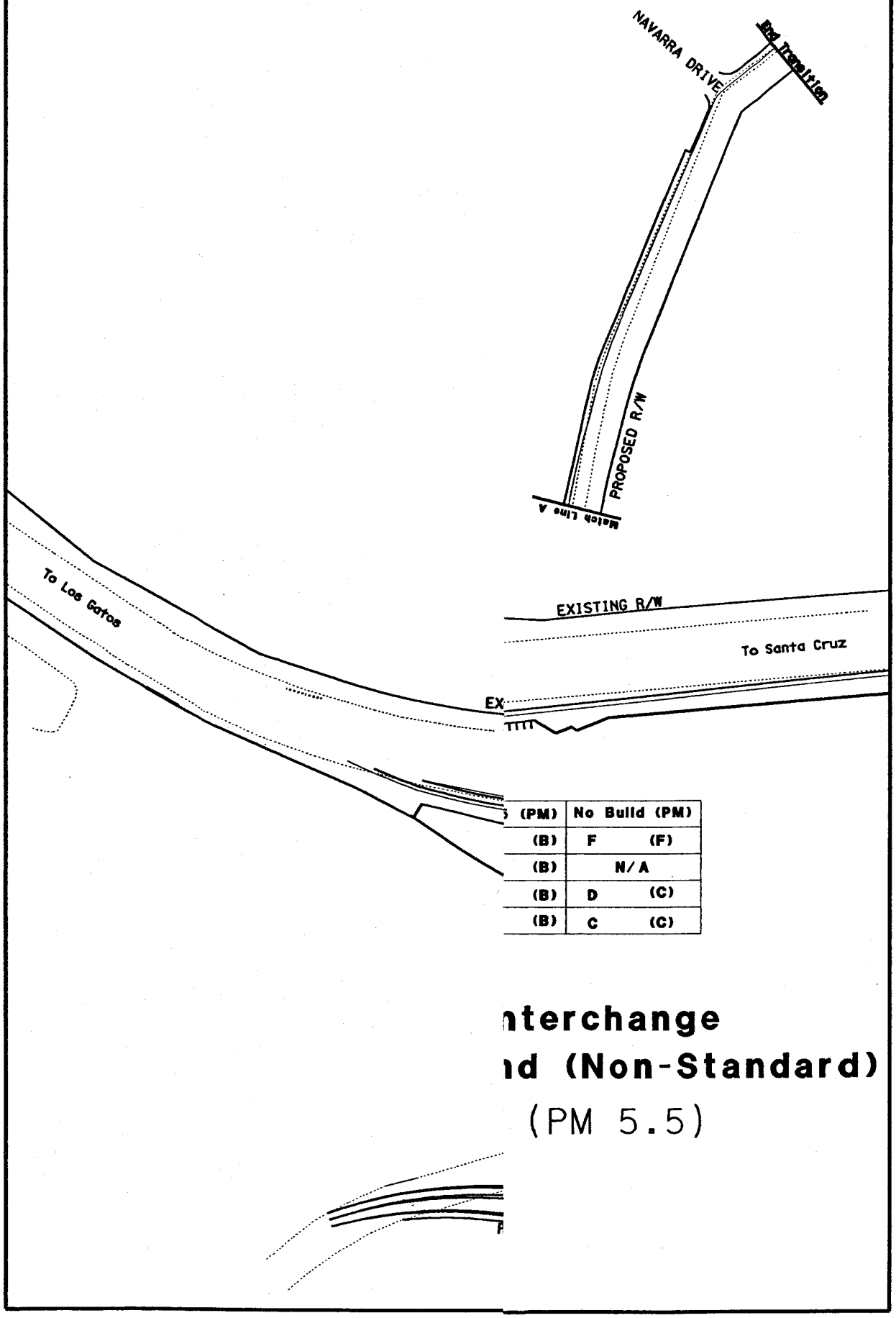
| | |
|---|---|
| A. Acquisition, including excess lands, damages to remainder(s) and Goodwill | $38,671,500 |
| B. Mitigation | $485,100 |
| C Utility Relocation (State share) | $775,950 |
| D RAP | $10,665,900 |
| E. Title & Escrow | $1,934,100 |

TOTAL RIGHT OF WAY ITEMS $52,532,550
(Escalated Value 2012)

Anticipated Date of Right of Way Certification 2012
(Date to which values are escalated)

All alternatives have been escalated to 2012. The right of way data sheet was only escalated to 2011. The three page estimate and the cost given in each alternative reflect the current schedule of 2012. Included in the Right of Way estimate is the acquisition of 62 parcels containing Family Residence, apartment complexes and some business's. Also included in the cost are the contingencies for Relocation Assistance Program, Damages, Goodwill, Demolition, Construction Contract Work & Fees.

# Attachment D




| | (PM) | No Build (PM) | |
|---|---|---|---|
| | (B) | F | (F) |
| | (B) | N/A | |
| | (B) | D | (C) |
| | (B) | C | (C) |

## nterchange
## nd (Non-Standard)
## (PM 5.5)

# Project Study Report – Project Development Support Cost Estimate

District-County-Route 05-SCr-17

KP(PM) 8.85(5.50)

EA 05-49380K

Program Code 20.10.101.620(HE11)

PROJECT DESCRIPTION:

Limits Granite Creek Road Interchange SCr-17

Proposed Improvement (Scope) Construct a New Interchange

Alternate 2– Compact Diamond Interchange (Non-Standard)

## SUMMARY OF PROJECT COST ESTIMATE

| | |
|---|---|
| TOTAL ROADWAY ITEMS | $ 3.5M-4.5M |
| TOTAL STRUCTURE ITEMS | $ 3.5M-4.5M |
| TOTAL ENVIRONMENTAL MITIGATION ITEMS | $ 0.5M-1M |
| SUBTOTAL CONSTRUCTION COSTS (2003) | $ 7.5M-10M |
| TOTAL RIGHT OF WAY ITEMS (Escalated) | $ 26M-28M |
| TOTAL PROJECT CAPITAL OUTLAY COSTS | $ 33.5M-38M |

I. ROADWAY ITEMS

| | Average Cost per Lane KM | Number of KMs | Total Cost |
|---|---|---|---|
| Total Cost of Lane KMs | $3.5M-4.5M | 1 | $3.5M-4.5M |

Built into the Cost per lane KM is the Earthwork, Retaining Walls, Class 2 Base Asphalt Concrete, AC Removal, Metal Beam Guard Railing, Concrete Barrier, and Electrical work. Also included are contingencies for Drainage Items, Traffic Items and Minor Items along with Mobilization. (A more detailed estimate is in the project files.)

II. STRUCTURES ITEMS

| | Structure (1) | Structure (2) | Structure (3) |
|---|---|---|---|
| Granite Creek Interchange | 1400 m2 | 295 $m^2$ | |
| Total Cost for Structure | $3M-4M | 750,000 | |

TOTAL STRUCTURES ITEMS $3.5M-4.5M
(Sum of Total Cost for Structures)

Included in our structure items is a reinforced concrete box girder bridge, type 25 bridge rail and sidewalk. We assumed a width of 31.2 m and span length of 45 m.

III. ENVIRONMENTAL MITIGATION

| | Quantity | Unit | Unit Price | Item Cost |
|---|---|---|---|---|
| A Phase III Data Recovery | 1 | LS | $750,000 | $750,000 |
| Visual Resources | 1 | LS | $100,000 | $100,000 |
| Hazardous Waste | 1 | LS | $25,000 | $25,000 |
| | | | TOTAL | $875,000 |

The Environmental Mitigation includes the mitigation of several species of trees that would be removed during construction. Several archaeological sites have been found within the project limits and will require extensive mitigation. Also within the project limits is a gas station that may have potential hazardous material.

IV. RIGHT OF WAY ITEMS — ESCALATED VALUE

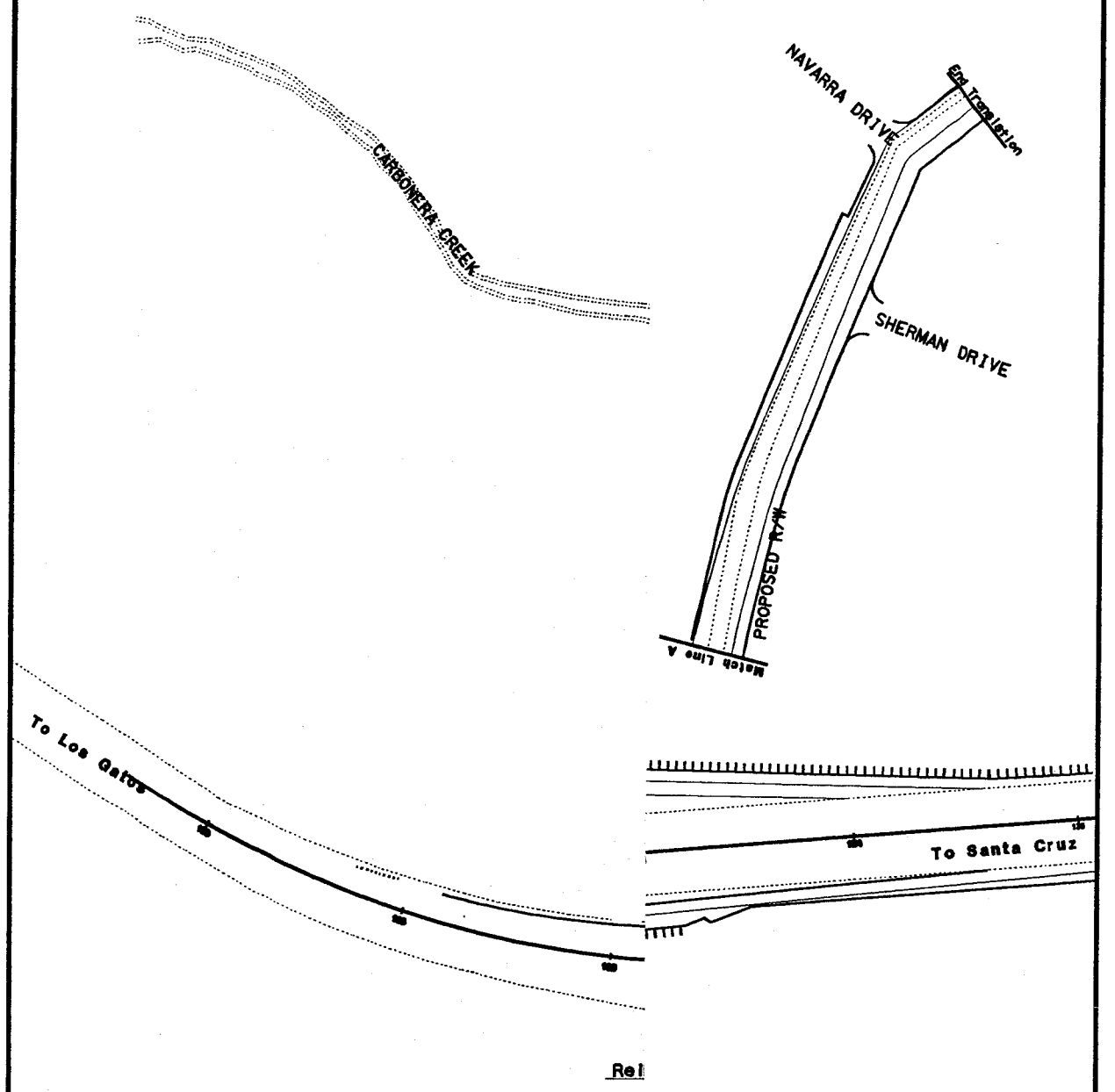
| | |
|---|---|
| A. Acquisition, including excess lands, damages to remainder(s) and Goodwill | $20,975,850 |
| B. Mitigation | $485,100 |
| C Utility Relocation (State share) | $775,950 |
| D RAP | $3,781,050 |
| E Title & Escrow | $1,050,000 |

TOTAL RIGHT OF WAY ITEMS $27,067,950
(Escalated Value 2012)

Anticipated Date of Right of Way Certification 2012
(Date to which values are escalated)

All alternatives have been escalated to 2012. The right of way data sheet was only escalated to 2011. The three page estimate and the cost given in each alternative reflect the current schedule of 2012. Included in the Right of Way estimate is the acquisition of 41 parcels containing Family Residence, apartment complexes and some business's. Also included in the cost are the contingencies for Relocation Assistance Program, Damages, Goodwill, Demolition, Construction Contract Work & Fees.

# Attachment F




## terchange
## f (Non-Standard)
(PM 5.5)

# Project Study Report – Project Development Support Cost Estimate

District-County-Route 05-SCr-17

KP(PM) 8.85(5.50)

EA 05-49380K

Program Code 20.10.101620(HE11)

PROJECT DESCRIPTION:

Limits Granite Creek Road Interchange SCr-17

Proposed Improvement (Scope) Construct a New Interchange

Alternate 3 –Cloverleaf / Compact Diamond (Non-Standard)

## SUMMARY OF PROJECT COST ESTIMATE

| | |
|---|---|
| TOTAL ROADWAY ITEMS | $ 3.5M-4.5M |
| TOTAL STRUCTURE ITEMS | $ 3.5M-4.5M |
| TOTAL ENVIRONMENTAL MITIGATION ITEMS | $ 0.5M-1M |
| SUBTOTAL CONSTRUCTION COSTS (2003) | $ 7.5M-10M |
| TOTAL RIGHT OF WAY ITEMS (Escalated) | $ 50M-53M |
| TOTAL PROJECT CAPITAL OUTLAY COSTS | $ 57.5M-63M |

I. ROADWAY ITEMS

| | Average Cost per Lane KM | Number of KMs | Total Cost |
|---|---|---|---|
| Total Cost of Lane KMs | $3.5M-4.5M | 1 | $3.5M-4.5M |

Built into the Cost per lane KM are the earthwork, class 2 Base Asphalt Concrete, AC removal, Metal Beam guard Railing, Concrete Barrier, and Electrical work. Also included are contingencies for Drainage Items, Traffic Items and Minor Items along with Mobilization. (A more detailed estimate is in the project files.)

II. STRUCTURES ITEMS

| | Structure (1) | Structure (2) | Structure (3) |
|---|---|---|---|
| Granite Creek Interchange | 1400 $m^2$ | 295 $m^2$ | |
| Total Cost for Structure | $3M-4M | $750,000 | |

TOTAL STRUCTURES ITEMS $3.5M-4.5M
(Sum of Total Cost for Structures)

Included in our structure items is a reinforced concrete box girder bridge, type 25 bridge rail and sidewalk. We assumed a width of 31.2 m and span length of 45 m.

III. ENVIRONMENTAL MITIGATION

| | Quantity | Unit | Unit Price | Item Cost |
|---|---|---|---|---|
| A Phase III Data Recovery | 1 | LS | $750,000 | $750,000 |
| Visual Resources | 1 | LS | $100,000 | $100,000 |
| Hazardous Waste | 1 | LS | $25,000 | $25,000 |
| | | | TOTAL | $875,000 |

The Environmental Mitigation includes the mitigation of several species of trees that would be removed during construction. Several archaeological sites have been found within the project limits and will require extensive mitigation. Also within the project limits is a gas station that may have potential hazardous material.

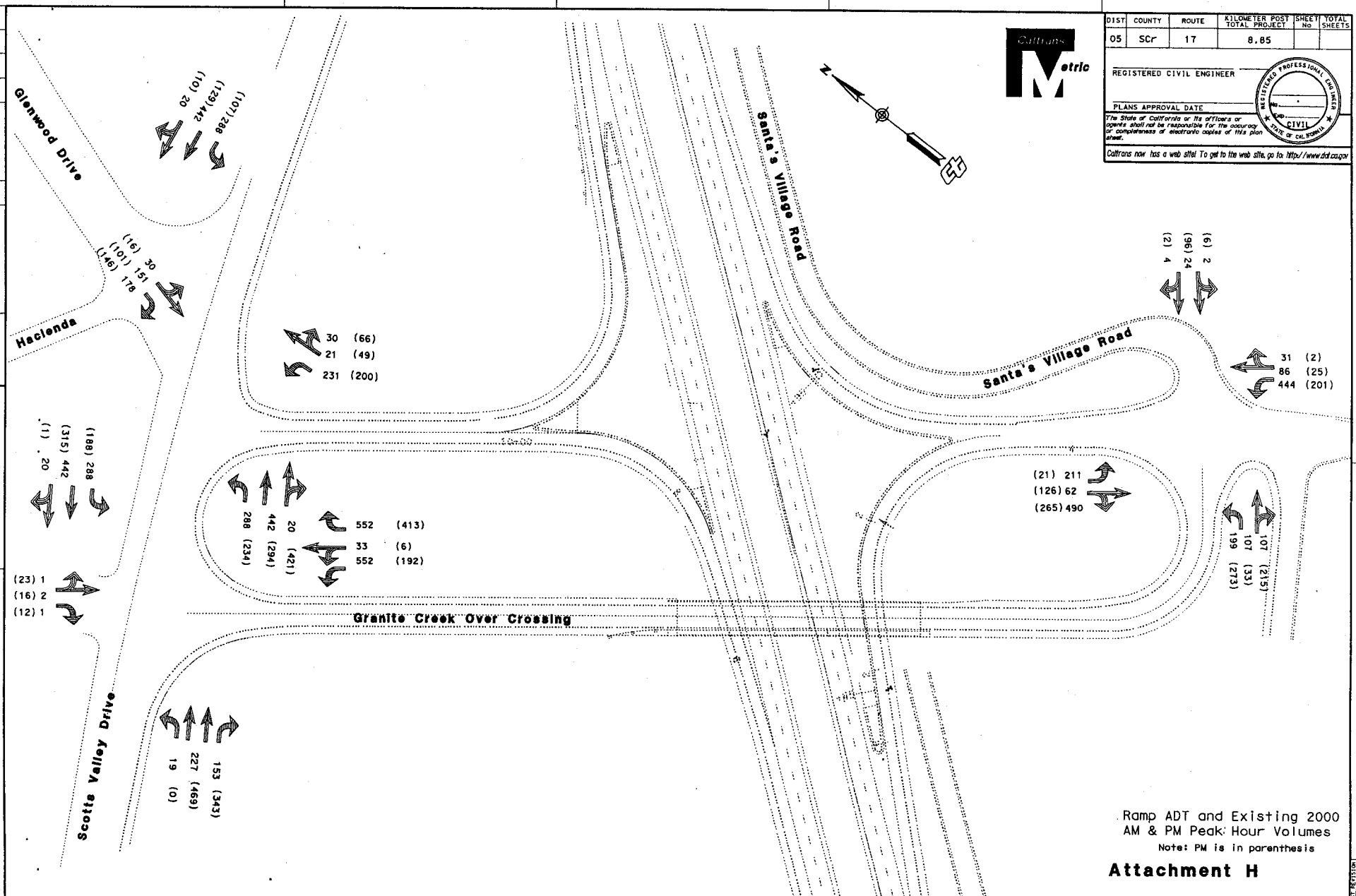
IV. RIGHT OF WAY ITEMS — ESCALATED VALUE

| | |
|---|---|
| A. Acquisition, including excess lands, damages to remainder(s) and Goodwill | $37,352,700 |
| B. Mitigation | $485,100 |
| C. Utility Relocation (State share) | $775,950 |
| D. RAP | $10,665,900 |
| D. Title & Escrow | $1,869,000 |

TOTAL RIGHT OF WAY ITEMS $51,148,650
(Escalated Value 2012)

Anticipated Date of Right of Way Certification 2012
(Date to which values are escalated)

All alternatives have been escalated to 2012. The right of way data sheet was only escalated to 2011. The three page estimate and the cost given in each alternative reflect the current schedule of 2012. Included in the Right of Way estimate is the acquisition of 62 parcels containing Family Residence, apartment complexes and some businesses. Also included in the cost are the contingencies for Relocation Assistance Program, Damages, Goodwill, Demolition, Construction Contract Work & Fees.




| DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 05 | SCr | 17 | 8.85 | | |

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov

REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA

DATE REVISED BY | DATE REVISED

CALCULATED/ DESIGNED BY | CHECKED BY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | PROJECT ENGINEER

Caltrans

Ramp ADT and Existing 2000
AM & PM Peak Hour Volumes
Note: PM is in parenthesis

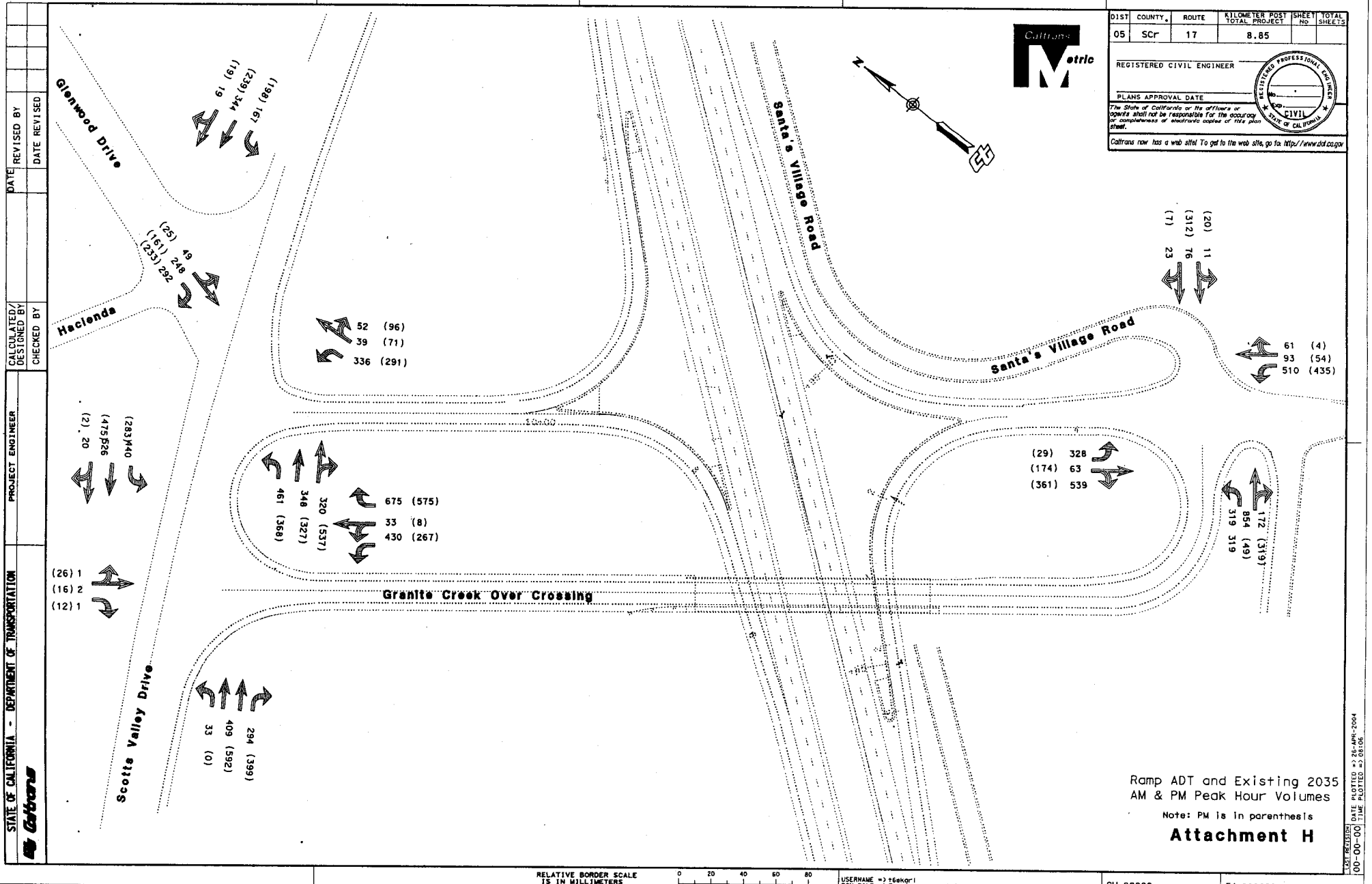
**Attachment H**

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => tsekari
DGN FILE => turningmovementdiggrame.dgn

CU 00000 | EA 000000

LAST REVISION 00-00-00 | DATE PLOTTED => 26-APR-2004 | TIME PLOTTED => 08:05




Ramp ADT and Existing 2035
AM & PM Peak Hour Volumes

Note: PM is in parenthesis

**Attachment H**

Attachment I

State of California Business, Transportation and Housing Agency

**Memorandum**

To: LUIS DUAZO
05-DESIGN II

Attn: SHAHIN MANSOUR
06-221

Date: 3/15/2004

File: EA 49380K ALT 1REV

DESCRIPTION:
PARTIAL CLOVERLEAF STANDARD DESIGN

From: **Department of Transportation**
Division of Right of Way Central Region

Subject: **RIGHT OF WAY DATA SHEET**

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 7/10/2003

The following assumptions and limiting conditions were identified:

Additional information includes the following:

SIGNIFICANT IMPACT TO A LARGE NUMBER OF RESIDENCES INCLUDING MANY AFFORDABLE HOUSING UNITS. EXTENSIVE RAP COSTS DUE TO LACK OF SUITABLE REPLACEMENT HOUSING. UTILITY VERIFICATIONS AND RELOCATIONS WILL REQUIRE 14 MONTHS LEADTIME. SEE ATTACHED UTILITY INFORMATION SHEET FOR DETAILS. UPDATED DATA SHEET TO REFLECT $250,000 MITIGATION AND $5,000 FOR PERMIT FEES.

Right of Way Lead Time will require a minimum of 29 months after we receive certified Appraisal Maps, the necessary environmental clearance has been obtained, and freeway agreements have been approved.

JOHN W. MADDUX, Chief
San Luis Obispo Field Office
(805) 549-3352
Calnet 8-629-3352

REQUEST DATE 7/10/2003 EA 49380K ALT 1REV

REVISED DATE CO/RTE/KP-KP[route 1 ,route 2] SCr/17/8.851-0.000 & /0/0.000-0.000

| RIGHT OF WAY COST ESTIMATE | CURRENT YR 2003 | CONTINGENCY RATE | RIGHT OF WAY ESCALATION RATE | ESCALATED YEAR (Rounded) 2011 |
|---|---|---|---|---|
| ACQUISITION | $24,928,125 | 25.00% | 5.00% | $36,830,000 |
| MITIGATION | $312,500.00 | 25.00% | 5.00% | $462,000 |
| STATE SHARE OF UTILITIES | $500,000 | 25.00% | 5.00% | $739,000 |
| RAP | $6,875,000 | 25.00% | 5.00% | $10,158,000 |
| CLEARANCE/DEMO | $146,250 | 25.00% | 5.00% | $216,000 |
| TITLE AND ESCROW | $1,247,031 | 25.00% | 5.00% | $1,842,000 |
| PROPERTY MANAGEMENT | | | | |
| SUPPORT HOURS | | | | |
| TOTAL CURRENT VALUE * | | | | $50,247,000 |

ESTIMATED CONSTRUCTION CONTRACT WORK $490,000

R/W LEAD TIME/MONTHS 29

| PARCEL DATA | | | |
|---|---|---|---|
| # OF PCL TYPE X | 0 | # OF DUAL APPR X | 0 |
| # OF PCL TYPE A | 48 | # OF DUAL APPR A | 15 |
| # OF PCL TYPE B | 3 | # OF DUAL APPR B | 0 |
| # OF PCL TYPE C | 11 | # OF DUAL APPR C | 11 |
| # OF PCL TYPE D | 0 | # OF DUAL APPR D | 0 |
| # OF MITIGATION | 0 | | |
| TOTALS | 62 | TOTALS | 26 |
| # OF EXCESS PARCELS 1 | | | |

| UTILITIES | |
|---|---|
| U4-1 | 0 |
| U4-2 | 0 |
| U4-3 | 0 |
| U4-4 | 4 |
| U5-7 | 0 |
| U5-8 | 0 |
| U5-9 | 4 |

| RR INVOLVEMENT | |
|---|---|
| ARE RAILROAD FACILITIES OR RIGHTS OF WAY | NO |
| CONST/MAINT AGREEMENT | NO |
| SERVICE CONTRACT | NO |
| RIGHT OF ENTRY | NO |
| CLAUSES | NO |

| MISC R/W WORK | |
|---|---|
| # OF RAP DISPLACEMENT | 41 |
| # OF CLEARANCE/DEMOS | 28 |
| # OF CONST PERMITS | 0 |
| # OF CONDEMNATIONS | 7 |

* IF R/W COST ESTIMATE FIELDS ARE BLANK, TOTAL CURRENT VALUE = $0

ARE UTILITIES OR OTHER RIGHTS OF WAY AFFECTED? UNDETERMINED

RAILROAD LEADTIME REQUIRED 0

PARCEL AREA UNIT: SQ FT

| | |
|---|---|
| TOTAL R/W TAKE | 462000 |
| TOTAL EXCESS AREA | 2915 |
| TOTAL MITIGATION AREA | 0 |

| | |
|---|---|
| TOTAL R/W FEE | $11,850,000 |
| TOTAL EXCESS COST | $87,500 |

PROVIDE GENERAL DESCRIPTION OF R/W AND EXCESS LANDS REQUIRED (ZONING, USE, MAJOR IMPROVEMENTS, CRITICAL OR SENSITIVE PARCELS, ETC.):

Convemtional single family residential, low density multi-family, mobilehome, industrial and neighborhood commercial in a mature neighborhood of Scott's Valley. Project will impact a large number of residences including many affordable housingunits. RAP expense expected to be at the upper end due to lack of suitable replacement housing.

IS THERE A SIGNIFICANT EFFECT ON ASSESSED VALUATION? No

WERE ANY PREVIOUSLY UNIDENTIFIED SITES WITH HAZARDOUS WASTE OR MATERIAL FOUND? No

ARE RAP DISPLACEMENTS REQUIRED Yes

# OF SINGLE FAMILY 32 # OF MULTI FAMILY 9 # OF BUSINESS/NONPROFIT 0 # OF FARMS 0

SUFFICIENT REPLACEMENT HOUSING WILL BE AVAILABLE WITHOUT LAST RESORT HOUSING NO

ARE MATERIAL BORROW OR DISPOSAL SITES REQUIRED?: No

ARE THERE POTENTIAL RELINQUISHMENTS OR ABANDONMENTS? No

ARE THERE ANY EXISTING OR POTENTIAL AIRSPACE SITES? No

ARE ENVIRONMENTAL MITIGATION PARCELS REQUIRED? No

## DATA FOR EVALUATION PROVIDED BY

| | | |
|---|---|---|
| ESTIMATOR REQUIRED | Linda A. Landry | 2/26/2004 |
| RAILROAD LIAISON AGENT | SALLY A. HOPKINS | 7/25/2003 |
| UTILITY RELOCATION COORDINATOR | DAVID LACKMAN | 9/8/2003 |

*I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.*

**JOHN W. MADDUX**
**Field Office Chief, Right of Way**

DATE ENTERED PMCS 2/26/2004

BY LINDA A. LANDRY

Attachment I

# Central Region Environmental Division
# Mitigation Cost Compliance Request Form

☒ Pear ☐ Draft ED ☐ Final ED

Dist.-Co.-Rte.-PM: 05-Santa Cruz-17-PM-5.5 EA: 49380K
Project Name: Granite Creek Interchange
Project Description: Replace Granite Creek Interchange

Environmental Manager: Larry Newland Phone Number: (805) 542-4603
Project Manager: Luis Duazo Phone Number: (805) 542-3407
Date: July 3, 2003

Numbers are in thousands

| | Prior to Construction | During Construction | Post Construction |
|---|---|---|---|
| Archaeological | $750,000 | | |
| Biological | See ROW Data Sheet | | |
| Historical | | | |
| Paleontology | | | |
| Hazardous Waste Remediation | $25,000 | | |
| Visual Resources | $100,000 | | |
| **Total** | $875,000 | | |

***Total Permit Costs: $7500***

- This form is completed as part of the PEAR for all candidate projects, at completion of the Draft Environmental Document, and at the completion of the Final Environmental Document
- This form is to be completed for all SHOPP & STIP projects (even those w/o Mitigation
- This formis to be completed for all Minor A & B projects with mitigation requirements
- Costs are to include all costs to complete the commitment including: capitol outlay (non-staffing support costs); cost of right-of-way or *easements; long-term monitoring and reporting, and; any follow-up maintenance*
- **Attach detailed descriptions of line items included in estimates**

**After approval by the Project Manager, a copy of the completed form is to be sent to the CR Environmental Support Services Branch, and ROW.**
**Attach completed ROW data sheets when forwarded to ROW.**

| PA & ED Date | RTL Date | Months Between | Months Required |
|---|---|---|---|
| 5/1/09 | | | |

## Right of Way Data Sheet Input Information

Environmental Mitigation Parcels: ☒ Required ☐ Not Required ☐ Pending

26.1 Acres $7500 Additional Funding

Before

```
COST 05 49380K RW1      M SCR 017   5.5      1   D     P=F11 N=F12 *CAPITAL PLAN*
EA *49380K  STIP *4938     LSTPGM          TOT PGM              APV COST
PGM *HE11     FP CODE *         04 PGM                 STATE 04 ___,___ 05 ___,___
ELEM *RIP                      LOCKOUT                   FED 04 ___,___ 05 ___,___
PRI 9                         R/W CONTB                CONTB 04          05
RW EA 493809 EST DTE 09/09/03 CAT A  APPR COMP ____ ___,___ TO DO ____ ___,___
        PCLS    DOLLARS  TITLE     ACQ       UTIL      RELOC   DEMO&CLR     PY'S
TOTAL     62     48,589    184    37,292       739     10,158        216   *  .00
PRIOR    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
03-04    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
04-05    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
05-06    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
06-07    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
07-08    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
08-09    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
09-10    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
10-11    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
11-12     62     48,589    184    37,292       739     10,158        216   *  .00
  PA&ED     ENV CLR    RW MAPS     REG RW   DT PS&E    RW CERT    RDY LIST CNST FY
*04/  /08             *02/  /10 *03/  /10 *06/  /12 *08/  /12
   *04/08               *00/00    *00/00    *00/00    *00/00     *00/00
COST REMARKS  INFO PER ALT1 REV D.S.JHA 9/9/03. CERT DATE CHANGED. RSG
```

After

```
COST 05 49380K RW1      M SCR 017   5.5      1   D     P=F11 N=F12 *CAPITAL PLAN*
EA *49380K  STIP *4938     LSTPGM          TOT PGM              APV COST
PGM *HE11     FP CODE *         04 PGM                 STATE 04 ___,___ 05 ___,___
ELEM *RIP                      LOCKOUT                   FED 04 ___,___ 05 ___,___
PRI 9                         R/W CONTB                CONTB 04          05
RW EA 493809 EST DTE 03/16/04 CAT A  APPR COMP ____ ___,___ TO DO ____ ___,___
        PCLS    DOLLARS  TITLE     ACQ       UTIL      RELOC   DEMO&CLR     PY'S
TOTAL     62     50,247    999    38,135       739     10,158        216   *  .00
PRIOR    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
03-04    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
04-05    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
05-06    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
06-07    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
07-08    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
08-09    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
09-10    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
10-11    ____                ___  ___,___  ___,___  ___,___  ___,___      *  .00
11-12     62     50,247    999    38,135       739     10,158        216   *  .00
  PA&ED     ENV CLR    RW MAPS     REG RW   DT PS&E    RW CERT    RDY LIST CNST FY
*04/  /08             *02/  /10 *03/  /10 *06/  /12 *08/  /12
   *04/08               *00/00    *00/00    *00/00    *00/00     *00/00
COST REMARKS  INFO PER ALT1 REV D.S.JHA 9/9/03. CERT DATE CHANGED. RSG
              UPDATE 1REV 03/16/04 LAL
PROJECT DATA HAS BEEN UPDATED
```

**UTILITIES DATA SHEET** EA 49380K ALT 1REV

STATE SHARE OF R/W UTILITY RELOCATION COST $400,000

CONTINGENCY RATE 25.00% STATE SHARE OF UTIL + CONTINGENCY $500,000

UTILITY ESCALATION RATE 5.00% ESCALATED YR: 8

# OF ESCALATED YRS 8 ESCALATED STATE SHARE OF UTIL $739,000

U4-1 0 U4-2 0 U4-3 0 U4-4 4 U5-7 0 U5-8 0 U5-9 4

ARE UTILITIES OR OTHER RIGHTS OF WAY AFFECTED? UNDETERMINED List companies involved

ELECTRIC PG&E GAS PG&E TELEPHONE SBC

CABLE TV CHARTER WATER SCOTTS VALLEY SEWER SCOTTS VALLEY

FIBER OPTICS OTHER

| UTILITY | | UNIT COST | | % STATE LIABILITY * | | TOTAL |
|---|---|---|---|---|---|---|
| | GAS LINE @ | $0.00 | /LF | | = | $0.00 |
| GAS LINE SIZE | | | | | | |
| | UG ELEC | $0.00 | /LF | | | $0.00 |
| | UG TEL | $0.00 | /LF | | | $0.00 |
| | UG CABLE TV | $0.00 | /LF | | | $0.00 |
| | WOOD POLES TELE | $0.00 | /WOOD POLE TELE | | | $0.00 |
| | WOOD POLES ELEC | $0.00 | /WOOD POLE ELEC | | | $0.00 |
| | JOINT POLES | $0.00 | /POLE | | | $0.00 |
| | POLE ANCHORS | $0.00 | /EA | | | $0.00 |
| | STEEL POLES | $0.00 | /STEEL POLE | | | $0.00 |
| | STEEL TOWERS | $0.00 | /TOWER | | | $0.00 |
| | WATER LINE | $0.00 | /FH | | | $0.00 |
| WATER LINE SIZE | | | | | | |
| | SEWER LINE | $0.00 | /LINE | | | $0.00 |
| | TELE JUNCTION BOXES | $0.00 | /LF | | | $0.00 |
| | ELEC VAULTS | $0.00 | /VAULT | | | $0.00 |
| | TELE VAULTS | $0.00 | /EACH | | | $0.00 |

* 1.0 = 100%, .50 = 50%

**TOTAL ESTIMATE OF STATE COST** $0.00

**ADDITIONAL INFORMATION CONCERNING UTILITY INVOLVEMENTS ON THIS PROJECT**

SIMILAR TO PREVIOUS DATA SHEET. VERIFICATION PLANS FROM UTILITY COMPANIES WILL BE REQUIRED TO DETERMINE CONFLICTS. AVOID WATER PUMPING STATION AT NE CORNER OF SCOTTS VALLEY ROAD & GRANITE CREEK ROAD. NEW MASTER AGREEMENT IN EFFECT JANUARY 2004.

ARE VERIFICATION PLANS REQUIRED? YES IF YES, HOW MANY MONTHS? 14

UTILITY RELOCATION COORDINATOR DAVID LACKMAN DATE 9/8/2003

CAS

State of California Business, Transportation and Housing Agency

**Memorandum**

**To:** LUIS DUAZO
05-DESIGN II

**Attn:** SHAHIN MANSOUR
06-221

**Date:** 3/15/2004

**File:** EA 49380K ALT 2REV

**DESCRIPTION:**
COMPACT DIAMOND INTERCHANGE

**From:** **Department of Transportation**
Division of Right of Way Central Region

**Subject:** **RIGHT OF WAY DATA SHEET**

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 7/10/2003

The following assumptions and limiting conditions were identified:

Additional information includes the following:

PARCELS ARE CONVENTIONAL SINGLE FAMILY RESIDENTIAL AND NEIGHBORHOOD COMMERCIAL DISTRICT IN A MATURE DISTRICT OF SCOTTS VALLEY. UTILITY VERIFICATIONS AND RELOCATIONS WILL REQUIRE 14 MONTHS LEADTIME. SEE ATTACHED UTILITY INFORMATION SHEET FOR DETAILS. UPDATED DATA SHEET TO REFLECT $250,000 MITIGATION AND $5,000 FOR PERMIT FEES.

Right of Way Lead Time will require a minimum of 29 months after we receive certified Appraisal Maps, the necessary environmental clearance has been obtained, and freeway agreements have been approved.

JOHN W. MADDUX, Chief
San Luis Obispo Field Office
(805) 549-3352
Calnet 8-629-3352

REQUEST DATE 7/10/2003 EA 49380K ALT 2REV

REVISED DATE CO/RTE/KP-KP[route 1 .route 2] SCr/17/8.851-0.000 & /0/0.000-0.000

| RIGHT OF WAY COST ESTIMATE | CURRENT YR 2003 | CONTINGENCY RATE | RIGHT OF WAY ESCALATION RATE | ESCALATED YEAR (Rounded) 2011 |
|---|---|---|---|---|
| ACQUISITION | $13,521,250 | 25.00% | 5.00% | $19,977,000 |
| MITIGATION | $312,500.00 | 25.00% | 5.00% | $462,000 |
| STATE SHARE OF UTILITIES | $500,000 | 25.00% | 5.00% | $739,000 |
| RAP | $2,437,500 | 25.00% | 5.00% | $3,601,000 |
| CLEARANCE/DEMO | $76,250 | 25.00% | 5.00% | $113,000 |
| TITLE AND ESCROW | $676,688 | 25.00% | 5.00% | $1,000,000 |
| PROPERTY MANAGEMENT | | | | |
| SUPPORT HOURS | | | | |
| TOTAL CURRENT VALUE * | | | | $25,892,000 |

ESTIMATED CONSTRUCTION CONTRACT WORK $30,000

R/W LEAD TIME/MONTHS 29

| PARCEL DATA | | | |
|---|---|---|---|
| # OF PCL TYPE X | 0 | # OF DUAL APPR X | 0 |
| # OF PCL TYPE A | 25 | # OF DUAL APPR A | 17 |
| # OF PCL TYPE B | 2 | # OF DUAL APPR B | 2 |
| # OF PCL TYPE C | 4 | # OF DUAL APPR C | 4 |
| # OF PCL TYPE D | 10 | # OF DUAL APPR D | 2 |
| # OF MITIGATION | 0 | | |
| TOTALS | 41 | TOTALS | 25 |
| # OF EXCESS PARCELS 7 | | | |

| UTILITIES | |
|---|---|
| U4-1 | 0 |
| U4-2 | 0 |
| U4-3 | 0 |
| U4-4 | 4 |
| U5-7 | 0 |
| U5-8 | 0 |
| U5-9 | 4 |

| RR INVOLVEMENT | |
|---|---|
| ARE RAILROAD FACILITIES OR RIGHTS OF WAY | NO |
| CONST/MAINT AGREEMENT | NO |
| SERVICE CONTRACT | NO |
| RIGHT OF ENTRY | NO |
| CLAUSES | NO |

| MISC R/W WORK | |
|---|---|
| # OF RAP DISPLACEMENT | 20 |
| # OF CLEARANCE/DEMOS | 14 |
| # OF CONST PERMITS | 0 |
| # OF CONDEMNATIONS | 5 |

* IF R/W COST ESTIMATE FIELDS ARE BLANK, TOTAL CURRENT VALUE = $0

ARE UTILITIES OR OTHER RIGHTS OF WAY AFFECTED? UNDETERMINED

RAILROAD LEADTIME REQUIRED 0

PARCEL AREA UNIT: SQ FT

| | |
|---|---|
| TOTAL R/W TAKE | 200537 |
| TOTAL EXCESS AREA | 46186 |
| TOTAL MITIGATION AREA | 0 |

| | |
|---|---|
| TOTAL R/W FEE | $5,528,000 |
| TOTAL EXCESS COST | $1,290,000 |

PROVIDE GENERAL DESCRIPTION OF R/W AND EXCESS LANDS REQUIRED (ZONING, USE, MAJOR IMPROVEMENTS, CRITICAL OR SENSITIVE PARCELS, ETC.):

Conventional single family residential and neighborhood commercial district in a mature district of Scott's Valley.

IS THERE A SIGNIFICANT EFFECT ON ASSESSED VALUATION? No

WERE ANY PREVIOUSLY UNIDENTIFIED SITES WITH HAZARDOUS WASTE OR MATERIAL FOUND? No

ARE RAP DISPLACEMENTS REQUIRED Yes

# OF SINGLE FAMILY 14 # OF MULTI FAMILY 4 # OF BUSINESS/NONPROFIT 2 # OF FARMS 0

SUFFICIENT REPLACEMENT HOUSING WILL BE AVAILABLE WITHOUT LAST RESORT HOUSING NO

ARE MATERIAL BORROW OR DISPOSAL SITES REQUIRED?: No

ARE THERE POTENTIAL RELINQUISHMENTS OR ABANDONMENTS? No

ARE THERE ANY EXISTING OR POTENTIAL AIRSPACE SITES? No

ARE ENVIRONMENTAL MITIGATION PARCELS REQUIRED? No

## DATA FOR EVALUATION PROVIDED BY

| | | |
|---|---|---|
| ESTIMATOR REQUIRED | Linda A. Landry | 2/25/2004 |
| RAILROAD LIAISON AGENT | SALLY A. HOPKINS | 7/25/2003 |
| UTILITY RELOCATION COORDINATOR | DAVID LACKMAN | 9/8/2003 |

*I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.*

**JOHN W. MADDUX**
**Field Office Chief, Right of Way**

DATE ENTERED PMCS 2/26/2004
BY LINDA A. LANDRY

Attachment K

State of California Business, Transportation and Housing Agency

**Memorandum**

To: LUIS DUAZO
05-DESIGN II

Attn: SHAHIN MANSOUR
06-221

Date: 3/15/2004

File: EA 49380K ALT 3REV

DESCRIPTION:
PARTIAL CLOVERLEAF L-9 NON-STANDARD DESIGN

From: **Department of Transportation**
Division of Right of Way Central Region

Subject: **RIGHT OF WAY DATA SHEET**

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 7/10/2003

The following assumptions and limiting conditions were identified:

Additional information includes the following:

SIGNIFICANT IMPACT TO A LARGE NUMBER OF RESIDENCES INCLUDING MANY AFFORDABLE HOUSING UNITS. EXTENSIVE RAP COSTS DUE TO LACK OF SUITABLE REPLACEMENT HOUSING. UTILITY VERIFICATIONS AND RELOCATIONS WILL REQUIRE 14 MONTHS LEADTIME. SEE ATTACHED UTILITY INFORMATION SHEET FOR DETAILS. UPDATED DATA SHEET TO REFLECT $250,000 MITIGATION AND $5,000 FOR PERMIT FEES.

Right of Way Lead Time will require a minimum of 29 months after we receive certified Appraisal Maps, the necessary environmental clearance has been obtained, and freeway agreements have been approved.

JOHN W. MADDUX, Chief
San Luis Obispo Field Office
(805) 549-3352
Calnet 8-629-3352

REQUEST DATE 7/10/2003 EA 49380K ALT 3REV

REVISED DATE CO/RTE/KP-KP[route 1 _route 2] SCr/17/8.851-0.000 & /0/0.000-0.000

| RIGHT OF WAY COST ESTIMATE | CURRENT YR 2003 | CONTINGENCY RATE | RIGHT OF WAY ESCALATION RATE | ESCALATED YEAR (Rounded) 2011 |
|---|---|---|---|---|
| ACQUISITION | $24,078,125 | 25.00% | 5.00% | $35,574,000 |
| MITIGATION | $312,500.00 | 25.00% | 5.00% | $462,000 |
| STATE SHARE OF UTILITIES | $500,000 | 25.00% | 5.00% | $739,000 |
| RAP | $6,875,000 | 25.00% | 5.00% | $10,158,000 |
| CLEARANCE/DEMO | $146,250 | 25.00% | 5.00% | $216,000 |
| TITLE AND ESCROW | $1,204,531 | 25.00% | 5.00% | $1,780,000 |
| PROPERTY MANAGEMENT | | | | |
| SUPPORT HOURS | | | | |
| TOTAL CURRENT VALUE * | | | | $48,929,000 |

ESTIMATED CONSTRUCTION CONTRACT WORK $49,000

R/W LEAD TIME/MONTHS 29

| PARCEL DATA | | | |
|---|---|---|---|
| # OF PCL TYPE X | 0 | # OF DUAL APPR X | 0 |
| # OF PCL TYPE A | 48 | # OF DUAL APPR A | 15 |
| # OF PCL TYPE B | 3 | # OF DUAL APPR B | 0 |
| # OF PCL TYPE C | 11 | # OF DUAL APPR C | 11 |
| # OF PCL TYPE D | 0 | # OF DUAL APPR D | 0 |
| # OF MITIGATION | 0 | | |
| TOTALS | 62 | TOTALS | 26 |
| # OF EXCESS PARCELS 1 | | | |

| UTILITIES | |
|---|---|
| U4-1 | 0 |
| U4-2 | 0 |
| U4-3 | 0 |
| U4-4 | 4 |
| U5-7 | 0 |
| U5-8 | 0 |
| U5-9 | 4 |

| RR INVOLVEMENT | |
|---|---|
| ARE RAILROAD FACILITIES OR RIGHTS OF WAY | NO |
| CONST/MAINT AGREEMENT | NO |
| SERVICE CONTRACT | NO |
| RIGHT OF ENTRY | NO |
| CLAUSES | NO |

| MISC R/W WORK | |
|---|---|
| # OF RAP DISPLACEMENT | 41 |
| # OF CLEARANCE/DEMOS | 28 |
| # OF CONST PERMITS | 0 |
| # OF CONDEMNATIONS | 7 |

* IF R/W COST ESTIMATE FIELDS ARE BLANK, TOTAL CURRENT VALUE = $0

ARE UTILITIES OR OTHER RIGHTS OF WAY AFFECTED? UNDETERMINED

RAILROAD LEADTIME REQUIRED 0

PARCEL AREA UNIT: SQ FT

| | |
|---|---|
| TOTAL R/W TAKE | 5717 |
| TOTAL EXCESS AREA | 2915 |
| TOTAL MITIGATION AREA | 0 |

| | |
|---|---|
| TOTAL R/W FEE | $11,500,000 |
| TOTAL EXCESS COST | $87,500 |

PROVIDE GENERAL DESCRIPTION OF R/W AND EXCESS LANDS REQUIRED (ZONING, USE, MAJOR IMPROVEMENTS, CRITICAL OR SENSITIVE PARCELS, ETC.):

Conventional single family residential, low density multi-family, industrial and neighborhood commercial in a mature neighborhood of Scott's Valley. Project will impact a large number of residences including many affordable housing units. RAP expense expected to be at the upper end due to high values typically and lack of suitable replacement housing alternatives.

IS THERE A SIGNIFICANT EFFECT ON ASSESSED VALUATION? No

WERE ANY PREVIOUSLY UNIDENTIFIED SITES WITH HAZARDOUS WASTE OR MATERIAL FOUND? No

ARE RAP DISPLACEMENTS REQUIRED Yes

# OF SINGLE FAMILY 32 # OF MULTI FAMILY 9 # OF BUSINESS/NONPROFIT 0 # OF FARMS 0

SUFFICIENT REPLACEMENT HOUSING WILL BE AVAILABLE WITHOUT LAST RESORT HOUSING NO

ARE MATERIAL BORROW OR DISPOSAL SITES REQUIRED?: No

ARE THERE POTENTIAL RELINQUISHMENTS OR ABANDONMENTS? No

ARE THERE ANY EXISTING OR POTENTIAL AIRSPACE SITES? No

ARE ENVIRONMENTAL MITIGATION PARCELS REQUIRED? No

## DATA FOR EVALUATION PROVIDED BY

| | | |
|---|---|---|
| ESTIMATOR REQUIRED | Linda A. Landry | 2/26/2004 |
| RAILROAD LIAISON AGENT | SALLY A. HOPKINS | 7/25/2003 |
| UTILITY RELOCATION COORDINATOR | DAVID LACKMAN | 9/8/2003 |

*I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.*

**JOHN W. MADDUX**
**Field Office Chief, Right of Way**

DATE ENTERED PMCS 2/26/2004

BY LINDA A. LANDRY

Caltrans Metric

**Preliminary Environmental Analysis Report**

## Project Information

District 05 County Santa Cruz Route 17 Post Mile 5.5 EA 05-49380K

Project Title: Granite Creek Interchange

Project Manager Luis Duazo Phone # (805) 542-4678

Project Engineer Eric Karlson Phone # (559) 230-3127

Environmental Branch Chief Bobi Lyon Phone # (559) 243-8178

Environmental Planner Generalist Steve Croteau Phone # (559) 243-8170

## Project Description

The project proposes to upgrade the interchange located on State Route 17 (PM 8.85) at Granite Creek Road in the City of Scott's Valley in Santa Cruz County. The current interchange at Granite Creek Road consists of a two-lane over-crossing with the freeway ramps located north of the structure. The off-set alignment between the over-crossing and the freeway ramps create multiple intersections and requires motorists to make a series of turning movements through several major intersections when exiting or entering the freeway. The project proposes four alternatives:

1) Alternative 1: Alternative 1 would construct a partial cloverleaf with a new six-lane structure replacing the existing two-lane facility. The alternative would eliminate access from Granite Creek Road to Santa's Village Road. A new local street would be constructed that would connect El Camino Road with Club Drive in order to provide access to Santa's Village Road. This would require a new structure over Cabonero Creek at El Camino Road. The existing bridge over Carbonero Creek would be widened or replaced.
2) Alternative 2: Alternative 2 would be a compact diamond interchange with a new six-lane structure replacing the existing two-lane facility. The existing bridge over Carbonero Creek would be widened or replaced.
3) Alternative 3: Alternative 3 would be a L-7 partial cloverleaf non-standard design. The alternative would provide through access from Granite Creek Road to Santa's Village Road. The existing two-lane structure over Route 17 would be replaced with a new six-lane structure. The existing bridge over Carbonero Creek would be widened or replaced.
4) Alternative 4: No-Build.

**Purpose and Need:** To correct operational deficiencies and relieve traffic congestion.

## Anticipated Environmental Approval

| CEQA | | NEPA | |
|---|---|---|---|
| ❑ | Categorical/Statutory Exemption | ❑ | Categorical Exclusion |
| ❑ | Negative Declaration / focused ND | ❑ | Finding of No Significant Impact |
| ✓ | Environmental Impact Report | ✓ | Environmental Impact Statement |

**PSR Summary Statement**

The expected environmental document for the proposed project is an Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The Federal Highway Administration and the California Department of Transportation would act as lead agencies in the preparation of a joint CEQA/NEPA (California Environmental Quality Act/National Environmental Policy Act) environmental document. The final environmental determination is projected to occur within 56 months from the start of environmental studies. Assuming a start date of October 2004, project approval and the environmental document would be expected by May 2009.

**Special Considerations**

A gas station is located adjacent to/within the proposed project limits. If ROW would be required from the gas station parcel, tests to determine soil contamination would be required. If the soil were found contaminated, cleanup costs could exceed $500,000.

**Anticipated Project Mitigation**

Biology: The project proposes to impact 8.7 acres. If any impacted land would be suitable habitat for sensitive species, mitigation replacement would be required at a ratio of 3:1. Mitigation acreage required could be up to 26.1 acres.

Cultural resources: Phase III data recovery, with an estimated cost of $750,000.

Visual Resources: Replacement planting and structure aesthetic treatments, with an estimated cost of $100,000.

Hazardous Waste: $25,000 for ADL.

**05-49380K: Disclaimer**

This report is not an environmental document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in this report. The estimates and conclusions provided are approximate and are based on cursory analysis of probable effects. This report is to provide a preliminary level of environmental analysis to supplement the Project Study Report. Changes

**Reviewed by:**

Bryan Appler, Chief — Date: 4/26/04
Preliminary Environmental Analysis Branch

Receiving Environmental Branch Chief — Date: 4/26/04

~~Robert Nguyen~~, Project Manager — Date: 5/11/04
Luis Duazo

**Environmental Technical Reports or Studies Required**

| | Study | Document Only | N/A |
|---|---|---|---|
| **Community Impact Study** | ✓ | ☐ | ☐ |
| **Farmland** | ☐ | ☐ | ✓ |
| **Section 4(f) Evaluation** | ☐ | ☐ | ✓ |
| **Visual Resources** | ✓ | ☐ | ☐ |
| **Water Quality** | ✓ | ☐ | ☐ |
| **Floodplain Evaluation** | ✓ | ☐ | ☐ |
| **Noise Study** | ✓ | ☐ | ☐ |
| **Air Quality Study** | ✓ | ☐ | ☐ |
| **Paleontology** | ☐ | ☐ | ✓ |
| **Wild and Scenic River Consistency** | ☐ | ☐ | ✓ |
| **Cumulative Impacts** | ✓ | ☐ | ☐ |
| **Cultural** | | | |
| ASR | ✓ | ☐ | ☐ |
| HSR | ✓ | ☐ | ☐ |
| HASR | ✓ | ☐ | ☐ |
| HRER | ✓ | ☐ | ☐ |
| HPSR | ✓ | ☐ | ☐ |
| Section 106 / SHPO | ✓ | ☐ | ☐ |
| Native American Coordination | ✓ | ☐ | ☐ |
| Finding of Effect | ✓ | ☐ | ☐ |
| Data Recovery Plan | ✓ | ☐ | ☐ |
| **Hazardous Waste** | | | |
| ISA (Additional) | ✓ | ☐ | ☐ |
| PSI | ✓ | ☐ | ☐ |
| Other | | | |
| _____ | ☐ | ☐ | ☐ |
| **Biological** | | | |
| Endangered Species (Federal) | ✓ | ☐ | ☐ |
| Endangered Species (State) | ✓ | ☐ | ☐ |
| Species of Concern (CNPS, USFS, BLM, S, F) | ✓ | ☐ | ☐ |
| Biological Assessment (USFWS, NMFS, State) | ✓ | ☐ | |
| Biological Opinion | ✓ | ☐ | ☐ |
| Wetlands | ✓ | ☐ | ☐ |
| Invasive Species | ✓ | ☐ | ☐ |
| Natural Environment Study | ✓ | ☐ | ☐ |
| NEPA 404 Coordination | ☐ | ☐ | ✓ |
| Other | | | |
| _____ | ☐ | ☐ | ☐ |
| **Permits** | | | |
| 401 Permit Coordination | ✓ | ☐ | ☐ |
| 404 Permit Coordination | ✓ | ☐ | ☐ |
| Nationwide ✓ Individual ☐ | | | |
| 1601 Permit Coordination | ✓ | ☐ | ☐ |
| City/County Coastal Permit Coordination | ✓ | ☐ | ☐ |
| State Coastal Permit Coordination | ☐ | ☐ | ✓ |
| NPDES Coordination | ✓ | ☐ | ☐ |
| US Coast Guard (Section 10) | ☐ | ☐ | ✓ |

**Discussion of Technical Review**

Socio-economic and Community Effects. The project proposes to remove several structures, including private residences. Further, the project proposes to create a new interchange and roads. A Community Impact Study would be required to determined potential impacts to the surrounding community.

Farmlands. Farmland impacts would not be anticipated.

4(f) Impacts. A Section 4(f) evaluation would not be anticipated.

Visual Effects. The project proposes to remove several mature trees and vegetation. A Visual Impact Assessment would be required.

Water Quality and Erosion. Carbonero Creek is located within the project limits, and the project proposes to disturb 8.7 acres of land. A water quality study and the following would be required:

1. A Notification of Construction (NOC) is to be submitted to the appropriate Regional Water Quality Control Board (RWQCB) at least 30 days before construction begins. The Regional Water Quality Control Board for this project is the Central Valley RWQCB in Merced County.

2. A Storm Water Pollution Prevention Plan (SWPP) is to be prepared and implemented during construction to the satisfaction of the resident engineer.

3. A Notice of Construction Completion shall be submitted to the Regional Water Quality Control Board upon completion of the construction and stabilization of the site. A project would be considered complete when the criteria for final stabilization in the Construction General Permit are met.

The design and construction of the proposed project must comply with the requirements set forth in Caltrans National Pollutant Discharge Elimination System (NPDES) permit, the Caltrans Storm Water Management Plan (SWMP), the Caltrans Project Planning and Design Guide, the Construction Site Best Management Practices (BMPs) Manual and Caltrans Standard Specifications. A water quality study would be required.

Floodplain. Floodplain impacts would not be anticipated.

Air and Noise. The proposed project would increase travel capacity and create new roadway alignments. State and Federal laws require that projects of this type conduct air quality and noise impact studies.

Wild and Scenic River. Wild and Scenic River impacts would not be anticipated

Cultural Resources. Fifty-nine surveys have been conducted within one-half mile of the project area. From these surveys, nine sites are located in or adjacent to the project area. Archaeological site CA-SCr-313 has recently been evaluated at the Granite Creek Over-crossing. This site underlies all four lanes of the highway and continues through to Santa's Village Road exit. Phase II archaeological test excavations found this site eligible for the National Register of Historic Places (NRHP). The test excavations also identified other cultural materials throughout the

project area. Due to the nature and previous survey history of this site (CA-SCr-313), Phase III excavations and data recovery would be anticipated.

The following studies and reports would be required: Phase I, Extended Phase I, and Phase II archaeological surveys, an Archaeological Survey Report (ASR), a Historic Study Report (HSR), Historic Architecture Report (HASR) Historic Resource Evaluation Report (HRER), and a Finding of Effect/ Memorandum of Agreement (FOE/MOA). Appropriate Native American consultation would be required during all phases of the project along with any local interest groups.

A Historic Property Survey Report (HPSR) incorporating all findings would be prepared and submitted to Federal Highway Administration (FHWA) and State Historic Preservation Officer (SHPO) for concurrence.

Hazardous Waste/Materials. An Initial Site Assessment (ISA) and Preliminary Site Investigation (PSI) would be required to determine the presence of hazardous materials, including an Aerially Deposited Lead (ADL) study and tests for soil contamination associated with the gas station located within/adjacent to the project limits.

Biological Resources. Several sensitive biological resources have the potential to exist within the project limits, including—but not limited to—steelhead, coho salmon, California red-legged frog, Santa Cruz tarplant, Carbonero Creek, oak trees, redwood trees, Monterey Pines, Monterey Cypress, and eucalyptus trees. Surveys to determine species and critical habitat presence would be required. Section 7 Formal Consultation with the United States Fish and Wildlife Service would be anticipated.

Wetlands. Executive Order 11990 requires avoidance alternative analysis for wetland impacts unless there is "no practicable alternative" available. The project limits have the potential to contain wetlands. A delineation of jurisdictional wetlands and waters of the United States would be anticipated.

Invasive Pest Plant Species. Executive Order 13112 requires that any federal action may not cause or promote the spread or introduction of invasive species.

Paleontology. Paleontology resource impacts would not be anticipated.

Permits. A Department of Fish and Game (1601) permit, U.S. Army Corps of Engineers (nationwide 404) permit, Regional Water Quality Control Board (401), and a NPDES permit would be required. Additional permits for the material site and disposal site may be required.

**Scoping Team**

| | |
|---|---|
| Hazardous Waste Review by Gary Gagliolo | Date 06/04/02 |
| Biological Review by Primavera Parker | Date 07/15/02 |
| Cultural Review by Bill Ray | Date 06/26/02 |
| Community Impact Review David Farris | Date 07/16/02 |
| Floodplain Review by David Farris | Date 07/16/02 |
| Architectural History Review by Lauire Welch | Date 07/18/02 |
| Air Noise and Water by Mohammad Hossain | Date 06/04/02 |
| Paleontology by Peter Hansen | Date 07/10/02 |
| Visual Assessment by Bill Duttera | Date 05/15/02 |

# APPENDIX E

## *Storm Water Data Report*

Caltrans Metric

KP 8.85 (PM 5.50)
Project Type
EA: 49380K
RU:
Program Identification: 20.10.075.600
Phases: ■ PID
❑ PA/ED
❑ PS&E

**Regional Water Quality Control Board(s): Central Coast Region 3**

**Project Manager: Luis Duazo**

Is the Project exempt from incorporating Treatment BMPs? Yes ❑ No ■ N/A ❑
If yes, attach the Exemption Documentation Form

Estimated Construction Start Date: 10/11

Notification of Construction (NOC) Date to be Submitted:_____

Notification of ADL reuse (if yes, provide date) Yes ❑ Date_____ No ❑ N/A ■

Separate Dewatering Permit (if yes, permit no.) Yes ❑ Permit #_____ No ❑ N/A ■

***I have reviewed the storm water quality design issues contained in the Storm Water Data Report and Attachments attached hereto, and find the data to be complete, current, and accurate:***

This Storm Water Data Report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based. PE stamp required at PS&E.

*Registered Project Engineer (Shahin Mansour)* — *Date* 10/15/03

*District/Regional Storm Water Coordinator (Jennifer O'Neal)* — *Date* 10/28/03

*Designated Landscape Representative (Dennis Reeves)* — *Date* 10/27/03

*Designated Maintenance Representative (Jon Wood)* — *Date* 10/28/03

APPROVAL RECOMMENDED:

*Project Manager* — *Date* 11/3/03