

PROJECT INFORMATION FORM

If you have any questions about this application or would like an electronic copy of the funding request packet, please call or email Rachel Moriconi at 831-460-3203 or rmoriconi@sccrtc.org.

A. Project Information

1. Project Title: **Mt. Hermon Road/Scotts Valley Drive/Whispering Pines Drive Intersection Operations Improvement Project**
2. Amount of RSTP Funding Requested: **\$400,000**
3. Implementing Agency: **City of Scotts Valley**
4. Sponsoring Public Agency that has Master Agreement with Caltrans (if different from implementing agency):
5. **This is priority number 2 of 2 projects submitted. (If requesting funds for more than one project)**
6. Project Description/Scope:

The project calls for implementing the following improvements to the intersection of Mt. Hermon Road/Scotts Valley Drive/Whispering Pines Drive. Figures 1- 4 illustrate the project’s location, vicinity, and conceptual plan respectively.

- **Add a second westbound left-turn lane from Mt. Hermon Road to Whispering Pines Drive. This lane is also needed to provide adequate storage for projected queues.**
- **Re-stripe the northbound approach on Whispering Pines Drive to provide separate left-turn, through and right-turn lanes.**
- **Modify the signal to eliminate the split phasing and allow for protected left-turn phasing for the northbound Whispering Drive and southbound Scotts Valley Drive approaches**
- **Modify the signal to provide right-turn overlap phasing for the westbound and northbound right-turn lanes.**
- **Install Bicycle loop detectors and provide new crosswalk striping on all approaches on Mt. Hermon Road and Scotts Valley Drive. Restripe bike lanes.**
- **Install Pedestrian signal faces with countdown indicators on all approaches on Mt. Hermon Road and Scotts Valley Drive.**
- **Re-synchronize traffic signals along Mt. Hermon Road between Glen Canyon Road and Lockwood Lane/SkyPark incorporating modifications and retiming of the traffic signal at Mt. Hermon Road/Scotts Valley Drive intersection.**

7. Project Cost by Mode:

Road Rehab	Road –Auto Serving	Bicycle	Pedestrian	Transit	TDM*	TSM*	Planning	TOTAL
%	70%	10%	10%	*%	%	10%	%	100%

** The Transit buses head for their Scotts Valley's main terminal must travel through this intersection and thus would also directly benefit from implementation of the project, i.e. beneficiary of improvement in the vehicle progression, and reduction in delay.*

8. Project Location/Limits (attach an 8 1/2" x 11" map and/or photos if available/applicable, include street names): **Scotts Valley Drive/Mt. Hermon Road Intersection.**

Mt. Hermon Road is a four-lane, east-west major arterial, with two travel lanes in each direction separated by an intermittent raised median. Mt. Hermon Road extends from SR 17 in the east to Graham Hill Road in the west. Mt. Hermon Road serves as the primary commercial street through Scotts Valley and provides regional access between SR 17 and SR 9 in Felton and Ben Lomond. Scotts Valley Drive is a four-lane, north-south arterial, with two travel lanes in each direction separated by intermittent sections of raised median. This arterial extends from Mt. Hermon Road in the south to its terminus is north, just beyond its intersection with Sawyer Circle.

- a. Project Length (in miles or feet, if applicable): **NA**
- b. For road projects: What is the functional classification of this road, as defined by FHWA? *SEE:*
 OTHER PRINCIPAL ARTERIAL: **Mt. Hermon Road east of intersection**
 MINOR ARTERIAL: **Scotts Valley Drive and Mt. Hermon Road west of intersection**
 MAJOR COLLECTOR: **Whispering Pines Drive**

9. Contact Person/Project Manager Name: **Majid Yamin**
 Telephone Number: **831-438-5854** E-mail: **myamin@scottsvalley.org**

B. Project Delivery Milestones

10. Capital Projects - Schedule:

Project Milestone	Date
Begin Environmental (PA&ED) Phase	03/01/2013
Circulate Draft Environmental Document Categorical Exclusion	06/01/2013
End Environmental Phase (PA&ED Milestone)	07/01/2013
Begin Design (PS&E) Phase	08/01/2013
End Design Phase (complete PS&E)	10/01/2013
Begin Right of Way Phase	NA
End Right of Way Phase (Right of Way Certification Milestone)	NA
Request Authorization to Proceed with Construction (completion of all prior tasks)	11/01/2013
Award Contract	03/01/2014
End Construction Phase (Construction Contract Acceptance Milestone)	05/01/2014
End Closeout Phase (Closeout Report)	06/30/2014

C. Project Cost Summary

11. Capital Projects – Total Cost Estimate:

Environ-mental (PA/ED)	Design (PS&E)	ROW	Construction	Total Project Cost
<u>\$6,000</u>	<u>39,000</u>	<u>NA</u>	<u>401,000</u>	<u>\$446,000</u>

Project Benefits

1. Generally, what are the benefits of this project? (ex. goal/purpose/benefit of project; problem to be addressed; importance to the community):

The proposed project is to improve the operations of the intersection of Mt. Hermon Road/Scotts Valley Drive/Whispering Pines Drive*. The resulting improvements will provide more efficient use of the transportation system by reducing vehicle stops, especially during peak commute hours and decreasing delay time. The improvements in traffic, flow and progression have corresponding reductions in vehicle emissions.

Recommendations for the proposed improvements were developed by a consultant in a traffic study commissioned by the City of Scotts Valley and completed in 2008. The traffic study concluded that the present intersection will not have the capacity for the anticipated growth and development in the city and its region, i.e. the intersection will be operating at level of service* F by the year 2015. Currently the intersection operates at LOS D. Level of service F means the motorists would experience delay of more than 80 seconds, and thus may wait through more than one cycle to clear the intersection. However, with the proposed improvements, the intersection level of service will be improved to level of service B. The resulting improvement means that many vehicles arrive during the green phase, and most do not stop at all.

- * Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. The LOS designation is accompanied by a unit of measure which indicates a level of delay. The study intersections were analyzed using methodologies from the *Highway Capacity Manual 2000*, Transportation Research Board, 2000 (HCM2000). This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

2. How many travelers will be served by/benefit from this project per day?

ADT volumes Mount Hermon Road carries an ADT of 33,000 vehicles per day (VPD). Scotts Valley Drive carries an ADT of 17,000 VPD.

- **Heavily traveled by multi-axle trucks.**
- **Existing transit service to the study area is provided by the Santa Cruz Metropolitan Transportation District (Santa Cruz Metro), with three regular bus lines and one express bus line.**

Scotts Valley Drive is also a principal transit route for Highway 17 express busses. There are currently Class II bike lanes along Mt. Hermon Road and Scotts Valley Drive. Existing transit service to the study area is provided by the Santa Cruz Metropolitan Transportation District (Santa Cruz Metro), with three regular bus lines and one express bus line.

3. What are the destinations served by this project?

The intersection of Mt. Hermon Road/Scotts Valley Drive/Whispering Pines Drive is a major intersection in Scotts Valley.

- **Serves the surrounding residential neighborhoods, as well as those from other regions.**
- **Mt. Hermon Road is a major arterial road providing east-west access from Highway 17 to Highway 9 and San Lorenzo Valley.**

- Major commercial/retail centers along Mt. Hermon Road between Scotts Valley Drive and Lockewood Lane
- Future major office complexes planned for the northeast corner of the Mt. Hermon Road and Scotts Valley Drive intersection.
- Scotts Valley Dr. provides the only north-south access between Mt. Hermon Road and north Scotts Valley/Highway 17.
- Access to the Scotts Valley Transit Center
- Commercial and employment centers, corporate buildings, law enforcement offices, urgent care medical clinics, shopping centers, small businesses, schools, and parks.
- Access to SR 17 in Santa Cruz and/or the South Bay, i.e. San Jose. All of these bus routes stop at the Scotts Valley Park and Ride/Transit Center located at the northeast corner of Kings Village Road/Blue Bonnet Lane.

4. Does this project preserve existing transportation infrastructure/facilities or services? **NA**

5. Does this project increase access or reduce pollution? If so, how?

The improvement in traffic flow and reduction in motorist's stop delays along Scotts Valley's major arterial intersection which is the primary access to the city's major employment centers and commercial districts would result in reduction in air pollution and a lowering of fuel consumption thus, improving air quality.

6. Does this project increase safety?

The improvements proposed in this application are necessary to improve traffic flow and to address safety concerns. Without these improvements, traffic flow, driver frustration, congestion, and potential conflicts between motorists, pedestrians, bicyclists crossing the intersection are projected to worsen. These improvements are considered critical to provide a safe environment for motorists, bicyclists and pedestrians, school children and others in this heavily concentrated area of town.

7. How does the project increase access and safety cost effectively, equitably and responsive to the needs of all users and/or benefit the natural environment? **NA**

8. Has public input been sought on this project? What is the public engagement plan for implementing this project? Is it identified in an adopted plan or other document?

- The City's Planning Commission and the City Council have held numerous public hearings attended by residents as well as government and school officials. Based on the input received through the public meetings and hearings, the City Council commissioned an engineering and environmental study of the need, issues and cost of the proposed improvements. Recommendations for the proposed improvements were developed by a consultant in a traffic study commissioned by the City of Scotts Valley and completed in 2008 and approved by the City Council in 2010.**

EXHIBIT A

Project Budget & Funding Plan

Project Cost by Phase

Revised 12/13/12

Capital Projects: MT. HERMON ROAD/SCOTT'S VALLEY DRIVE INTERSECTION OPERATION IMPROVEMENT

Sources (Specify fund source type - ex. RSTP, STIP, AB2766, Local, TDA, etc)	Source Total	Phase of Work			
		Env'l (PA/ED)	Design (PS&E)	Right-of-Way (ROW)	Construction
STIP	\$400,000	\$5,000	\$35,000	\$0	\$360,000
Local Match: Gas Tax Funds	\$45,880	\$574	\$4,015	\$0	\$41,292
Source 3:	\$0	\$0	\$0	\$0	\$0
Source 4:	\$0	\$0	\$0	\$0	\$0
Source 5:	\$0	\$0	\$0	\$0	\$0
Source 6:	\$0	\$0	\$0	\$0	\$0
Source 7:	\$0	\$0	\$0	\$0	\$0
Total	\$445,880	\$5,574	\$39,015	\$0	\$401,292

Fiscal Year each component to begin	:12/13		:12/13		:13/14	
	Env'l (PA/ED)	Design (PS&E)	Right-of-Way (ROW)	Design (PS&E)	Right-of-Way (ROW)	Construction
			NA			

Pending Funds: Highlight any funds that are yet not secured, describe below status/anticipated receipt date:

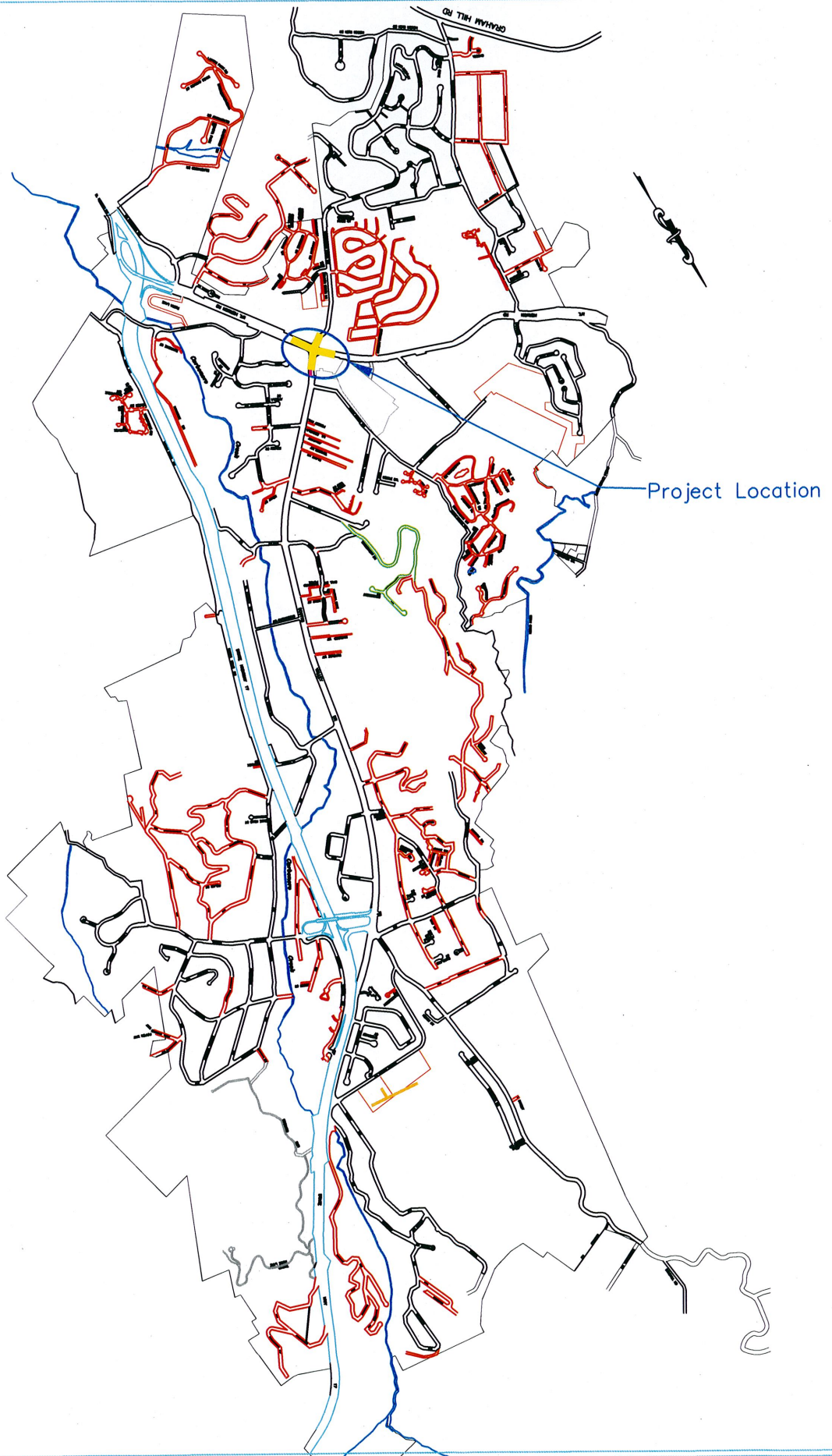
Pending Source 1:

Pending Source 2:

Pending Source 3:

EXHIBIT B
ENGINEER'S PRELIMINARY OPINION OF COST
MT. HERMON ROAD/SCOTTS VALLEY DRIVE INTERSECTION OPERATION IMPROVEMENT
Scotts Valley, California
Revised 12/13/12

Description	Quantity	Unit	Unit Cost	Cost	Total Cost
<u>Pre-Construction Cost</u>					
1 Mobilization (10% of Cost)	1	LS	30000	30,000	
2 Traffic Control (10% of Cost)	1	LS	30000	30,000	
3 Subsurface Exploration (2% of Cost)	1	LS	6000	6,000	
Subtotal				\$	<u>66,000</u>
<u>Demolition Cost</u>					
4 Sawcutting	1130	LF	1.00	1,130	
5 Pavement/Subgrade Demolition (Depth = 1.0')	250	CY	15.00	3,750	
6 Off Haul (Pavement & Subgrade)	250	CY	25.00	6,250	
7 Removal of (e) mast arm pole	1	LS	7,500	7,500	
8 Removal of (e) 1-B pole and equipment	1	LS	7,500	7,500	
Subtotal				\$	<u>26,130</u>
<u>Roadway Construction Cost</u>					
9 Roadway excavation (6,750 S.F.)	250	CY	50.00	12,500	
10 Type "C" Curb	650	LF	25.00	16,250	
11 Type "A" Curb and Gutter	580	LF	35.00	20,300	
12 5' PCC sidewalk	2900	SF	18.00	52,200	
13 8" - Class 2 aggregate base	315	TN	26.00	8,190	
14 5" - Type A asphalt concrete pavement	211	TN	145.00	30,595	
15 Striping, markings, signage	1	LS	18,000	18,000	
Subtotal				\$	<u>158,035</u>
<u>Signalization Cost</u>					
16 Install 26-4-100 pole & hardware	1	LS	\$ 20,000.00	20,000	
17 Install 1-B pole & hardware	1	LS	15,000.00	15,000	
18 stop bar detector loops, hand holes and pull boxes	1	LS	10,000.00	10,000	
19 Modify Conductors	1	LS	5,000.00	5,000	
Subtotal				\$	<u>50,000</u>
Total Construction Cost				\$	<u>300,165</u>
Contingencies @ ±20%				\$	<u>60,000</u>
Total Construction Cost with contingencies				\$	360,165.00

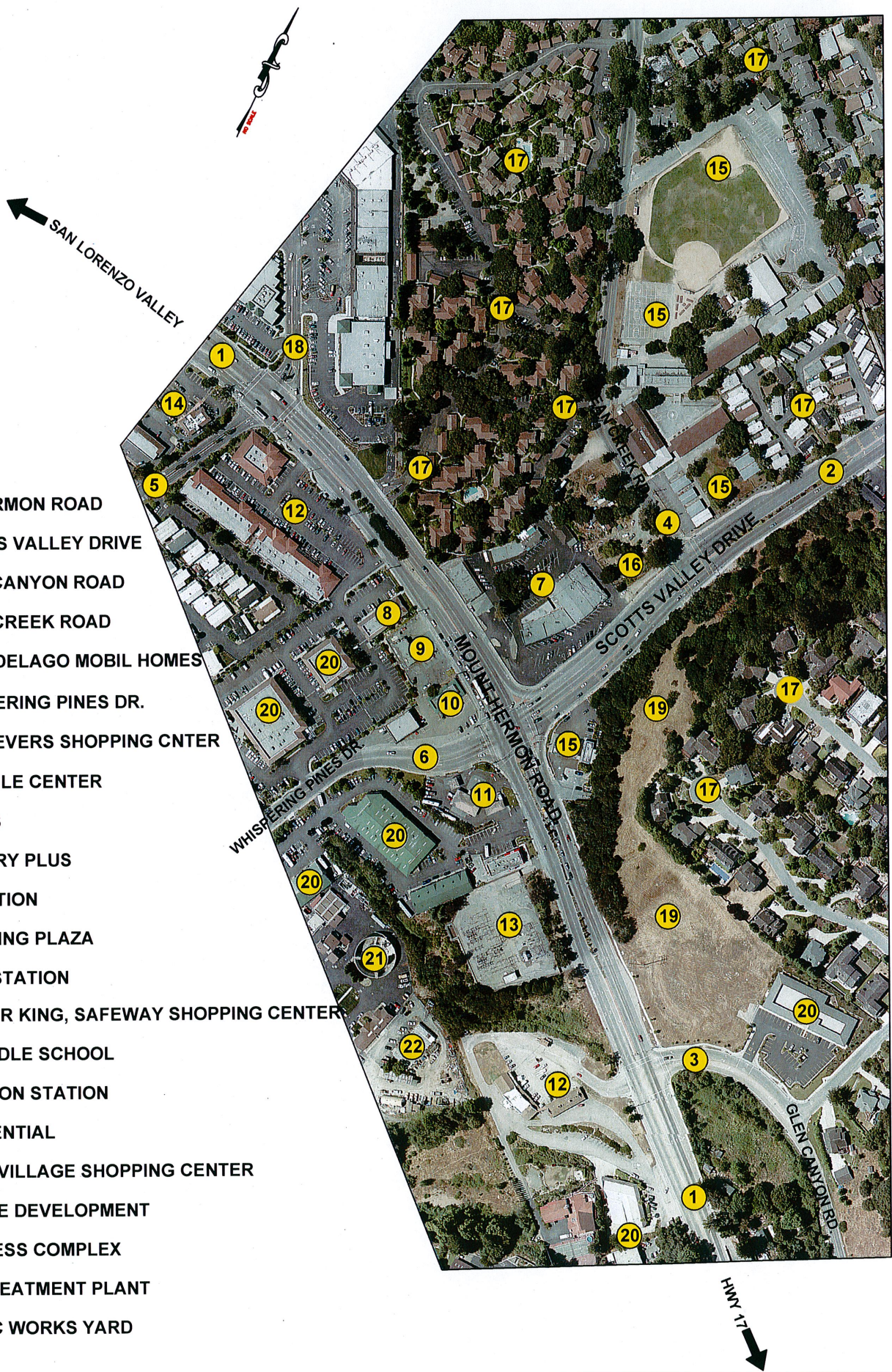


File name:
 LOCATION MAP SV DRIVE AND MT HERMON RD 2012
 Date: Dec 13, 2012

MOUNT HERMON ROAD SCOTTS VALLEY DR.
 INTERSECTION OPERATIONS IMPROVEMENT
LOCATION MAP

CITY OF SCOTTS VALLEY
 ONE CIVIC CENTER DRIVE
 SCOTTS VALLEY, CA 95066
 ENGINEERING / PUBLIC WORKS
 831.438.5854 FAX 831.439.9748

FIGURE
1



- 1 MT HERMON ROAD
- 2 SCOTTS VALLEY DRIVE
- 3 GLEN CANYON ROAD
- 4 BEAN CREEK ROAD
- 5 VISTA DELAGO MOBIL HOMES
- 6 WHISPERING PINES DR.
- 7 CAMP EVERS SHOPPING CNTR
- 8 SV CYCLE CENTER
- 9 SV GAS
- 10 BATTERY PLUS
- 11 76 STATION
- 12 SHOPPING PLAZA
- 13 PG&E STATION
- 14 BURGER KING, SAFEWAY SHOPPING CENTER
- 15 SV MIDDLE SCHOOL
- 16 CHEVRON STATION
- 17 RESIDENTIAL
- 18 KINGS VILLAGE SHOPPING CENTER
- 19 FUTURE DEVELOPMENT
- 20 BUSINESS COMPLEX
- 21 WW TREATMENT PLANT
- 22 PUBLIC WORKS YARD

