



City of Santa Barbara Transportation & Circulation Committee Staff Report

DATE: May 23, 2013
TO: Transportation and Circulation Committee (TCC)
FROM: Brian D'Amour, Supervising Civil Engineer
SUBJECT: Las Positas Road at Cliff Drive Intersection Improvements Project

RECOMMENDATION:

That the Transportation and Circulation Committee (TCC) receive a status report on funding for the Las Positas Road at Cliff Drive Intersection Improvements Project (Project), and provide input to the Council.

BACKGROUND:

Public Works staff reported to the TCC on November 8, 2012, regarding the evaluation of proposed alternatives for the Project. Copies of the staff report and minutes from the meeting are attached. At that meeting, the TCC motioned *'That staff keep the roundabout as preferred alternative for another six months and look for further funding sources, and return to the Committee.'* The TCC made this motion due to a significant funding shortfall for the roundabout alternative. At that time, the only available funding for the project was a \$750,000 State Transportation Improvement Program (STIP) grant for construction only. A funding summary of the roundabout and traffic signal alternatives is presented below:

Alternative	Future Design Phase Costs	Construction Phase Costs	Total Future Project Costs	Less Amount Budgeted	Less STIP Grant	Project Shortfall
Roundabout	\$250,000	\$1,650,000	\$1,900,000	\$39,186	\$750,000	\$1,110,814
Traffic Signal	\$150,000	\$781,250	\$931,250	\$39,186	\$750,000	\$142,064

Due to the significant funding shortfall for the roundabout alternative, the TCC requested that staff pursue additional funding sources in order to fund this alternative. Public Works staff has spent the past six months seeking such funding. This report represents a summary of our findings.

SUMMARY OF ADDITIONAL GRANT FUNDING OPPORTUNITIES:

Public Works staff pursued numerous possible grant funding opportunities in an effort to cover the cost of the identified shortfall for the roundabout alternative. The potential funding sources included local, state, and federal grants as summarized below:

Coastal Resource Enhancement Funds (CREF): The Project could potentially be eligible for CREF funding, as it could be considered to emphasize two of the required categories; coastal tourism or

recreation and coastal quality of life. Staff requested to be added to the mailing list for the next solicitation for CREF funding. There has not been a public solicitation for CREF funding since the 2010 cycle, but a decision will be made on whether or not to do a solicitation for the 2014 cycle sometime this spring/early summer. Due to the uncertainty associated with the overall competitiveness of the Project and the limited amounts made available, this is not considered a feasible funding source.

Environmental Enhancement and Mitigation Program (EEM): After reviewing the eligibility requirements for this funding, staff was unable to identify any Public Works projects that would be eligible.

Highway Safety Improvement Program (HSIP): The collision rates at the Las Positas/Cliff intersection are below the state average. Therefore, this project would not qualify for HSIP funding for capacity improvements at this location. However, the Project would likely qualify for HSIP funding for pedestrian facilities only due to a pedestrian fatality near this location. However, the funds would be limited to pedestrian improvements only, not operational improvements at the Las Positas/Cliff intersection. Of the \$1,650,000 total construction phases costs, only approximately \$200,000 would qualify for HSIP funding as pedestrian improvements. Unfortunately, this still leaves a total project shortfall amount of over \$1.1 million. Therefore, unless other additional funding sources could be identified, there would be still too great a funding gap for the roundabout alternative.

Measure A Regional Bike & Pedestrian Funds: The Project could potentially qualify for Measure A regional funds, but the grant amount would not be enough to cover the shortfall for the roundabout alternative as the funds could only be used for bike and/or pedestrian facilities associated with the Project. Therefore, similar to the HSIP funding, the Measure A funds could be used to narrow the gap, but substantial additional funding would be needed to close the gap.

Transportation Enhancement (TE) funds: Public Works staff have had extensive discussions with SBCAG and Caltrans staff regarding the possibility of TE funds for this project. Initially, there was optimism regarding SBCAG's available TE reserves. SBCAG currently has \$933,000 and \$918,000 programmed for Fiscal Years 15/16 and 16/17, respectively. Unfortunately, after taking this a step further with Caltrans, we learned that unless these funds were obligated for construction before July 1, 2013 they would be rolled into the new Moving Ahead for Progress in the 21st Century (MAP-21) Program. Details of funding opportunities out of MAP-21 are still emerging. However, it is known that any funding for the Project out of this program would be competitive at a minimum for the region and possibly statewide. Based on other needs throughout the City, this Project is unlikely to be a feasible candidate for funding through MAP-21.

SUMMARY:

Public Works staff has performed an extensive search for potential grant funding opportunities for the Project. Unfortunately, none of the potential funding sources provided a strong likelihood for the Project successfully receiving sufficient funds to cover the shortfall needed to complete the roundabout alternative. Therefore, staff will be requesting that Council award a final design contract for the traffic signal alternative.

BD/

ATTACHMENTS:

1. November 8, 2012 Staff Report
2. Minutes from November 8, 2012 TCC Meeting



City of Santa Barbara
Transportation & Circulation Committee
Staff Report

DATE: November 8, 2012
TO: Transportation and Circulation Committee (TCC)
FROM: Brian D'Amour, Supervising Civil Engineer
SUBJECT: Las Positas Road at Cliff Drive Intersection Improvements Project

RECOMMENDATION:

That the Transportation and Circulation Committee (TCC) receive a report on the Las Positas Road at Cliff Drive Intersection Improvements Project (Project) and evaluate the proposed alternatives for consistency with the Circulation Element and General Plan.

EXECUTIVE SUMMARY:

The City has initiated this project to construct intersection improvements at the Las Positas/Cliff Drive intersection in order to improve traffic operations. Three build alternatives have been evaluated: 1) maintain the existing all-way stop control and widen the southbound approach to accommodate a second left-turn lane; 2) installation of a traffic signal; and 3) construction of a roundabout. At this time, the only construction funding available for this project is a \$750,000 State Transportation Improvement Program (STIP) grant.

BACKGROUND:

In August 1999 a draft Annexation Policy Update (APU) Program Environmental Impact Report was prepared for the City to update the General Plan policies regarding future annexations to the City. The overall purpose of the APU is to plan comprehensively for the future development of unincorporated islands of land located in the western portion of the City, specifically land within the Las Positas Valley and Northside areas above upper State Street. The APU included a traffic assessment of the Las Positas Valley area, which included the Las Positas Road/Cliff Drive intersection. The APU found that the intersection was operating deficiently during the PM peak hour and would continue to experience degrading operations with the future build out of the APU study area. To reduce significant impacts related to traffic at the intersection, the APU study proposed mitigation measure T-1, which states the following:

T-1 The City shall propose to the Santa Barbara County Association of Governments (SBCAG) inclusion of the intersection at Las Positas Road/Cliff Drive in the Regional Transportation Plan for future funding of signalization or other alternative intersection design (such as a roundabout).

In response to mitigation T-1 of the APU, the City of Santa Barbara initiated the preparation of a Project Study Report (PSR) for the Las Positas Road/Cliff Drive intersection in 2001, which was subsequently approved by Caltrans in 2002. At the time the PSR was prepared, the Las Positas Road/Cliff Drive

intersection was within the jurisdictional boundary of the County of Santa Barbara (County) and within the SR 225 right of way, but within the sphere of influence of the City. The County was supportive of the Project and was consulted for input during the PSR process. Since that time, the intersection has been annexed to the City.

During the course of preparing the PSR, discussions developed between the City and Caltrans about the relinquishment of SR 225 to the City. Relinquishment of SR 225 to the City would eliminate the need for the project to be reviewed and approved by Caltrans, as the intersection would no longer be within State right of way.

The PSR evaluated two build alternatives – implementation of a traffic signal and implementation of a roundabout. At the time the PSR was prepared, construction of each of the alternatives was estimated by a consultant at approximately \$750,000, and the roundabout was then selected as the preferred alternative. Upon approval of the PSR in 2002, the Santa Barbara County Association of Governments (SBCAG) recommended the project for \$750,000 of STIP funding. Since then, that funding has been reprogrammed several times due to the State's ongoing cash flow deficiencies. The funding is currently programmed in Fiscal Year 2015-2016 for the construction phase only.

PROJECT PURPOSE:

The purpose of this Project is to improve traffic operations and reduce congestion at the Las Positas Road/Cliff Drive intersection during the morning (AM) and evening (PM) peak hours. The existing three-way stop controlled intersection experiences recurrent congestion and queuing, particularly during the PM peak hour. The intersection currently operates at level of service (LOS) F during both the AM and PM peak hours. The City of Santa Barbara's intersection level of service standard is LOS C. Traffic operations at this intersection are projected to continue to degrade through the 2035 design year.

CURRENT STATUS:

In January of 2012, City Council approved a contract with Penfield & Smith (P&S) for preliminary design services for the Project. P&S's scope of work included the preparation of preliminary designs and cost estimates for the two build alternatives – traffic signal and roundabout – which will be utilized during the Environmental phase and as the basis for the Final Design phase. At that time, staff had not yet received direction from Council regarding whether or not to continue to pursue the potential relinquishment of SR 225, so staff proceeded under the assumption that SR 225, and thus the Project intersection, would continue to be a State Highway, which would require Caltrans review and approval of the entire Project process.

In May 2012, after several staff reports and presentations to Council regarding the relinquishment of SR 225 to the City, staff was directed by Council to proceed with the relinquishment. As a result, staff modified the Project's scope of work to reflect the revised assumption that SR 225 would become a City street and that Caltrans review and approval would no longer be required for this Project.

P&S, with support from their sub-consultant Kittelson & Associates, who are experts in roundabout design, have completed preliminary designs and cost estimates for both build alternatives – traffic signal and roundabout. Although it was not included in P&S's scope of work, staff has included a third build alternative for discussion purposes, which consists of maintaining the current all-way stop control at the

Project intersection and would widen southbound Las Positas to accommodate two southbound left-turn lanes.

ALTERNATIVES ANALYSIS:

Following is a discussion of the existing conditions at the Project intersection, as well as a discussion of each of the build alternatives. Attachment 1 includes a matrix that compares the operational, environmental, and fiscal impacts of the different alternatives evaluated.

Existing Conditions

The Project intersection currently operates with all-way stop control, with stop signs and a flashing red beacon. The southbound leg of Las Positas Road consists of one left-turn lane and one right turn lane, which are separated by a landscaped 'pork chop' island. The westbound Cliff Drive leg has two through lanes, one right-turn lane, and a bike lane. The eastbound Cliff Drive approach includes one shared left-through lane, one through lane, and a bike lane. Attachment 2 shows the existing intersection configuration.

As previously discussed, the Project intersection currently operates at LOS F during both the AM and PM peak hours. The overall intersection delay during the AM peak hour is 59.3 seconds, while the overall intersection delay during the PM peak hour is 100.2 seconds. The southbound approach consistently experiences the longest delays and queues at the intersection, particularly during the PM peak hour (194.0 seconds of delay). Although the intersection operates deficiently during the peak hours, the intersection generally operates acceptably during the rest of the day. The crash history at this intersection is consistent with statewide average for this type of intersection and there are no known safety concerns at this time. Attachment 3 includes a summary of existing traffic operations, as well as future condition operations using projected 2035 traffic volumes. Without modifications to the existing intersection geometry, traffic operations at the Project intersection are expected to continue to degrade through the 2035 design year. Furthermore, without intersection improvements, there is a potential for increased crash frequency as the intersection delay increases.

All-Way Stop with Two Southbound Left-Turn Lanes

This alternative would maintain the existing all-way stop control at the intersection, but would widen the southbound Las Positas approach in order to accommodate a second southbound left-turn lane (see Attachment 4). Although implementation of this alternative would result in noticeable improvements to both the overall intersection delay and southbound approach delay during the PM peak hour (overall intersection delay reduced from 100.2 seconds to 30.0 seconds; southbound approach delay reduced from 194.0 seconds to 32.5 seconds), the intersection would continue to operate at LOS D, which would still be deficient under existing conditions based on the City's level of service standard of LOS C. Attachment 5 includes a summary of existing and 2035 traffic operations for this alternative.

This alternative would include new sidewalks with protected pedestrian crossings and would result in minimal aesthetic changes at the intersection. The roadway widening associated with this project would result in a net increase of 700 square feet of impervious surface and this alternative would have the potential of only minor impacts on archaeological resources. If the roadway widening of the southbound Las Positas approach cannot be accommodated on the west side of the road, the roadway may be widened on the west side toward Arroyo Burro Creek. Some modifications to an existing culvert that

crosses Las Positas Road north of the intersection may also be required, but all improvements would be made within the City right of way. From a safety perspective, implementation of this alternative could potentially increase the crash frequency due to the addition of a turning lane, which increases the number of conflict points at the intersection.

The total construction cost of this project is estimated at \$370,000, with a total project cost estimated at \$460,000. Unfortunately, because this alternative would not improve traffic operations above the City's LOS standard, this project would not be eligible for the \$750,000 of STIP funds that are available in FY 15/16. This project could, however, be scaled back to not include the roadway widening or sidewalk installation, in which case the cost would be significantly decreased; however, the operational benefit would also be significantly decreased.

Traffic Signal with Two Southbound Left-Turn Lanes

This alternative would include the installation of a new traffic signal at the Project intersection, as well as widening the southbound Las Positas approach to accommodate two southbound left-turn lanes (see Attachment 6). With the existing traffic volumes, implementation of this alternative would improve the level of service of the overall intersection from LOS F to LOS A during the AM peak hour and from LOS F to LOS B during the PM peak hour. This corresponds to an improvement in the overall intersection delay from 100.2 seconds to 12.2 seconds during the PM peak hour. The delay for the southbound approach during the PM peak hour would be significantly reduced from 194.0 seconds to 15.5 seconds. This alternative is expected to continue to provide acceptable traffic operations through the 2035 design year, with the overall intersection operating at LOS B during the PM peak hour in 2035. Attachment 7 includes a summary of existing and 2035 traffic operations for this alternative.

This alternative would include new sidewalks with protected pedestrian crossings and would add urban elements at the intersection; however, the overall aesthetics and footprint of the intersection would not change significantly. The roadway widening associated with this project would result in a net increase of 700 square feet of impervious surface and this alternative would have the potential of only minor impacts on archaeological resources. If the roadway widening of the southbound Las Positas approach cannot be accommodated on the west side of the road, the roadway may be widened on the west side toward Arroyo Burro Creek. Some modifications to an existing culvert that crosses Las Positas Road north of the intersection may also be required, but all improvements would be made within the City right of way. Implementation of a traffic signal at the Project intersection would have a negligible impact on intersection safety as compared to stop-controlled conditions.

The total construction cost of this project is estimated at \$625,000 with a total project cost estimated at \$780,000. Although the \$625,000 total construction cost of this alternative could be covered by the \$750,000 in available STIP funding, the STIP funding can only be used for the construction phase. This means that the remaining project costs (\$155,000) would require funding by another source that has not been identified at this time.

Roundabout

This alternative would include the construction of a new single-lane roundabout at the Project intersection (see Attachment 8). Similar to the traffic signal alternative, with the existing traffic volumes, implementation of this alternative would improve the overall intersection level of service from LOS F to LOS B during the PM peak hour. This corresponds to an improvement in the overall intersection delay from 100.2 seconds to 10.9 seconds during the PM peak hour. The delay for the southbound approach

during the PM peak hour would be significantly reduced from 194.0 seconds to 12.1 seconds. The roundabout is expected to continue to provide acceptable traffic operations through the 2035 design year, with the overall intersection operating at LOS B during the PM peak hour in 2035. Attachment 9 includes a summary of existing and 2035 traffic operations for this alternative.

This alternative would include new off-street multipurpose pathways, which would provide bicyclists with the option of either travelling through the roundabout or using the off-street paths, depending on rider comfort level. The roundabout would provide uncontrolled pedestrian crossings that would be significantly shorter than the crossings provided by the other alternatives. One of the unique features of the roundabout alternative is the opportunity to include various aesthetic features that could create a 'gateway' to this area of the City. Construction of a roundabout would result in a net decrease of 9,000 square feet of impervious surface and this alternative would have the potential of only minor impacts on archaeological resources. The roundabout alternative may shift the intersection footprint toward Arroyo Burro creek at the northeast corner, but all improvements would be made within the City right of way. Although the Project intersection currently has relatively low accident rates, implementation of a roundabout would reduce the *potential* for severe, high speed, right angle crashes by significantly changing the intersection geometry and reducing speeds.

The total construction cost of this project is estimated at \$1,320,000 with a total project cost estimated at \$1,650,000. Given the \$750,000 in available STIP funding for the construction phase, the remaining project costs (\$900,000) would require funding by another source that has not been identified at this time.

BUDGET/FINANCIAL INFORMATION:

As previously discussed, the City received \$750,000 in STIP funding for the construction phase of this Project based upon the PSR that was approved in 2002. At that time, both alternatives – traffic signal and roundabout – were estimated at approximately the same cost and the roundabout was selected as the preferred alternative.

At this time, the \$750,000 of STIP funding is the only construction funding available for this project. Although the construction cost of installing a traffic signal could be fully covered by the STIP funds, there is still a shortfall for the environmental and final design phases (\$155,000). The total project cost for the roundabout alternative is significantly higher than the available funding, with a total shortfall of \$900,000.

Staff continuously pursues available grant funding for City projects. Currently, the majority of available grant funding for this type of intersection improvement project is dedicated to locations with proven safety issues. Because the Project intersection does not have a history of safety concerns or elevated crash rates, it would not be eligible for grant funds intended for safety improvement projects. To date, staff has been unable to identify any other potential sources of funding for this Project.

SUMMARY:

Improvements are needed at the Project intersection in order to improve traffic operations during the AM and PM peak hours. At the time the PSR was prepared and approved in 2002, the construction cost estimates for the two alternatives – traffic signal and roundabout – were estimated by the consultant as comparable. The roundabout was subsequently selected as the preferred alternative and the project received \$750,000 in STIP funding for the construction phase, which was full

construction funding at that time. Due to the State's ongoing financial issues, the funding has been reprogrammed several times since it was originally programmed. Updated cost estimates reflect a significant funding shortfall for the roundabout alternative, which was previously selected as the preferred alternative. Although the total construction cost for the traffic signal alternative could be covered by funding available, there would be a funding shortfall for the environmental and final design phases. A third alternative of maintaining the existing all-way stop control and widening the southbound approach to accommodate a second left-turn lane is the least expensive alternative; however, because this alternative would not improve traffic operations above the City's minimum standard, it is unlikely that the STIP funding could be used for this alternative.

AS/

ATTACHMENTS:

1. Project Alternative Summary
2. Existing Intersection Configuration
3. Existing Traffic Operations
4. All-Way Stop with Two Southbound Left-Turn Lanes – Preliminary Design
5. All-Way Stop with Two Southbound Left-Turn Lanes – Traffic Operations
6. Traffic Signal with Two Southbound Left-Turn Lanes – Preliminary Design
7. Traffic Signal with Two Southbound Left-Turn Lanes – Traffic Operations
8. Roundabout – Preliminary Design
9. Roundabout – Traffic Operations

**Cliff / Las Positas Intersection Improvements
Project Alternative Summary**

PROJECT ALTERNATIVE	OPERATIONAL				ENVIRONMENTAL						FISCAL				
	PM Peak Hour Delay (seconds)				Bike / Ped	Safety	Aesthetics	Arch.	Creek	Net Impervious Area (S.F.)	Total Const. Cost	Total Project Cost	Available Const. Funding	Const. Funding Shortfall	Total Funding Shortfall
	2012		2035												
	Intersection (Avg.)	SB Las Positas	Intersection (Avg.)	SB Las Positas											
No Project	100.2 LOS F	194.0 LOS F	170.7 LOS F	329.0 LOS F	No Change	Potential increased crash frequency as delay increases	No Change	No Impact	No Impact	No Change	\$ -	\$ -	\$ -	\$ -	\$ -
All Way Stop w/ 2 SB lanes	30.0 LOS D	32.5 LOS D	60.1 LOS F	62.1 LOS D	New Sidewalks Protected Xings	Potential increased crash frequency w/ additional lanes / conflict points	Little Change	Minor Impact Potential	Roadway widening may shift SB approach toward creek (within ROW)	700	\$ 370,000	\$ 460,000	\$ -	\$ (460,000)	\$ (460,000)
Traffic Signal w/ 2 SB lanes	12.2 LOS B	15.5 LOS B	14.6 LOS B	19.0 LOS B	New Sidewalks Protected Xings	Negligible change from stop-controlled scenarios	Urban Elements Added	Minor Impact Potential	Roadway widening may shift SB approach toward creek (within ROW)	700	\$ 625,000	\$ 780,000	\$ 750,000*	\$ 125,000	\$ (155,000)
Roundabout	10.9 LOS B	12.1 LOS B	12.9 LOS B	14.8 LOS B	New Multi-Purpose Path Shorter Uncontrolled Xings	Reduced potential for severe, high speed, right angle crashes	Gateway Opportunities	Minor Impact Potential	Intersection footprint may shift toward creek (within ROW)	-9000	\$ 1,320,000	\$ 1,650,000	\$ 750,000*	\$ (570,000)	\$ (900,000)

* \$750,000 of STIP funds available in FY 15/16 for construction costs only



ATTACHMENT 2	
CLIFF DRIVE AND LAS POSITAS - EXISTING CONDITIONS	
SERVICE REQUEST: N/A	WORK ORDER: N/A
SHEET: 1 OF 1	DATE: 10/31/2012
SCALE: 1"=40'	DRAWN BY: DVB

Las Positas Rd/Cliff Dr Intersection
Scenario 1 - Existing Traffic Control and Geometry

Existing Conditions

Approach	AM				PM			
	LOS	V/C	Delay	Queues	LOS	V/C	Delay	Queues
Eastbound Cliff Dr	B	N/A	13.1	-	B	N/A	14.9	-
Westbound Cliff Dr	E	N/A	49.8	-	D	N/A	27.8	-
Southbound Las Positas Rd	F	N/A	88.0	-	F	N/A	194.0	-
Total	F	N/A	59.3	-	F	N/A	100.2	-

Year 2035 Conditions

Approach	AM				PM			
	LOS	V/C	Delay	Queues	LOS	V/C	Delay	Queues
Eastbound Cliff Dr	B	N/A	14.2	-	C	N/A	17.5	-
Westbound Cliff Dr	F	N/A	102.6	-	F	N/A	52.6	-
Southbound Las Positas Rd	F	N/A	169.1	-	F	N/A	329.8	-
Total	F	N/A	115.2	-	F	N/A	170.7	-

Delay is average delay per vehicle in seconds.
Queues are 95th Percentile queue lengths.

Las Positas Rd/Cliff Dr Intersection

Scenario 2 - Existing Traffic Control and Southbound Left-Turn Lane/Shared Left-Right Turn Lane

Existing Conditions

Approach	AM				PM			
	LOS	V/C	Delay	Queues	LOS	V/C	Delay	Queues
Eastbound Cliff Dr	B	N/A	13.0	-	C	N/A	16.2	-
Westbound Cliff Dr	E	N/A	49.7	-	D	N/A	34.4	-
Southbound Las Positas Rd	C	N/A	20.5	-	D	N/A	32.5	-
Total	D	N/A	32.1	-	D	N/A	30.0	-

Year 2035 Conditions

Approach	AM				PM			
	LOS	V/C	Delay	Queues	LOS	V/C	Delay	Queues
Eastbound Cliff Dr	B	N/A	14.5	-	C	N/A	19.8	-
Westbound Cliff Dr	F	N/A	120.4	-	F	N/A	79.4	-
Southbound Las Positas Rd	D	N/A	28.5	-	F	N/A	62.1	-
Total	F	N/A	66.5	-	F	N/A	60.1	-

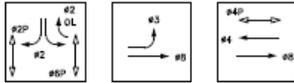
Delay is average delay per vehicle in seconds.

Queues are 95th Percentile queue lengths.

EQUIPMENT SCHEDULE										
LOCATION	STANDARD		LUMINAIRE WATTAGE (PPS)	VEHICLE SIGNAL MOUNTING	PED SIGNAL MOUNTING	PED PUSH BUTTON & ARROW	POLE LOCATION (COLUMNS PER PLAN E-15)		SIGN (MAST ARM MOUNTED)	NOTES
	TYPE	SIGNAL MAST ARM					LUMINAIRE MAST ARM	A		
(A)	17-2-1004	20'	15'	250	MAS SV-1-T	SF-1-T	-	-	S.N.S.(LAS POSITAS RD-SR 2204S)	4
(B)	1-A-7*	-	-	-	-	TV-2-T	2/4	↑	-	-
(C)	TYPE A	-	15'	250	-	-	-	-	-	-
(D)	1-A-7*	-	-	-	-	TP-2-T	4/6	↑	-	-
(E)	19T5*	-	15'	250	SV-2-T	-	-	-	-	4
(F)	24-4-1004	35'	15'	250	SV-2-T	SF-1-T	6	←	S.N.S.(LAS POSITAS RD-SR 220)	4
(G)	1-A-10*	-	-	-	-	TV-2-T	-	-	R73-S(CA)	-
(H)	19T5*	-	15'	250	SV-2-T	SF-1-T	2	←	-	4

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW.

* POLES ARE PER CALTRANS STANDARD PLANS, WITH DECORATIVE BASE, LUMINAIRE, BRACKET AND FINAL PER CITY OF SANTA BARBARA STANDARD DETAIL 3-008.0-06



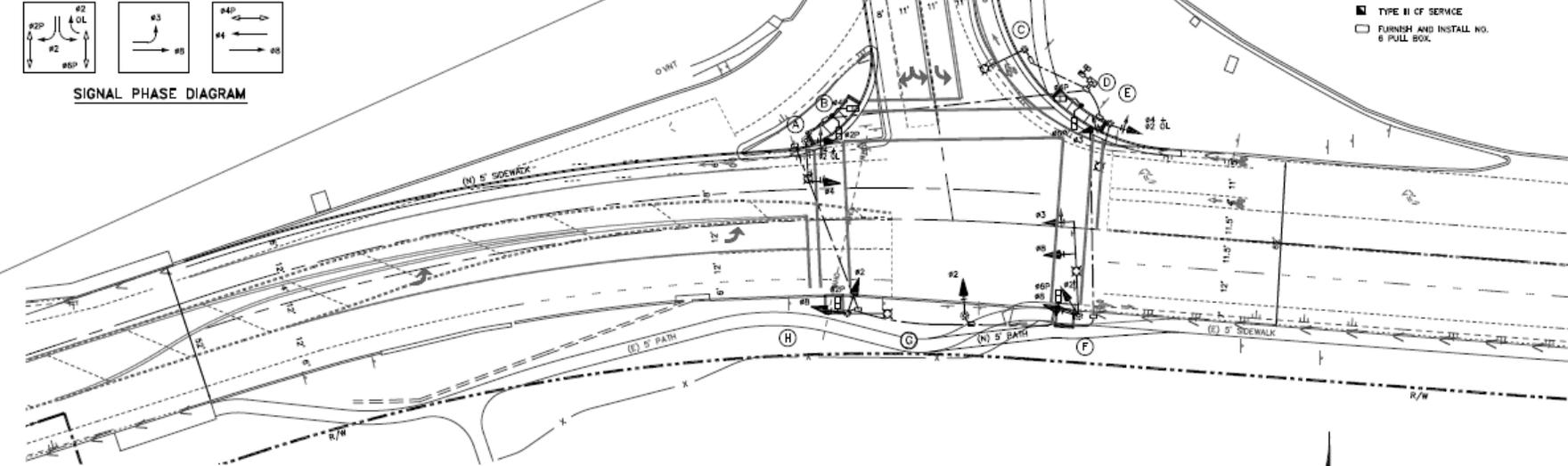
SIGNAL PHASE DIAGRAM

CONDUCTOR SCHEDULE									
CONDUIT RUN	CONDUIT SIZE								
	1"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	4 1/2"	6"
SB 27 CONDUCTOR CABLE WIRING									
#10 LUMINAIRES									
#10 GROUND WIRE									
(4) SERVICE									
#6 SIGNAL POWER									
N-138 CABLE OPTICOM CABLE									
9C									
SW150 CAMERA CABLE ASSEMBLY									
12-STRAND SMFD CABLE									
CONDUIT SIZE									

ALL CONDUCTORS ARE NEW EXCEPT WHERE NOTED.

LEGEND

- 333.P. CONTROLLER CABINET
- TYPE II OF SERVICE
- FURNISH AND INSTALL NO. 6 PULL BOX.

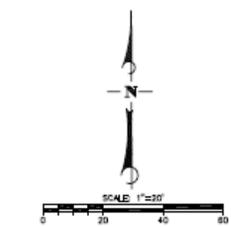


GENERAL NOTES

- EXISTING TRAFFIC SIGNAL TO REMAIN IN OPERATION UNTIL NEW TRAFFIC SIGNAL EQUIPMENT IS INSTALLED IN ORDER TO MINIMIZE TRAFFIC CONTROL DISRUPTION.
- ALL VEHICULAR INDICATORS SHALL BE 12" LED TYPE BY GEL CORE OR APPROVED EQUAL. ALL SIGNAL HEADS AND BRONZE FRAMEWORK TERMINAL HOUSINGS AND FITTINGS SHALL BE POWDER COATED MALAGA GREEN. TUNNEL MOUNTS AND 5-INCH ALUMINUM LOUVERED BACKPLATES SHALL BE POWDER COATED BLACK. ALL PEDESTRIAN SIGNALS SHALL BE INSTALLED WITH BRONZE FRAMEWORK.
- ALL PEDESTRIAN INDICATORS BE COUNTDOWN LED TYPE BY GE GELCORE OR APPROVED EQUAL.
- ALL TRAFFIC SIGNAL WORK SHALL CONFORM TO CALTRANS 2010 STANDARD PLANS AND SPECIFICATIONS.
- THE FINAL LOCATION OF ALL TRAFFIC SIGNAL EQUIPMENT IS TO BE DETERMINED IN THE FIELD BY THE CITY TRAFFIC ENGINEER OR HIS DESIGNEE.
- ALL PULL BOXES SHALL BE NO. 6 PER CALTRANS STANDARD PLAN ES-8.
- INSTALL PULL ROPE AND DUCT SEAL IN ALL NEW EMPTY CONDUITS PER CALTRANS SPECIFICATIONS.

SIGNAL CONSTRUCTION NOTES

- FURNISH AND INSTALL TYPE III OF SERVICE PEDESTAL EQUIPPED WITH TWO METERS PER S.C.E. REQUIREMENTS. CONSTRUCT PEDESTAL FOUNDATION PER REVISED STD. PLAN ES-27. INSTALL CONDUIT FROM SERVICE PEDESTAL TO SERVICE POINT PER SPECIFICATIONS. COORDINATE WORK WITH SOUTHERN CALIFORNIA Edison.
- FURNISH AND INSTALL NEW 333.P. CABINET WITH BATTERY BACKUP SYSTEM AND RACK MOUNT SHELVING IN EMPTY SIDE OF CABINET, POWDER COATED (MALAGA GREEN). CONSTRUCT CONTROLLER CABINET FOUNDATION PER CALTRANS STANDARD PLAN ES-30. POUR P.C.C. SLAB BETWEEN CONTROLLER AND SERVICE CABINETS. FURNISH AND INSTALL 1704T5-CF-LD-C CONTROLLER AND CLARY SP12500-8 UPS BATTERY BACKUP SYSTEM WITH 8 0P9-1251, 51 Ah, 172 VOLT BATTERIES, PER PROJECT SPECIFICATIONS.
- INSTALL 3" CONDUIT FROM SOUTHERN CALIFORNIA Edison POINT OF SERVICE TO NEW TYPE II OF SERVICE. DEPTH OF CONDUIT SHALL BE 42" MINIMUM.
- POT HOLE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATION PRIOR TO ORDERING EQUIPMENT TO CONFIRM NO UTILITY CONFLICTS.
- REMOVE AND SALVAGE EXISTING POWER POLE AND ATTACHED OVERHEAD WIRE.
- REMOVE AND SALVAGE EXISTING STREET FROWM EXISTING POWER POLE.
- REMOVE AND SALVAGE EXISTING OVERHEAD FLASHING BEACON AND CONDUCTORS.



811
Know what's below,
Call before you dig.

Pearfield & Smith
Engineering Surveying Planning
Construction Management

111 East White Street Santa Barbara, CA 93101
Phone (805) 963-9332 Fax (805) 969-9601

INTERSECTION IMPROVEMENT PROJECT
LAS POSITAS ROAD AND CLIFF DRIVE
TRAFFIC SIGNAL INSTALLATION PLAN

DATE: _____ DESIGN: _____ CHECKED: _____ APPROVED: _____
CITY ENGINEER: _____ DATE: _____
CONSTRUCTION DOCUMENTS

2012-XXXX
REV. NO. _____
XXXX
PROJ. NO. INT. NO. _____
C-1-XXXX
DWG. NO. _____
SHEET 1 OF 1

Las Positas Rd/Cliff Dr Intersection

Scenario 3 - Traffic Signal and Southbound Left-Turn Lane/Shared Left-Right Turn Lane

Existing Conditions

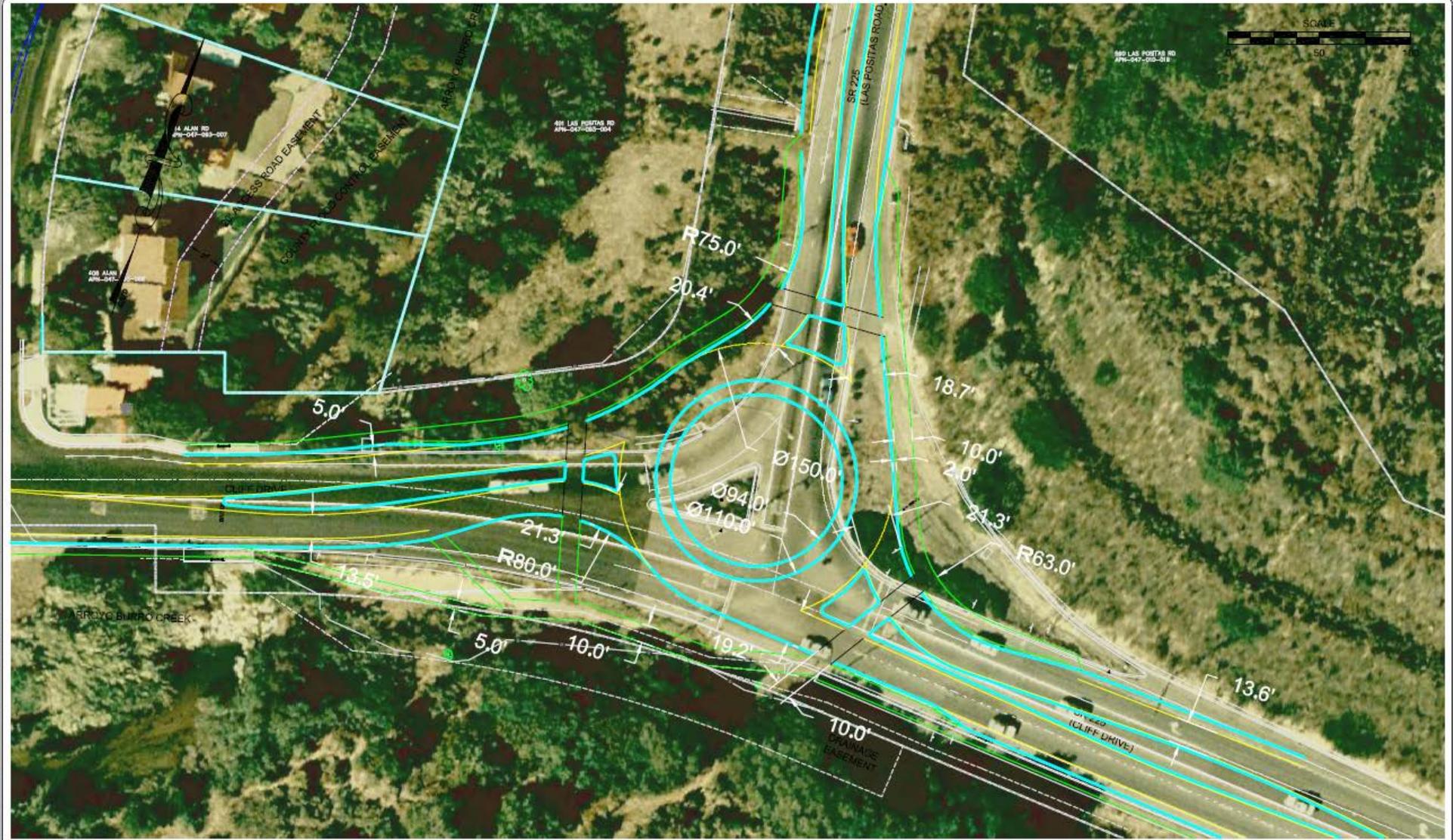
Approach	AM				PM			
	LOS	V/C	Delay	Queues	LOS	V/C	Delay	Queues
Eastbound Cliff Dr	B	0.04	15.9	92	B	0.10	16.0	117
Westbound Cliff Dr	A	0.15	5.0	63	A	0.08	5.8	82
Southbound Las Positas Rd	B	0.18	14.8	158	B	0.22	15.5	214
Total	A	0.47	9.8	-	B	0.50	12.2	-

Year 2035 Conditions

Approach	AM				PM			
	LOS	V/C	Delay	Queues	LOS	V/C	Delay	Queues
Eastbound Cliff Dr	B	0.09	15.9	105	B	0.12	18.0	136
Westbound Cliff Dr	A	0.17	5.0	73	A	0.1	7.1	98
Southbound Las Positas Rd	B	0.21	14.8	197	B	0.26	19.0	313
Total	B	0.57	10.7	-	B	0.58	14.6	-

Delay is average delay per vehicle in seconds.

Queues are 95th Percentile queue lengths in feet.



PRELIMINARY ROUNDABOUT CONCEPT
SR 225 (LAS POSITAS ROAD) AT CLIFF DRIVE
SANTA BARBARA, CA

FIGURE
2

H:\projects\10380 - Las Positas Roundabout Plan Review\design\10380_PlanRev.dwg Oct 22, 2012 - 12:46pm - opened Layout Tab: 11X17_PlanDesign

**Las Positas Rd/Cliff Dr Intersection
Scenario 4 - Single Lane Roundabout**

Existing Conditions

Approach	AM				PM			
	LOS	V/C	Delay	Queues	LOS	V/C	Delay	Queues
Eastbound Cliff Dr	-	-	-	-	B	0.46	11.0	75
Westbound Cliff Dr	-	-	-	-	A	0.54	9.2	100
Southbound Las Positas Rd	-	-	-	-	B	0.67	12.1	150
Total	-	-	-	-	B	-	10.9	-

Year 2035 Conditions

Approach	AM				PM			
	LOS	V/C	Delay	Queues	LOS	V/C	Delay	Queues
Eastbound Cliff Dr	-	-	-	-	B	0.53	13.1	75
Westbound Cliff Dr	-	-	-	-	B	0.60	10.5	100
Southbound Las Positas Rd	-	-	-	-	B	0.74	14.8	175
Total	-	-	-	-	B	-	12.9	-

Delay is average delay per vehicle in seconds.

Queues are 95th Percentile queue lengths in feet.



MEETING MINUTES

CITY OF SANTA BARBARA

TRANSPORTATION AND CIRCULATION COMMITTEE (TCC)

David Gebhard Public Meeting Room
630 Garden Street, Santa Barbara, CA
Thursday, November 8, 2012, 6:00 PM

CALL TO ORDER: Chair Blackerby called the meeting to order at 6:02 PM

ROLL CALL:

TCC MEMBERS

Hillary Blackerby
Mark Bradley
Keith Coffman-Grey
Edward France
Susan Horne
Kathleen Rodriguez
David Tabor

Attendance

Present
Present
Present
Present
Present
Present
Absent

CITY STAFF PRESENT :

Browning Allen, Transportation Manager
John Ewasiuk, Principal Engineer
Ashleigh Shue, Project Engineer
Rob Dayton, Principal Transportation Planner
Sarah Grant, Mobility Coordinator
Jessica Grant, Project Planner
Kim Thaler-Strange, Administrative Specialist

LIAISONS PRESENT

Grant House, Council Liaison

CHANGES TO THE AGENDA: Switched items 6 and 7

PUBLIC COMMENT:

1. No Public Comment.

CONSENT CALENDAR:

2. **Approval of Minutes from the September 27, 2012 meeting where a TCC quorum was present.**

Motion: Approve the Minutes from the September 27, 2012, meeting.

Motion made to approve the minutes by, Mr. Coffman-Grey, seconded by Susan Horne

Ayes: 3 Noes: Abstain: 2 (France, Rodriguez) Absent: 1 (Tabor)

Mr. Bradley came in at 6:04

REPORTS

3. MTD Monthly Report

Mr. Allen reminded the Committee that this was a general standing item. Ms. Blackerby noted the passing of David Damiano, a much respected MTD Employee. Mr. Coffman Grey noted that the decrease in ridership on the Downtown/Waterfront Shuttle between August and September was smaller than in previous months.

4. Eastside Neighborhood Transportation Management Plan

Jessica Grant presented the report for the Eastside Neighborhood Traffic Management Plan (NTMP) as an informational item. She went over the timeline, project objectives, areas of interest and measures for success. Council gave direction for the planning effort of this project at the September 18, 2012 meeting. This project's objective is to address traffic issues and engage the Eastside community regarding pedestrian and safety concern, as well as inform and educate the neighborhoods. Ultimately, short and long-term improvements will be recommended and covered at a later time. On November 14, 2012, Ms. Grant will be going to the Neighborhood Advisory Committee, and hopes to return to the TCC in spring 2013 for a final presentation and TCC Recommendation.

Public Comment

Caitlin Carlson (COAST) – Thanked Jessica for taking the lead on this project. She also urged that COAST would like to see specific projects be made a priority.

TCC Comments and questions

Mr. Allen advised the TCC that this was an informational item and no motion was necessary. He also said that this was the first public presentation about this project. Staff has been working on this since September, and Derrick Bailey is doing parallel work looking at crash history in these neighborhoods for any traffic concerns that can be addressed. Both efforts will be brought to the Committee concurrently.

The Committee overall expressed their pleasure and support for this effort. Mr. Coffman-Grey inquired as to where the funds for this project were going to come from. He was told that various funds, including a reprioritization of Streets Capital, Measure A, Safe Routes to School, and Measure A Pedestrian and Bicycle grants would be utilized. Additionally, staff will be asking for CDBG Funds. Mr. Allen indicated that by the time this effort goes to Council, there would be a better idea of where the funding was going to come from.

Ms. Horne received confirmation that the safety measures already agreed upon were in progress. Mr. Allen informed the Committee that short term solutions will be more in Mr. Bailey's area, and the long-term solutions will be more of a planning effort.

It was suggested to staff that the community outreach process include graphs of vehicle counts and ADTs, locations of stop signs, graphs to indicate speed, and outreach to the Independent Living Resource Center. There was also a request for improvements for the bike lanes throughout the Eastside. Ms. Grant told the Committee that there would be translators available for the various meetings, but staff was still looking into who would be providing such services. She asked for any

recommendations. Mr. Allen indicated that staff would be talking to the experts for the best approach.

5. Pilot On-Street Bicycle Parking Project

Mr. France excused himself from this item.

Sarah Grant, Mobility Coordinator presented the report. This is a pilot project, fully driven by the community. This project will place a bike corral at the corner of Canon Perdido and Santa Barbara Streets. The Bicycle Coalition and eight businesses have written letters of support for this project. At this time, parking for bicycles in this area is inadequate. Cyclists are parking on the sidewalk, which takes up pedestrian space as well as space for outdoor dining. The businesses in this area are on the cross town bicycle route. Staff looked at three locations, (in front of Julienne, Sojourner, and Handlebar Coffee Roasters). The preferred option is in front of Handlebar and an art gallery. This location is furthest from the intersection and has best visibility because of a natural break in sidewalk. The racks that will be used will be more secure.

Concerns include the loss of two 15-minute spaces for businesses that need those spaces for customer pick up and drop off. A proposed compromise is to convert a 75-minute space to a 15-minute space. Staff will work with the businesses these issues. \$3,000 is available to fund this project, and staff will install the racks. This is consistent with goals of the Bicycle Master Plan. Staff is recommending that the TCC support the request for Alternative 2 and review the project in a year.

Public Comment

Business owners from the area were at the meeting to show their support for this project, and are glad to be part of the pilot program. They thanked Sarah for her time, and feel that the positive aspects of this project outweigh the negatives. One property owner came to the meeting to show support and suggested shortening the red zone on Canon Perdido Street because Santa Barbara Street is a one-way street. The only concern he has was that Handlebar is a mid-block business.

TCC Comments

The Committee was supportive of this project. They are pleased that the business community is speaking up, and expressed hope that the HLC sees that bicycles are more historic. They also hoped that the HLC only weighs in on the aesthetics of the project. Mr. Bradley asked how abandoned bicycles would be dealt with. Ms. Grant indicated that the business owners would be encouraged to take initiative and call the Police Department to have them put a notice on the bike before removing it. Mr. Trey Penner told Ms. Horne that the new bike parking would be similar to a bike corral and there shouldn't be a problem with employees parking in front.

Committee members also pointed out that the parking should not look like a corral, especially in the historical district. He also asked about a barrier on the curb or in the alley, as well as expressing concern for the potential for cars to run into bicycles. He was also concerned about the lack of a 15-minute zone. Ms. Grant indicated that Staff would be exploring that, and working with owners to form a consensus. She also said that there would be reflective markers on the street and barriers in the form of wheel stops would be on both sides.

Mr. Allen told the Committee that it was Ms. Grant's last TCC meeting, and acknowledged her work. He also said that this item may not go to HLC in December; its timing is uncertain, and it may not be until after the first of the year. The Committee will be notified when it does go to HLC.

Motion: That the TCC support the request of businesses for on-street bicycle parking, and that it is consistent with the Circulation Element supporting Alternative. 3

Motion made by, Mr. Coffman-Grey, seconded by Mr. Bradley

Ayes: 5 Noes: 0 Abstain: 1 (France) Absent: 1 (Tabor)

6. Las Positas Road at Cliff Drive Intersection Improvement Project

Ashleigh Shue, Project Engineer, presented this report. Derek Rapp from Penfield & Smith, and John Ewasiuk, Principal Engineer were also in attendance to answer questions. This project was initiated by the City to construct intersection improvements at the Las Positas Road/Cliff Drive Intersection. Three alternatives were evaluated: 1) maintain the existing all-way stop and widen the southbound approach to accommodate a second left hand turn lane, 2) install a traffic signal, and 3) construct a roundabout.

The Committee overall expressed concerns about the funding issues. The funds will be available for Fiscal Year 2015/2016; however, the costs involved with this project will go up. Ms Shue indicated that a 20 percent contingency was included to cover any cost increase. It was agreed that the first alternative would not make any improvements to the intersection, and shouldn't be on the table. The question was also raised about when the City would be taking over this intersection, and staff was asked why decisions are being made now. The Committee, along with two members of the public, expressed support for the roundabout option. Committee Member Bradley pointed out that the project is subject to the Safe Streets guidelines. Mr. Coffman-Grey indicated that if the funds can't be found for a roundabout, a traffic signal would be the next viable option to maintain the current LOS. Ms. Blackerby suggested that the project would be pushed out further if the City was unable to find funding; although perhaps some funding could be found based on environmental benefit since there would be a reduction in impervious surface. Ms. Blackerby also inquired as to when the focus could move from the roundabout alternative to the traffic signal. Where is it in the CIP? Ms. Blackerby suggested that staff go after the funding and if we are unable to do the roundabout project, go to the traffic signal option.

Ms. Horne suggested that this project needs to be done sooner rather than later, and that as nice as the roundabout is, it is not worth waiting years. At least a traffic signal would reduce timing. Mr. France noted that there is a difference of \$745,000 between the roundabout option and the traffic signal option. Could that kind of funding be found? Ms. Rodriguez pointed out that the roundabout would be more aesthetically pleasing than a traffic signal, especially given the amount spent on creek restoration.

Ms. Shue indicated that if the project was put on hold there would be cost savings at least in the design phase, since the City would not have to go through Caltrans coordination and review. Staff will also be looking into the Safe Streets Guidelines, and looking for more funding options. Any STIP funds have already been allocated for the HOV/101 Project. Mr. Allen indicated that staff would like to have the final design before going out to bid, in tentatively a year to a year and a half; however, bid prices will increase as the economy gets better. Staff will have to sit down and discuss where the project falls in the CIP, and two possible options. One option is to push the STIP funding out. The delay in funding is due to the state's budget issues; there has not been funding available at the state level.

Mr. Allen told the Committee that if they vote for the roundabout, staff would sit down with SBCAG and discuss available funding. If the money is there, we can explore funding options. If this process will take a several years, staff will let the Committee know that.

Councilmember House indicated that the recommendation of the Committee would help Council move forward and asked the Committee to let them know their preference, money aside. Council is interested in what the Committee wants and why they want it.

Motion: That staff keep the roundabout as preferred alternative for another six months and look for further funding sources, and return to the Committee.

Motion made by Mr. Bradley, seconded by Mr. Coffman-Grey

Ayes: 6 Noes: 0 Abstain: 0 Absent: 1 (Tabor)

7. Review of the proposed 2014-2019 Six-Year Capital Improvement Program

John Ewasiuk presented this report discussing the Capital Improvement Program (CIP). It is a new six-year cycle, and there are 88 projects identified. He reviewed the purpose of the CIP Program, and reminded the Committee that the budget is adopted annually. Input was received from the Neighborhood Improvement Task Force, the Access Advisory Committee, and other Boards and Commissions. The main purpose of the CIP projects is safety and maintenance of the City infrastructure. This will be presented to Council in June, 2013.

The majority of the projects listed were traffic safety and bridge projects. This year's budget is approximately \$3.7 million. This report will go to PC in December, and will come back to the TCC in spring, prior to going to Council.

(Ms. Horne left at 8:30).

TCC Comments:

Ms. Blackerby wondered how many bridges now need repair, and asked about the Bicycle Master Plan and where its priority is; indicating that the Committee would like to see the update of the Plan made a priority. She also noted that somewhere, the Bicycle Master Plan needs to be ranked as a high priority. She also asked how sidewalk infill gets prioritized. Mr. Ewasiuk said that the City was trying to get as many bridges replaced as possible. Many of them are 100 years old. Some funding for these bridges is coming from the FHWA, who is giving the City 88 percent funding for some bridges, leaving the City to come up with 11 percent of the cost. Bridges are anticipated to last for a lifetime. Mr. Allen said that funding for the Bicycle Master Plan is still there. Staff is submitting an application for Measure A funds for other projects, to free up money for other purposes. The decision of when to update the Bicycle Master Plan is Council's. The Eastside plan needs to be completed first. Mr. Allen discussed the process for sidewalk infill – there is a separate prioritization list. The Streets division will perform contract work; they have a list of locations where the sidewalk is uplifted (based on calls from the public and from staff). The worst areas are completed first. Infill is an annual program, adopted as a priority by Council, and is completed as funding is available.

Mr. Bradley noted four out of the top 5 priorities are pedestrian related; two of those are on the Eastside and asked about funding sources. Mr. Allen replied that the downtown sidewalk was funded with RDA funds. Staff is looking at what funds are available and the worst sidewalks will be repaired first. Once the Neighborhood Traffic Management Plan is completed, funds will be

identified for the Bicycle Master Plan. There is a Safe Routes to School grant for Cleveland School; that money will be used on the Eastside this year. Staff is looking for additional funding.

Mr. France asked about the flexibility of budget funding. He pointed out that the LSTP has been steady for the past several years, but was programmed into pavement maintenance. He suggested that the City add their voice to the lobbying mechanism in Sacramento. Staff needs to be proactive and try to make things such as the Gas tax based on the facilities that are being used. Mr. Ewasiuk indicated that the revenue streams (UUT, Gas Tax, Measure A, non-101 corridor Measure A) have stayed the same. This could change if there is an increase in sales tax. Mr. Allen indicated that the only revenue source with that would get an increase is Measure A, and that money goes through SBCAG. Other potential funds for transportation infrastructure include General Fund money; however that is allocated by Council. Staff is not asking for that now. Staff can go to Council and make adjustments, however it is up to them to allocate block grant money, and reprioritize.

Ms. Rodriguez asked about how staff works within the agency. Mr. Ewasiuk said that our department works with Creeks staff and the Creeks Manger. There is a process for working on significant issues.

Mr. Coffman-Grey said that staff did a good job of narrowing the project list down. He hopes that Eastside projects are not jeopardized and that we can leverage the grants. He pointed out that pavement maintenance keeps up moving. There are cities that are in worse shape than Santa Barbara.

Mr. Allen announced that Interviews for TCC are in progress. Mr. Tabor and Mr. Bradley have not reapplied. He thanked them for their service, as did Ms. Blackerby.

Chair Blackerby adjourned the meeting at 9:07 p.m. out of respect for the departing TCC and City staff members, and in memory of David Damiano.