Council Meeting: April 27, 2010

SUBJECT: Consideration of Bordeaux Drive Street Space Allocation Study

BACKGROUND

A segment of Bordeaux Drive from Moffett Park Drive to Java Drive (Attachment A – Location Map) is scheduled for re-paving in April, 2010. This section of the road currently features a single lane in each direction and parking on both sides of the street. Bordeaux Drive is planned for consideration of bike lanes as part of the City's Bicycle Capital Improvement Program. The pending re-paving and associated replacement of roadway striping provides an opportunity for installation of bike lanes. Consistent with the City's street space allocation policies, staff has conducted a technical analysis of options to meet minimum design standards for motor vehicles, bicycles and pedestrians. Staff has also conducted public outreach. Staff is presenting this information to Council in order for Council to consider whether to change the existing accommodations as part of the pending paving project.

DISCUSSION

In 2009, the City of Sunnyvale adopted a Policy on the Allocation of Street Space. The Policy for Allocation of Street Space was initiated by the City's Bicycle and Pedestrian Advisory Commission (BPAC) and approved by the City Council on April 28, 2009 (RTC 09-085). The goal was to provide direction on how to consider all modes of transportation when allocating roadway space, particularly in situations that could require the removal of travel lanes or on-street parking or other roadway reconfigurations because of right-of-way constraints. Consideration of bike lanes was a particular intent of the street space allocation policy.

Bordeaux Drive currently does not feature facilities for bicycles or pedestrians. Providing bike lanes on the segment of Bordeaux Drive in question within the existing curb to curb width would require elimination of some or all on-street parking. There is sufficient right of way behind the existing curb to provide sidewalks, or to widen the road to provide bike lanes and sidewalks. Staff has identified and studied three options for providing bike lanes: 1) One travel lane in each direction, center two way left turn lane, bike lanes, and no on-street parking; 2) One travel lane in each direction, bike lanes, and on-street parking alternated on one side of

the street; and, 3) Roadway widening to accommodate bikes, pedestrians, motor vehicles and parking. All alternatives would meet minimum design standards for motor vehicles and bicycles.

Staff evaluated roadway geometry, parking supply and demand, motor vehicle speeds, and collision history. Possible environmental impacts and budgetary implications were also generally considered. Motor vehicle volume and roadway capacity were not evaluated because no options propose changing motor vehicle capacity. A summary of findings is included as Attachment B. As a result of the evaluation, staff recommends that as part of replacement striping associated with the pending re-paving project, the roadway space be allocated to provide one travel lane in each direction, center two way left turn lane, bike lanes, and no on-street parking. In discussions with the BPAC, BPAC members observed that the offset parking arrangement option creates the potential for several areas of conflict between motor vehicles and bicycles, including the potential for motor vehicles to weave into the bike lane at the beginning of sections of parking, potential for "dooring" of passing bicyclists from drivers of parked vehicles, and, in this case, given the non-existent parking demand, the potential for motor vehicles to stray into the relatively wide unused parking strip. The BPAC also noted that provision of a two way left turn lane will eliminate the potential for motor vehicles to use the bike to pass left turning vehicles. Staff notes that the proposed configuration will slightly narrow travel lanes from their current width and introduce the center turn lane, which will have a positive impact on reducing observed motor vehicle speeding on this roadway segment.

The City has identified funding for industrial area sidewalk construction and is planning to pursue a project at an undetermined future date. Staff recommends that provision of sidewalks on Bordeaux Drive be deferred to a later date due to possible significant effects to landscaping and topography, and to allow for planning and design of a sidewalk construction project that includes a number of other industrial area streets, to take advantage of economies of scale.

Staff is not recommending road widening due to budgetary constraints.

Property owners were surveyed to provide input on proposed reconfiguration alternatives. Fifteen surveys were mailed, with nine returned. Five favored no changes, two favored parking removal and two way left turn installation, one favored parking on alternating sides of the street, and one had no opinion.

Staff also posted an on-line survey on the City's web site. Invitations to take the survey were mailed to 29 community groups, and an email

announcement mailed to 69 community activists. The on-line survey found that of 68 respondents, 82% favored the two way left turn lane installation with bike lanes and no parking; 12 percent favored parking on alternate sides of the street, and 6% favored road widening.

The BPAC considered this item at its April 15 meeting and voted unanimously to support provision of one travel lane in each direction, center two way left turn lane, bike lanes, and no on-street parking for the reasons cited above.

The BPAC did consider one dissenting alternative proposed by a member that would provide a travel lane in each direction, bike lanes, and a shoulder that could be used by pedestrians. The Commission by consensus did not support this option because it would create an unorthodox lane pattern that could cause confusion and conflict amongst users.

EXISTING POLICY

Land Use and Transportation Element C3.5.4 Maximize the provision of bicycle and pedestrian facilities.

Land Use and Transportation Element Street Space Policies:

Appropriate accommodations for motor vehicles, bicycles, and pedestrians shall be determined for City streets to increase the use of bicycles for transportation and to enhance the safety and efficiency of the overall street network for bicyclists, pedestrians, and motor vehicles.

All modes of transportation shall have safe access to City streets. The City should consider enhancing standards for pedestrian facilities.

City streets are public space dedicated to the movement of vehicles, bicycles and pedestrians. Providing safe accommodation for all transportation modes takes priority over non-transport uses. Facilities that meet minimum appropriate safety standards for transport uses shall be considered before non-transport uses are considered.

Parking is the storage of transportation vehicles and shall not be considered a transport use.

Historical precedence for street space dedicated for parking shall be a lesser consideration than providing street space for transportation uses when determining the appropriate future use of street space.

Parking requirements for private development shall apply to off-street parking only.

When decisions on the configuration of roadway space are made, staff shall present options, including at a minimum an option that meets minimum safety-related design standards for motor vehicles, bicycles and pedestrians.

Bike retrofit projects shall be evaluated based on the merits of each project in the context of engineering and planning criteria.

The City Council shall make the final decisions on roadway space reconfiguration when roadway reconfiguration will result in changes to existing accommodations.

Public input on roadway space reconfiguration shall be encouraged and presented independently of technical engineering and planning analyses. If street configurations do not meet minimum design and safety standards for all users, than standardization for all users shall be priority.

Safety considerations of all modes shall take priority over capacity considerations of any one mode.

FISCAL IMPACT

There are sufficient funds in the operating budget to install striping, signs and legends to re-stripe the road within the existing right of way. Funds are not available for roadway widening, and Council would need to give direction to re-program capital funds or direct staff to pursue outside funding opportunities if road widening is a preferred course of action. The Transportation Strategic Program includes funding for sidewalk construction in industrial areas, and sufficient fee revenue has been collected to construct sidewalks on Bordeaux Drive. A specific sidewalk project for Transportation Strategic Program funding has not been programmed in the Resource Allocation Plan, however.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City's Web site.

In addition, two surveys were administered to property owners along the affected stretch of Bordeaux Drive and to community groups and the public in general. Also, the Bicycle and Pedestrian Advisory Commission held a public hearing on a draft Report to Council at its April 15, 2010 meeting.

ALTERNATIVES

1. Direct staff to allocate street space on Bordeaux Drive between Moffett Park Drive and Java Drive in order to provide one travel lane in each direction, center two way left turn lane, bike lanes, no on-street parking

2. Direct staff to allocate street space on Bordeaux Drive between Moffett Park Drive and Java Drive in order to provide one travel lane in each direction, bike lanes, on-street parking on one side of the street in an alternating pattern.

3. Direct staff to make no changes from the existing configuration/defer bike lane construction until the road can be widened to accommodate bicycles, pedestrians, and on-street parking.

RECOMMENDATION

Staff and the Bicycle and Pedestrian Advisory Commission recommend Alternative No. 1: Direct staff to allocate street space on Bordeaux Drive between Moffett Park Drive and Java Drive in order to provide one travel lane in each direction, center two way left turn lane, bike lanes and no on-street parking

Alternative 1 provides bike lanes. The two way left turn lane installation and removal of on-street parking is viewed as the safest accommodation for bicyclists by eliminating left turning, weaving, and parking conflicts. Staff is recommending deferral of accommodations for pedestrians due to insufficient budget resources. Accommodation of pedestrians can occur within the existing right of way as part of a future project, but current budgeted levels for the pending roadway maintenance project are insufficient for sidewalk construction. This section of Bordeaux Drive would be an element of a future planned industrial area sidewalk project to be funded with transportation impact fees.

Reviewed by:

Marvin A. Rose, Director, Public Works
Prepared by: Jack Witthaus, Transportation and Traffic Manager

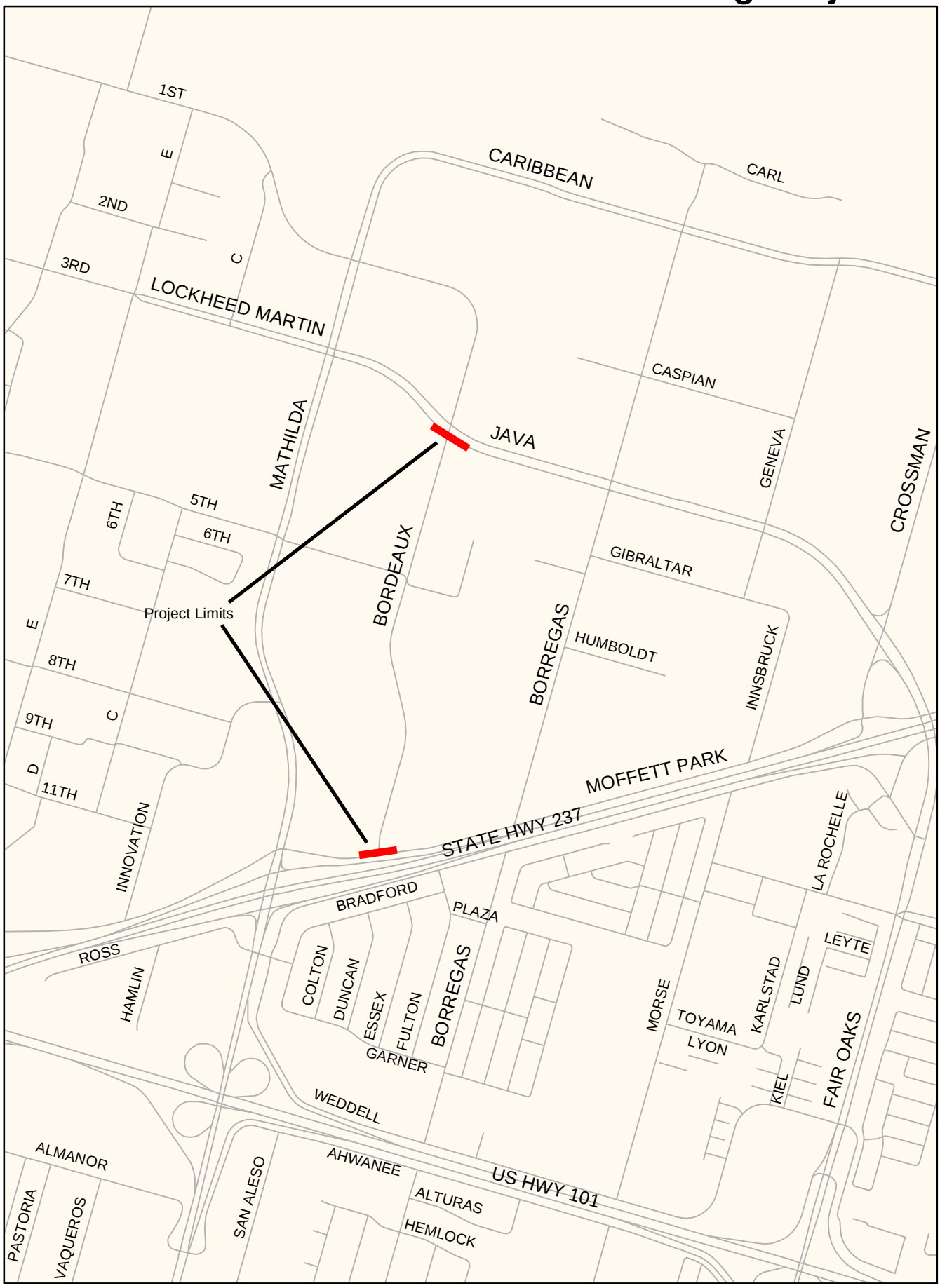
Approved by:

Gary M. Luebbers
City Manager

Attachments

A. Project Location Map
B. Street Space Allocation Study Summary

Attachment A: Bordeaux Drive Paving Project



ATTACHMENT B

Bordeaux Drive Street Space Allocation Study – Moffett Park Drive to Java Drive

DAY/DATE_____3/17.10_____

TIME___9:30 AM_____

WEATHER_____Clear_____

Street Segment	On Street Parking Capacity	On street Parking Demand
NORTHBOUND		
Moffett Park Drive to Java	**123**	0
SOUTHBOUND		
Java to Moffett Park Drive	**123**	0

Estimated Off Street Parking Load

Addresses East Side of Street	Estimated Parking Load	Addresses West Side of Street	Estimated Parking Load
155 A	15%	1335	75%
1160	0%	1231	10%
1178	3%	1225	2%
1180	40%	1215	40%
1188	0%	1195	90%
11990	30%	1185	70%
1212	0%	1183	10%
1230	25%	Cogswell	90%
390	45%	Sheraton	0%

Bordeaux Drive Street Space Allocation Study – Moffett Park Drive to Java Drive

DAY/DATE_____3/22.10_____

TIME___2:30 PM_____

WEATHER_____Clear_____

Street Segment	On Street Parking Capacity	On street Parking Demand
NORTHBOUND		
Moffett Park Drive to Java	**123**	0
SOUTHBOUND		
Java to Moffett Park Drive	**123**	0

Estimated Off Street Parking Load

Addresses East Side of Street	Estimated Parking Load	Addresses West Side of Street	Estimated Parking Load
155 A	15%	1335	90%
1160	0%	1231	15%
1178	20%	1225	5%
1180	0%	1215	90%
1188	0%	1195	98%
1190	10%	1185	90%
1212	0%	1183	90%
1230	0%	Cogswell	90%
390	90%	Sheraton	70%

Operational Feature	Minimum Standard or Criterion	Existing	2 travel lanes, parking one side, bike lanes	2 travel lanes, 2 way left turn lane, bike lanes	Road Widening
Vehicle travel lane width	10’ travel	13’	13’	12’	12’
Parking lane width	8’ parking	8’ parking	8’ parking	none	8’
Two way left turn lane width	10’			10’	
Bike lane width	3’ asphalt, 4’ total		5’	5’	5’
Intersection Through Volume	1050 vph/per direction				
ADT	10,000/lane				
Curb ramps	At intersections	none	defer	defer	yes
Sidewalks	5’	none	none	none	5’
Crash reduction potential	High = high incidence of bike collisions, pedestrian collisions, rear end collisions related to left turns		Low	Low	Low
Crosswalk installation potential	See crosswalk installation criteria	none	candidate	candidate	candidate
Speed compatibility and speed reduction potential	Speed limit < 45 mph, 85th percentile more than 5MPH of posted speed	30 MPH posted speed, 42 MPH 85th percentile	good	moderate	moderate
Potential environmental/other issues			insignificant	insignificant	Significant tree removal,

					utility relocation
Relative Cost/budget			Low cost, funds budgeted	Low cost, funds budgeted	Very high cost, funds not budgeted