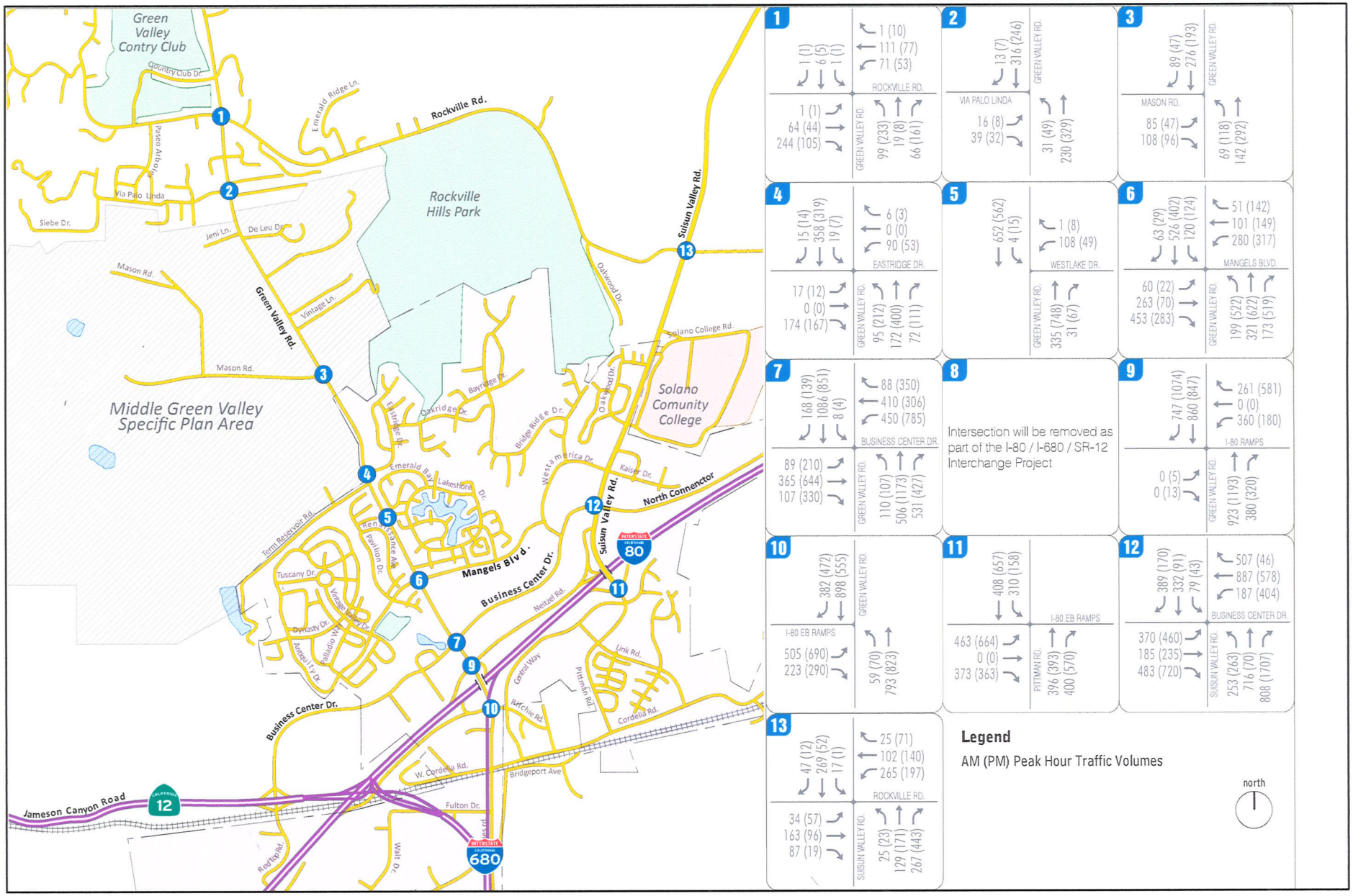

SOURCE: Abrams Associates, Transportation Consultants

Figure 17.12

CUMULATIVE (2030) INTERSECTION PEAK HOUR VOLUMES WITH PROJECT

Table 17.6
CUMULATIVE (2030) INTERSECTION LEVEL OF SERVICE CONDITIONS

	Intersection	Control	Peak Hour	Cumulative Delay (Sec/Veh)	Cumulative LOS	Control	Cumulative + Project Delay (Sec/Veh)	Cumulative + Project LOS
1	Green Valley Rd. & Rockville Rd.	Stop Sign	AM	7.7	A	Stop Sign	8.4	A
			PM	8.3	A		8.8	A
2	Green Valley Rd. & Via Palo Linda	Stop Sign	AM	11.7	B	Stop Sign	14.1	B
			PM	13.5	B		14.9	B
3	Green Valley Rd. & Mason Rd.	Stop Sign	AM	10.3	B	Roundabout	4.2	A
			PM	10.9	B		4.3	A
4	Green Valley Rd. & Eastridge Dr.	Stop Sign	AM	13.4	B	Roundabout	4.6	A
			PM	14.6	B		6.3	A
5	Green Valley Rd. & Westlake Dr.	Stop Sign	AM	15.5	C	Stop Sign	33.6	D
			PM	17.8	C		**45.7**	**E**
6	Green Valley Rd. & Mangels Blvd.	Traffic Signal	AM	24.9	C	Traffic Signal	32.8	C
			PM	22.0	C		30.7	C
7	Green Valley Rd. & Business Center Dr.	Traffic Signal	AM	21.3	C	Traffic Signal	22.1	C
			PM	33.0	C		38.3	D
8	Neitzel Rd. & Business Center Dr.	Intersection will be removed as part of the I-80/I-680/SR12 interchange project.						
9	Green Valley Rd. & I-80 WB On-Ramp	Traffic Signal	AM	7.9	A	Traffic Signal	8.6	A
			PM	12.1	B		18.5	B
10	Green Valley Rd. & I-80 EB Ramps	Traffic Signal	AM	10.1	B	Traffic Signal	10.8	B
			PM	10.1	B		11.1	B
11	Pittman Rd. & I-80 EB Ramps	Traffic Signal	AM	14.8	B	Traffic Signal	16.1	B
			PM	13.6	B		15.1	B
12	Business Center Rd. & Suisun Valley Rd.	Traffic Signal	AM	34.8	C	Traffic Signal	35.2	D
			PM	51.1	D		53.0	D
13	Rockville Rd. & Suisun Valley Rd.	Traffic Signal	AM	15.3	B	Traffic Signal	15.8	B
			PM	10.8	B		11.1	B

SOURCE: Abrams Associates, 2009

Notes: Intersection Delay is presented is presented in terms of seconds per vehicle. For Stop Sign Controlled intersections, the level of service and delay are reported for the worst approach.

17.3.7 Cumulative (2030) Plus Project Roadway System Impacts

Impact 17-2: Cumulative Plus Project Impacts on Intersection Operations. Under projected cumulative (2030) plus project conditions, the project would contribute significantly to further deterioration of traffic operations at intersection 5, Green Valley Road at Westlake Drive, in the PM peak hour, reducing operations from LOS C to LOS E. This intersection LOS change would represent a ***potentially significant cumulative impact*** (see criteria [a][1], [a][2] and [b][2] in subsection 17.3.1, "Significance Criteria," above).

Mitigation 17-2: The cumulative plus project condition at this intersection would not warrant installation of a traffic signal. It is recommended that this intersection remain in its current unsignalized condition, since the project-related significant delay would be limited to the left-turn movement at the side street (Westlake Drive) approach in the PM peak hour only, and alternative routes are available to motorists at this location. This impact is therefore considered to be ***significant and unavoidable.***

17.3.8 Pedestrian Impacts

Project Impacts on Vehicular/Pedestrian Safety Conditions. The proposed project would not significantly impact any existing pedestrian facilities or result in significant safety problems in the area.

Mitigation. No significant impact has been identified; no mitigation is required.

17.3.9 Bicycle Impacts

Project Impacts on Bicycles Conditions. The proposed project would not significantly impact any existing bicycle and pedestrian facilities, including bike lanes, routes, or paths in the area.

Mitigation. No significant impact has been identified; no mitigation is required.

17.3.10 Circulation, Access and Parking Impacts

Project Impacts on Internal Circulation, Access and Parking. No internal site circulation or access issues have been identified that would cause a traffic safety problem or any unusual traffic congestion or delay. Both of the proposed project access points on Green Valley Road are proposed to incorporate roundabouts and the LOS analysis summarized in Tables 17.5 and 17.6 indicate that the two intersections would operate well (within the County's acceptable LOS standard of C). With the proposed roundabout improvements, both intersections would have adequate sight distances and could readily accommodate the estimated baseline plus project and cumulative plus project traffic volumes. The proposed project would provide an adequate supply of on-site parking. The project is proposing to meet or exceed the County's parking requirements and, as such, no significant parking spillover impacts to the surrounding properties are expected.

Mitigation. No significant impact has been identified; no mitigation is required.

17.3.11 Roadway Segment Impacts

Project Impacts on Roadway Segment Operations. A detailed review has been conducted of potential project impacts on traffic operations for the "study" segment of Green Valley Road extending from Eastridge Drive south of the plan area in the City of Fairfield, to Via Palo Linda north of the plan area in the Upper Green Valley subdivision. This section of Green Valley Road has been reviewed on numerous occasions in the past to determine whether widening to provide graded (i.e., gravel) shoulders may be warranted. Previous analyses have indicated that traffic from approved projects in the area would trigger the need to widen the roadway shoulders on this segment of Green Valley Road by an additional four feet to meet County Roadway Standards. However, numerous constraints and other factors were identified that ultimately resulted in a County decision not to widen the roadway. It was determined, for example, that widening could potentially require installation of major new drainage facilities along the roadway and the removal of numerous existing mature trees. In addition, local residents have opposed shoulder widening along this segment because of the possibility of increased travel speeds.

Because this roadway section is currently not controlled by stop signs or traffic signals, a detailed roadway segment LOS analysis was conducted to verify that this section would continue to operate at the County's standard of LOS C under both baseline plus project and cumulative plus project conditions. Both analysis scenarios assumed installation of the Specific Plan-proposed roundabouts at the two proposed plan area access points. The detailed roadway segment LOS calculations for the two scenarios are presented in the *Traffic Analysis Appendix*, available for review at the Solano County Department of Resource Management, Planning Division. The calculations indicate that future traffic volumes would continue to fall within the design capacity of the roadway and that the project would not result in any significant impacts on traffic operations or safety. In addition, it is expected that the Specific Plan-proposed roundabout at Mason Drive could reduce speeding and improve safety on this segment of Green Valley Road.

Solano County-adopted current Road Improvement Standards (February, 2006) specify minimum standards for roadways based on the posted speed limit and traffic volumes. The EIR analysis of baseline plus project and cumulative plus project conditions indicates that the proposed project would not trigger any changes to the required design standards already identified for this segment of Green Valley Road.

The previously-identified finding that the roadway shoulders along this segment warrant widening due to traffic from already approved projects in the area in order to meet County Roadway Standards would remain regardless of whether or not the proposed Specific Plan is implemented. With Specific Plan approval, the County would need to continue to closely monitor traffic safety conditions along this study roadway segment to determine whether the previously-identified shoulder widening need to meet County Roadway Standards should be implemented.

Mitigation. No significant impact has been identified; no mitigation is required.

17.3.12 Construction Period Impacts

Project-Related Construction Period Transportation and Circulation Impacts. In general, County consideration of temporary construction period traffic impacts is specific to individual development projects, and includes consideration of the potential for temporary roadway and sidewalk closures, potential effects on local roadway circulation due to: (1) construction trucks; and (2) increases in vehicle-trips, transit trips and parking demand associated with construction workers. Following standard County practice, separate, site-specific analyses would be conducted for all future substantive individual development projects in the plan area and any need for a construction period mitigation plan would be identified.

In general, Specific Plan-related construction activities would typically occur Monday through Friday, between 6:00 AM and 6:00 PM. Any necessary construction staging would typically occur within individual development sites or from the adjacent roadways. Affected sidewalks and multi-use trails along construction site frontages may need to be temporarily closed during construction. In such situations, temporary pedestrian walkways are typically constructed. Such lane and sidewalk closures are subject to review and approval by the County's Department of Public Works.

During individual development construction periods, temporary and intermittent traffic and transit impacts may also result from truck movements to and from the development sites. Truck movements during periods of peak traffic flow would have greater potential to create conflicts than truck movements during non-peak hours. It is also possible that construction activity associated with an individual development would overlap with that of other nearby developments. Following standard County procedures, the sponsors of individual subdivision and other discretionary development activities in the plan area would be required to consult with Solano County and other responsible agencies to coordinate construction activities so as to minimize temporary impacts on vehicular, transit and pedestrian traffic.

Based on these considerations, environmental impacts from project-related construction activities would be ***less-than-significant***.

Mitigation. No significant environmental impact has been identified; no mitigation is required.