

Traffic Impact Study for SOMO Village (Revisions)



Prepared for the City of Rohnert Park

Submitted by **W-Trans**

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Executive Summary

The SOMO Village project is on a 179-acre site in southeast Rohnert Park and is generally bounded by Camino Colegio on the north, Railroad Avenue on the south, Bodway Parkway on the east, and the SMART rail corridor on the west. The project would retain approximately 700,000 square feet of existing nonresidential development and add a total of 1,750 new residential units as well as 123,000 square feet of new nonresidential uses.

The anticipated trip generation of SOMO Village at buildout was compared to the assumptions included in the 2009 Sonoma Mountain Village EIR, and it was found that the proposed project would be expected to generate fewer daily and p.m. peak hour trips, but more a.m. peak hour trips. At buildout, SOMO Village is projected to add just over 14,000 new daily trips to the street network beyond those already occurring including approximately 920 during the a.m. peak hour and 1,290 during the p.m. peak hour.

Peak hour traffic conditions at 24 intersections were evaluated to determine the potential impacts associated with development of the project. All but four of the intersections operate acceptably under existing conditions, with the exceptions being East Cotati Avenue/La Salle Avenue in the City of Cotati and Old Redwood Highway Railroad Avenue, Petaluma Hill Road/Railroad Avenue, and Petaluma Hill Road-Main Street/Adobe Road in the County of Sonoma. Under Existing plus Project conditions, the project would result in significant traffic impacts to these four intersections plus an additional intersection at East Cotati Avenue/Camino Colegio in Rohnert Park.

Under Future Conditions without the SOMO Village project, 10 of the 24 study intersections are projected to operate unacceptably. These include East Cotati Avenue/Old Redwood Highway, East Cotati Avenue/La Salle Avenue, East Cotati Avenue/Camino Colegio, East Cotati Avenue/Snyder Lane, East Cotati Avenue/Bodway Parkway, East Cotati Avenue/Petaluma Hill Road, Petaluma Hill Road/Valley House Drive, Old Redwood Highway/Railroad Avenue, Petaluma Hill Road/Railroad Avenue, and Petaluma Hill Road-Main Street/Adobe Road. With the addition of SOMO Village traffic to future conditions, 11 intersections are anticipated to operate unacceptably, including the 10 already projected to operate unacceptably without the project plus Camino Colegio/Manchester Avenue. The project's effects on delay and levels of service would be considered significant at 10 of the 11 intersections (with the exception being East Cotati Avenue/Bodway Parkway where the project's impact would be considered less than significant per the City's criteria).

Several of the intersections where the project would have a significant traffic impact are located in the City of Cotati and County of Sonoma. The project should be responsible for contributing a proportionate share of the costs to fund identified improvements at these locations, except for three locations in the County of Sonoma where the project should be required to obtain permits from the County to construct the improvements: at Petaluma Hill Road/Valley House Drive the project should be responsible for lengthening turn pockets and completing upgrades to the traffic signal equipment and operations; at Petaluma Hill Road/Railroad Avenue the project should be responsible for installing a traffic signal and adding turn pocket storage; and at East Cotati Avenue/Petaluma Hill Road the project should be responsible for lengthening a turn pocket and completing upgrades to the traffic signal equipment and operations (improvements to this intersection would be required once SOMO Village initiates any development beyond Phase 1).

The project should be responsible for completing several intersection and roadway improvements in Rohnert Park. These include modifying the East Cotati Avenue/Snyder Lane-Maurice Avenue intersection to add a second southbound left turn lane, installing all-way stop-controls at Camino Colegio/Manchester Avenue, modifying Camino Colegio to provide sufficient space for on-street bike lanes and include left-turn pockets at the project intersections, and modifying the signal phasing at East Cotati Avenue/Camino Colegio. For any development in SOMO Village occurring beyond Phase 1, the project should also be responsible for constructing an eastbound right-turn pocket at the East Cotati Avenue/Camino Colegio intersection. Bodway Parkway should be extended to Railroad Avenue in tandem with any SOMO Village



development occurring beyond Phase 1, or in the next 10 to 15 years, whichever occurs first. If not constructed by the project in the near-term, the project should contribute to the cost of the roadway extension through payment of the City's PFFP fees.

The project would be well-served by both bus and rail transit. The project would need to complete several improvements in order to establish effective connectivity to transit and link the project site to the current and planned pedestrian and bicycle networks. The project should be responsible for relocating the bus stop at Camino Colegio/Manchester Avenue to the northwest intersection corner. A new crosswalk incorporating high-visibility crossing treatments should be installed at the Bodway Parkway/Wisdom Lane intersection. New sidewalks must be constructed on all new project streets as well as the project frontages on Camino Colegio (as a multi-use path) and Bodway Parkway. The project should construct additional connections to the SMART multiuse pathway 1) in the northern portion of the site, 2) between the B Street/SOMO Avenue intersection and the SMART path, and 3) in the southern portion of site as part of future SOMO Village development occurring beyond Phase 1. The project should be responsible for extending the SMART path southward from SOMO Avenue to Railroad Avenue, and for installing pedestrian-scale lights on the SMART path between the Cotati SMART station and the pedestrian connection points to SOMO Village. Finally, the project should be responsible for constructing a Class 1 pathway segment between Bodway Parkway and the SMART multi-use path.



The project site plan does not appear to depict new sidewalks along the Camino Colegio or Bodway Parkway frontages, though the existing paths are comprised of deteriorating asphalt and must be replaced.

Finding – The project's onsite pedestrian facilities as proposed are well-connected and anticipated to perform adequately, but additional frontage improvements and connections to the SMART trail and neighborhoods in the Southeast Area Plan are needed to effectively connect to the surrounding network.

Recommendation – The project should include additional connections to the SMART multiuse pathway in the northern and southern developed portions of the site and should include an extension of the SMART path from Valley House Drive (SOMO Avenue) to Railroad Avenue along the western boundary of the project site as part of Phase 1. Additionally, the project should include installation of pedestrian-scale lights on the SMART path between the Cotati SMART station and connection points to SOMO Village.

Recommendation – A new crosswalk should be established on the west leg of Camino Colegio/Manchester Avenue intersection.

Recommendation – The project should include construction of new sidewalks on its <u>Camino Colegio and</u> Bodway Parkway frontage <u>and a reconstructed and widened multi-use path on its Camino Colegio</u> <u>frontages</u>.

Recommendation – A new crosswalk should be established at the Bodway Parkway/Wisdom Lane intersection, incorporating high-visibility crossing treatments consistent with those installed at the adjacent Bodway Parkway/Waterside Lane intersection.

Bicycle Facilities

The project site plan indicates that bicycle lanes would be constructed on B Street, 5th Street, Pope Street, SOMO Avenue, the Bodway Parkway extension between SOMO Avenue and 5th Street, and the segment of Manchester Avenue between SOMO Avenue and 5th Street. The bicycle connection to the SMART path via 2nd Street creates an awkward bicycling route. A more convenient route would be to extend a path westward from the roundabout at B Street/SOMO Avenue, providing direct connectivity to the SMART path from the project's primary north-south and east-west corridors at a controlled, low-speed intersection (ultimately proposed to be a roundabout) that is easy for bicyclists to navigate when traveling to and from the SMART path.

The site plan appears to depict no changes to bicycle facilities on Camino Colegio or Bodway Parkway. While bike lanes on Bodway Parkway are already in place and sufficient to accommodate project-related bicycle traffic, bicycle network improvements are necessary on Camino Colegio. The *Countywide Bicycle and Pedestrian Master Plan* (referred to as the Countywide Bike Plan below) depicts future on-street bicycle lanes on Camino Colegio along the project frontage. There is currently insufficient width on eastbound westbound Camino Colegio to stripe bicycle lanes. It is recommended that the project be responsible for widening striping westbound Camino Colegio along the project frontage to provide space for two 11-foot wide travel lanes and a 6-foot wide bike lane. On eastbound Camino Colegio, bicyclists would be able to use the Class I multi-use path along the project frontage, which is recommended to be reconstructed and widened as indicated above. The project should also be responsible for striping on street bicycle lanes on Camino Colegio between Bodway Parkway and Mitchell Drive, connecting the existing bicycle network on Bodway Parkway to the northern areas of the project site.

The Countywide Bike Plan depicts a future Class I pathway extending westward from the intersection of Bodway Parkway/Valley House Drive-SOMO Avenue, crossing the SMART rail corridor before continuing west into Cotati. The path would be part of the Laguna de Santa Rosa regional trail that is planned to extend to Sebastopol. Construction of the SMART bike crossing would require further coordination with the rail agency as well as securing right-of-way for a future trail extension to the west; as such it is considered a regional project that would be constructed at a later time. The SOMO Village project includes



open space in the area where this potential future crossing would be and would not preclude its construction.

Similar to the Countywide Bike Plan, the City's bike plan depicts an off-street path connecting the intersection of Bodway Parkway/SOMO Avenue-Valley House Drive to the SMART path. The SOMO Village site plan does not depict such a connection; the project proposes to include bicycle lanes on SOMO Avenue that could reasonably serve some bicyclists in this area, but an off-street trail consistent with the City's bicycle plan and Countywide Bike Plan should also be provided. Provision of this trail either along SOMO Avenue or across the southern portion of the site (including a connecting segment along the Bodway Parkway extension) would satisfy the functional intent of both plans.

Finding – The project as proposed includes an integrated network of onsite bicycle facilities that are anticipated to function well, making bicycling within the site a viable travel alternative.

Finding – The project does not appear to comply with plans for bike <u>lanes-facilities</u> on Camino Colegio and would benefit from additional connections to the regional SMART pathway to make bicycling more convenient and attractive.

Finding – The project does not appear to comply with plans to provide a Class I bike path between Bodway Parkway and the SMART path, as shown in the City's Bike Plan and Countywide Bike Plan.

Recommendation – The project should extend a path westward from the intersection at B Street/SOMO Avenue to the SMART path.

Recommendation – The project should restripe <u>westbound</u> Camino Colegio along the project frontage to include bike lanes between Mitchell Drive and Bodway Parkway, including widening of eastbound Camino Colegio to provide sufficient space for the new bike laneand reconstruct and widen the multi-use pathway on the south side of Camino Colegio to serve eastbound bicyclists.

Recommendation – The project should include construction of a segment of the planned Laguna de Santa Rosa regional trail between Bodway Parkway and the SMART corridor, either 1) along SOMO Avenue or 2) along the southern developed portion of the site including a connecting pathway segment along the project's Bodway Parkway extension.

Transit

The project site is well-served by both local and regional bus transit routes operated by Sonoma County Transit. The project is also located within a reasonable walking and bicycling distance of the Cotati SMART commuter rail station, making rail transit a viable option for the project's residents, employees, and visitors. Access to transit would be improved with implementation of the pedestrian circulation recommendations identified above, including installation of an additional crosswalk at the Camino Colegio/Manchester Drive intersection. As recommended in the Credo High School Safe Routes to School evaluation, the Sonoma County Transit bus stop on the northeast corner of Camino Colegio/Manchester Avenue should be relocated to the northwest corner, and the sidewalk near the relocated transit stop widened to accommodate the high volume of riders using this stop. It is further recommended that the applicant be responsible for installing a transit shelter at the relocated stop per Sonoma County Transit specifications.

With implementation of the recommended pedestrian and bicycle improvements identified above, including improved connections between the site and the SMART multi-use pathway, effective linkages to transit would be established.

Finding – The project would be well-served by both bus and rail transit. The project would be expected to increase both bus and rail transit ridership and reduce auto reliance, both of which are considered beneficial impacts.



Site Access

The SOMO site currently has vehicular connections to the surrounding roadway network at two existing intersections: Camino Colegio/Manchester Avenue and Bodway Parkway/Valley House Drive. The proposed project would establish a grid network of streets within the site, expanding the number of access points to six existing intersections. Additionally, the project would extend Bodway Parkway southward from Valley House Drive to Railroad Avenue, with an additional five intersection connecting the project site to the surrounding network. The project site plan does not include intersection-level details such as where turn lanes would be provided. Following is an evaluation of how access to the project site could be accommodated at the current and proposed intersections on Camino Colegio and Bodway Parkway.

Camino Colegio

The project would have three intersections on Camino Colegio. Camino Colegio has two travel lanes in each direction plus a raised median along the project frontage. Median breaks with eastbound left-turn pockets exist at Emerald Pointe Apartments, Mitchell Drive, Manchester Avenue, and Mainsail Drive. The intersection at Manchester Avenue, which is the only location that currently has a leg on the south side of Camino Colegio, also includes a westbound left-turn pocket. On-street parking is currently allowed in the westbound direction. Westbound beicycle lanes are planned on this segment of Camino Colegio but do not currently exist.

The project would need to modify Camino Colegio, which is designated as a major collector, to include new westbound left-turn pockets at Mitchell Drive and Mainsail Drive. Sufficient space exists within the existing medians to establish the new left-turn pockets. During a review of bicycle circulation (described above) it was also determined that Camino Colegio has insufficient existing widths to accommodate planned bike lanes and would need to be widened along the project frontage.

Recommendation – Camino Colegio Lane Reconfiguration

- Widen eastbound Camino Colegio along the project frontage to provide space for two 11-foot travel lanes and a 6-foot bike lane, striping the bike lane between Mitchell Drive and Bodway Parkway.
- Restripe westbound Camino Colegio between Bodway Parkway and Mitchell Drive to add on-street bike lanes.

Specific intersection-related recommendations are identified below.

Recommendation – Camino Colegio/Mitchell Drive

- Reconfigure the existing median to add a 100-foot long westbound left-turn pocket.
- Include a left-turn lane and shared through/right-turn lane on the new northbound approach
- The operational analysis indicates that acceptable operation could result by maintaining the current all-way stop-controls.

Recommendation - Camino Colegio/Manchester Avenue

• Install all-way stop controls.

Recommendation – Camino Colegio/Mainsail Drive

- Reconfigure the existing median to add a 100-foot long westbound left-turn pocket.
- Provide side-street stop controls on Mainsail Drive.

Recommendation - Camino Colegio/Bodway Parkway



 Maintain separate castbound left- and right-turn lanes, slightly narrowing the existing median to create enough width for a bike lane between the left- and right-turn lanes (alternatively, maintain existing median and slightly widen roadway into the project site to create space for the bike lane).

Bodway Parkway

At buildout, the project would access Bodway Parkway via eight intersections. The northernmost access would add a new western leg to the intersection at Waterside Lane, maintaining the current raised median on Bodway Parkway, and creating a right-turn in/right-turn out configuration. The next intersection to the south at Wisdom Lane has an existing median break and southbound left-turn pocket; the project would need to modify the Bodway Parkway median at this location to add a northbound left-turn pocket serving the site. Both Waterside Lane and Wisdom Lane would operate acceptably with side-street stop controls. The project's primary access point on Bodway Parkway would be at SOMO Avenue-Valley House Drive and would be converted to a single-lane roundabout.

The five project intersections to the south of Valley House Drive would be located on an extension of Bodway Parkway. This street extension is anticipated to carry substantially less traffic than segment to the north of Valley House Drive and would function acceptably with one lane in each direction plus bike lanes, consistent with the "Modified Avenue" configuration assumed in the City's Public Facilities Finance Plan. Based on the site plan's configuration and anticipated traffic volumes, the addition of northbound left-turn pockets appears to be unnecessary at any of these five future intersections, and all locations would function acceptably with side-street stop controls.

Recommendation - Bodway Parkway/Waterside Lane

- Maintain the existing raised median and right-turn in/right-turn out configuration.
- Provide side-street stop controls on Waterside Lane.

Recommendation – Bodway Parkway/Wisdom Lane

- Add a northbound left-turn pocket within the existing median area.
- Provide side-street stop controls.

Recommendation – Configure the segment of Bodway Parkway to the south of Valley House Drive as a "Modified Avenue" including one travel lane and bike lanes in each direction, with stop controls on the minor street approaches.

Onsite Circulation

All the project's internal streets would include one vehicle travel lane in each direction, sidewalks, and onstreet parking. Given the "grid" street network proposed on the site, traffic volumes are anticipated to be dispersed, with all streets easily accommodating anticipated volumes with single lanes of traffic in each direction. All intersections within the site would be unsignalized. A single-lane roundabout is shown at the intersection of B Street/SOMO Avenue and, given the anticipated traffic volumes, would be expected to perform well. Intersection controls at the remaining internal streets, as well as crossing improvements for pedestrians and bicyclists, should be determined during the evaluation and review of improvement plans. Because ride sharing services have become a popular means of travel, and because a rise in the use of automated vehicles (AV) is anticipated to occur within the next decade, it is recommended that improvement plans for the project include designated curb space to accommodate the increased frequency of pick up/drop off activity associated with new transportation technologies.

Finding – The project's internal circulation system is anticipated to function acceptably.



Table 11 – Summary of Recommendations		
12. Camino Colegio/ Mitchell Dr	 Project Responsibility Modify Camino Colegio: Reconfigure the existing median to add a 100-foot long westbound left-turn pocket. Include a left-turn lane and shared through/right-turn lane on the new northbound approach Retain all-way STOP controls. 	
13. Camino Colegio/ Manchester Ave	 Project Responsibility Install all-way STOP controls. Add a new crosswalk on the western intersection leg. Relocate bus stop to the northwest intersection corner, including widening of the sidewalk and installation of transit shelters to Sonoma County Transit's specifications. 	
14. Camino Colegio/ Mainsail Dr	 Project Responsibility Modify Camino Colegio: Reconfigure the existing median to add a 100-foot long westbound left-turn pocket. Install STOP sign on new northbound approach. 	
1 5. Camino Colegio/ Bodway Pkwy	 Project Responsibility Modify Camino Colegio: Maintain separate eastbound left- and right-turn lanes, narrowing existing median to create enough width for a bike lane between the left- and right-turn lanes (alternatively, maintain existing median and widen roadway into the project site to create space for the bike lane). 	
16. Bodway Pkwy/ Waterside Ln	 Project Responsibility Maintain right-in/right-out configuration with raised median. Install STOP sign on new eastbound approach. 	
17. Bodway Pkwy/ Wisdom Ln	 Project Responsibility Install a northbound left-turn pocket. Install a new crosswalk incorporating high-visibility crossing treatments consistent with those installed at the adjacent Waterside Lane intersection. Install STOP sign on new eastbound approach. 	
19. Petaluma Hill Rd/ Valley House Dr	 Project Responsibility Extend northbound left-turn pocket storage to 460 feet. Extend eastbound right-turn pocket storage to 400 feet. Add eastbound and southbound right-turn overlap signal phases. Improvements can be accommodated within the existing right-of-way; applicant shall be responsible for obtaining an encroachment permit from the County of Sonoma. The above improvements offset the project's increase to delay but still result in LOS E operation under future conditions; regional transportation measures would be required on the Petaluma Hill Road corridor to achieve acceptable operation. 	
20. Old Redwood Hwy/ Railroad Ave	 Project Responsibility Applicant shall be responsible for contributing a proportionate share of the costs to fund planned future improvements. Near-Term Improvement Widen the eastbound approach to include a left-turn pocket and the westbound approach to include a right-turn pocket. 	



Table 11 – Summary	of Recommendations
	 This improvement would offset the project's increase to delay but still result in LOS F operation on the eastbound approach. Future Improvement Signalize the intersection.
22. Petaluma Hill Rd/ Railroad Ave	 Project Responsibility Widen the eastbound approach to add an approximately 105-foot long right-turn pocket. Signalize the intersection. Extend northbound left-turn pocket storage to 150 feet. Improvements can be accommodated within the existing right-of-way; applicant shall be responsible for obtaining an encroachment permit from the County of Sonoma.
23. Petaluma Hill Rd- Main St/Adobe Rd	 Project Responsibility Applicant shall be responsible for contributing a proportionate share of the costs to fund planned future improvements. Near-Term Improvement Widen the westbound approach to include a right-turn lane and add a right-turn overlap signal phase. Future Improvement Implementation of the near-term improvement would offset the project's increase to future delay but still result in LOS F operation; regional transportation measures would be required on the Petaluma Hill Road corridor to achieve acceptable operation.
Road Segments	
Camino Colegio	 Project Responsibility Reconstruct and widen the multi-use pathway on the south side of Camino Colegio to serve pedestrians and bicyclistsWiden eastbound Camino Colegio along the project frontage to provide space for two 11-foot travel lanes and a 6-foot bike lane, striping the bike lane between Mitchell Drive and Bodway Parkway. Restripe westbound Camino Colegio between Bodway Parkway and Mitchell Drive to add on-street bike lanes. Construct new sidewalks along project frontage.
Bodway Pkwy	 Project Responsibility Install single-lane roundabout at SOMO Avenue-Valley House Drive as proposed. Construct new sidewalks along project frontage. Construct the segment to the south of Valley House Drive in tandem with development of adjacent areas (after Phase 1) as a "Modified Avenue" including one travel lane and bike lanes in each direction, with stop controls on the minor street approaches. If the project does not develop areas south of SOMO Avenue-Valley House Drive, it should still contribute to the cost of extending Bodway Parkway through payment of PFFP fees, as the roadway is estimated to be needed to support areawide traffic in the next 10-15 years.
Paths	
SMART Path - including connections to project site	 Project Responsibility Northern connection: construct a connection to the SMART multiuse pathway in the northern portion of the site.



Lighting

SMART Path Lighting Add pathway lighting between

project and Cotati SMART station

Paths

- SMART Path _ As part of Pha from SOMO Av
- Laguna de Sa - - -As part of Pha off-street path Pkwy and SMA

Frontages

Α

В

C

D

E

F

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H

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Camino Coleg Reconstruct ar path on south

Intersection Improv

 SMART Path Extension As part of Phase 1, extend path from SOMO Ave to Railroad Ave Laguna de Santa Rosa Trail As part of Phase 1, construct off-street path between Bodway Pkwy and SMART Path SMART Path Connections Add path connections in northwest project area, at SOMO Ave, and (upon development of Phase 2) in southern developed area Ges Camino Colegio Project Reconstruct and widen multi-use path on south side of street Bodway Pkwy Phase 1 Construct new sidewalks on west side of the street 	A Manchester Ave A Mannsail Dr C C C C C C C C C C C C C C C C C C C
Bodway Pkwy Phase 2 Construct street extension to Railroad Ave as part of Phase 2 including single lanes and bike lanes in each direction, and side- walks on west side of the street	Railroad Ave
- time land	
ection Improvements	
E Cotati Ave/Camino Colegio (#7)	Phase 1: Modify signal phasing. Phase 2: Widen eastbound approach to add right-turn lane and modify signal phasing
E Cotati Ave/Petaluma Hill Rd (#10)	Phase 2: Widen eastbound approach to add right-turn lane and modify signal phasing
Camino Colegio/Mitchell Dr (#12)	Add westbound left-turn pocket
Camino Colegio/Manchester Ave (#13)	Install all-way stop controls, add crosswalk on west leg, relocate bus stop to northwest intersection corner including widening of sidewalk and new transit shelters
Camino Colegio/Mainsail Dr (#14)	Add westbound left-turn pocket
Bodway Pkwy/Waterside Ln (#16)	Maintain raised median and restrictions to right-turns only
Bodway Pkwy/Wisdom Ln (#17)	Add northbound left-turn pocket and install high-visibility crosswalk crossing Bodway Pkwy

E Cotati Ave

Petaluma Hill Rd/Valley House Dr (#19) Extend storage lengths in northbound left-turn & eastbound right-turn pockets, modify signal phasing Petaluma Hill Rd/Railroad Ave (#22) Signalize the intersection and widen the eastbound approach to add right-turn pocket

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