Mill Valley to Corte Madera
Bicycle and Pedestrian Corridor Study

Appendix I:
Inventory and Description of Routes

Prepared by
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Appendix I – Inventory and Description of Routes
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This section provides an overview of the routes – their current conditions and the opportunities and constraints for improving them as bicycle and pedestrian routes. Information on conditions relating to the Alto Tunnel, traffic conditions and potential solutions, emergency access and response, potential use levels of the routes, and environmental conditions and issues is provided in the technical studies contained in other appendices to this report.

Alternative A- Horse Hill Route

Segment 1: Functions as part of Alto Tunnel & Horse Hill Route. From northern end of Mill Valley-Sausalito Path to Vasco Court. See Figure 1

- Segment is 3590 feet/0.68 miles long.
- Route starts at intersection of E. Blithedale Avenue and the northern end of the Mill Valley-Sausalito Path, proceeds north on existing Class I bike path
- Cross walks at E. Blithedale Avenue.
- Traffic signal at E. Blithedale Avenue with pedestrian crossing signal.
- 8’ – 12’ wide paved bike path.
- Signed Bike Route #5 up to Edna Maguire Elementary School, then Route #5 turns to the right, but path continue to Vasco Court.
Summary/ Opportunities and Constraints: Existing Class I bike path. Heavily used by children attending school and trail users seeking to continue on Mill Valley-Sausalito Path. It is relatively level and in adequate condition. No improvements recommended.
Segment 2: From bike path at Edna Maguire Elementary School along Lomita Drive to Horse Hill bike path. See Figure 1

- Segment is 3350 feet/0.63 miles long.
- Signed as Bike Route #5.
- Lomita is designated as a secondary emergency evacuation route on the City of Mill Valley Evacuation Route Map. Maguire School is a designated emergency assembly area.
- Segment starts at intersection with existing bike path at Edna Maguire Elementary School, proceeds east along 8’ – 12’ paved path alongside school for 360 feet. This section has a 10% slope at the beginning. There exists a wheelchair ramp next to the sloped section as an alternative approach.
- At the school, the route awkwardly passes through a head-in parking lot. It is unclear which direction the route follows through the parking lot.
- There is intermittent gravel and asphalt sidewalk along south side of Lomita Road. There is 1300 feet of sidewalk on north side of Lomita Road from Edna Maguire Elementary School to Horse Hill Park.
- Lomita Drive is about 42’ wide, one lane of traffic in each direction, with street parking on both sides of the road.
- Lomita Drive is in the unincorporated area of Marin County.
- There are homes along the entire south side of the segment.
- There are homes along most of the entire north side of the segment, except for about 700 feet where the road abuts against Horse hill.
- There are 12 driveways on the north side of the road and 22 on the south side of the road.
- There is a drainage ditch that runs about 1000’ along the northern edge of the road.
- The final approach along Lomita Drive to the Horse Hill staging area has a climb of 10% slope.
- Speed limit is 25MPH.
- There is a gravel parking lot at Horse Hill which is maintained by the Marin Open Space Council.
| 46. 100’ along segment, entrance into Edna Maguire Elementary School parking lot, wide paved path. |
| 44. Looking west at wheelchair ramp, about 50’ along the segment. The ramp is an alternative to the steep grade from the school to the paved path. |

| 148. Looking east up Lomita Drive, typical section. |
| 47. Looking east from Edna Maguire Elementary School along Lomita Drive, head in parking, crosswalk. |

| 150. Looking east along Lomita Drive, after 815’ the road narrows and sidewalk shifts. |
| 154. Looking west along Lomita Drive, several driveways and drainage ditch running along north side. |
Summary/ Opportunities and Constraints:

Lomita Drive is a low vehicular traffic road. The first 815’ from the school: the road is sufficiently wide (38’ – 49’) to construct a Class II bike lane. There is a sidewalk along the northern edge of the road. Near the eastern edge of the school property, the road narrows to 33’ and the sidewalk shifts. For the next 425’ the sidewalk continues. The road would need to be widened to construct a Class II bike lane. There is sufficient room to do so. After this, the sidewalk ends and road further narrows to 24’ -28’ the remainder of the segment to Horse Hill. About 1600 feet of sidewalk would need to be built. There is room for a Class II bike lane along the 700 foot section where there are no homes. The final 875’ is flanked by homes on both sides. Widening the road would involve reducing the front yards of several homes.

In total, to create a Class II bicycle and pedestrian route along Lomita Drive, 2000’ of road widening would be needed, of which:

- About 1300’ of road side is flanked by homes
- About 700’ of road side is not flanked by homes.
- About 1000’ of drainage ditch would need to be piped and covered.
- About 1550’ of sidewalk would need to be built.
Segment 3: Existing Class I bike path running from end of Lomita Drive parallel to Highway 101 to Merriwood Drive. **See Figure 1**

- Segment is 1989 feet/0.38 miles long.
- Route starts at Horse Hill staging area, at the end of Lomita Drive, proceeds north parallel to western side of Highway 101 to Meadowsweet Drive.
- 6’ high chain linked fence between path and highway the entire length of segment.
- 6’ high chain linked fence between path and Horse Hill for about 400’.
- Dirt parking lot at Horse Hill staging area. Maintained by Marin County Open Space District.
- Port-a-potty at Horse Hill parking lot.
- Path is 8’ wide and striped.
- From the southern end of the path, the path climbs at an 8% slope for several hundred feet.
- At the northern end of the path, there is a 50’ section of path that climbs at 10% slope.

| 1. Southern end of bike path, looking south to Lomita Drive. | 2. Southern end of bike path, looking north. |
Summary/ Opportunities and Constraints: Existing Class I bike path that is well used and signed. The 8% and 10% slope sections would be difficult for some users. The trail pavement is in adequate condition. The freeway noise is very prevalent. Improved lane striping and better signage at transition areas onto Lomita Drive and Meadowsweet Drive to alert drivers to bicycles would be an improvement.
Figure 1: Segments - Horse Hill Part 1
Segment 4: Casa Buena Drive from northern end of Horse Hill path to Roberts Avenue.  
See Figure 2

- Segment is 5550 feet/1.05 miles long.
- Route starts at northern end of Horse Hill path, proceeds north on Casa Buena Drive to Roberts Avenue.
- One lane of traffic in both directions.
- Existing Class III bike route with signage at intersection of Horse Hill path and Casa Buena Drive.
- Freeway noise is very audible.
- Posted 25MPH speed limit.
- 30’ wide road at intersection of Horse Hill path and Casa Buena Drive.
- 24’ wide road along Casa Buena Drive with 4’ paved shoulder on both sides.
- 32’ wide road from Marin Joe’s to end of segment.
- No sidewalk from Horse Hill path for 3130 feet.
- 2420 feet of 5’ wide sidewalk on western side from upper parking lot for Marin Joe’s restaurant until end of segment at Tamal Vista.
- No parking on eastern side for most of the segment.
- No parking on western side of segment for first 2100 feet, then street parking for remainder of segment.
- Segment descends from 135’ elevation to 5’ elevation with eight sections greater than 5% including one 18% section and one 20% section.

92. Looking north from intersection of Horse Hill path and Casa Buena.  
93. Looking south from intersection of Horse Hill path and Casa Buena.
199. Looking north from onramp to Highway 101 southbound.

200. Looking south from onramp to Highway 101 southbound.

201. Looking south from Marin Joes restaurant.

202. Looking north from Marin Joes restaurant.

SEGMENT 4
SECTION 4A
CASA BUENA DRIVE
CONDITION: NEAR 101 ON RAMP; NARROW SHOULDERS
Summary/ Opportunities and Constraints: A hilly route for many cyclists. This segment has a pavement width of 42 feet with parking on the south side. There is inadequate space to convert the existing Class III route to a Class II route unless the roadway is widened to the east, and less than standard width lanes are provided. There is room to extend the sidewalk on the western side of road 2420 feet from Horse Hill path to the existing sidewalk, but this would entail construction of retaining walls in many locations.
There is an opportunity for better signage and lane striping at transition areas onto Lomita Drive and Meadowsweet Drive to alert drivers to bicycles and pedestrians.

The tight intersection of Sanford, Casa Buena, and Meadowsweet is challenging for traffic movements and for bicyclists and pedestrians to navigate due to the multiple yield and lack of crosswalks. Using Casa Buena is safer for northbound bicyclists and pedestrians because they don’t have to traverse the portion of this intersection where southbound cars are turning left onto Casa Buena from Sanford. Conversely, southbound bicyclists and pedestrians would be safer using Meadowsweet rather than Casa Buena.

**Segment 5**: From the intersection with the northern end of the Horse Hill path and Meadowsweet Drive, along Meadowsweet Drive to Sanford Street. **See Figure 2**

- Segment is 6342 feet/1.20 miles long.
- Existing Class III bike route with signage at Tamal Vista/Meadowsweet intersection.
- Route starts at the intersection with the northern end of the Horse hill path, proceeds northwest along Meadowsweet Drive to Sanford Street.
- Speed limit is 25MPH.
- Intermittent sidewalk from beginning of segment to Conow Street.
- No sidewalk from Horse Hill path to Conow Street.
- No street parking from Horse Hill path to Conow Street.
- Road is 22’ - 24’ wide from Horse Hill path to Conow Street.
- Street parking from Conow Street to end of segment.
- Road widens to 40’ after Conow Street to end of segment.
- Sidewalk from Conow Street to end of segment, 1400’ of existing sidewalk.
- Residential area with low vehicle traffic.
- Segment has 7 sections with a slope greater than 5%, including one with 26% slope
- 13 driveways on the east side of the section from Horse Hill path to Conow Street.
- 19 driveways on the west side of the section from Horse Hill path to Conow Street.

| 75. Looking north along Meadowsweet Drive near intersection with Laurel Drive. | 74. Looking south along Meadowsweet Drive near intersection with Laurel Drive. |
Summary/ Opportunities and Constraints: A hilly route for many cyclists. Converting the existing Class III route to a Class II route would involve extensive widening of the existing road where it is flanked by homes on both sides of the road.

In total: From Meadowsweet Drive to Conow Street, the road would need to be widened the first 4942’. Of that, about 2000 feet of 4’ high retaining walls would need to be built and 4942’ sidewalk would need to be built. From Conow Street to the end of the segment the road widens and there is sufficient room to construct a Class II bike route.
Segment 6: From Tamalpais Drive to Wornum Way along Madera Boulevard and Tamal Vista Boulevard. See Figure 2

- Segment is 3630 feet/0.69 miles long.
- Route starts at intersection of Tamalpais Drive and Madera Boulevard, proceeds north on Madera Boulevard. At Council Crest Drive, Madera Boulevard turns to the east and the route continues north along Tamal Vista Boulevard.
- Existing Class II/III bike route
- One lane of traffic in both directions with medians and turning lanes
- Posted speed limit of 30 MPH.
- 5’ sidewalks on both sides for most of segment.
- Tamal Vista road is 43’ wide with central turning lane.
- No street parking along Madera Boulevard.
- Very limited street parking along Tamal Vista Boulevard.
- Eastern side of Madera Boulevard is a busy shopping area with several parking lots on east side.
- Western side of Madera Boulevard is a residential area.
- Western side of Tamal Vista Boulevard is a residential area.
- Eastern side of Tamal Vista Boulevard is a mix of residential and commercial properties.
- Sidewalks and crosswalks on both sides along entire stretch of Madera Boulevard and Tamal Vista.
- A parallel residential access road runs beside the southbound direction of Madera Boulevard, from Council Crest Drive to Mohawk Avenue. This access road has a sidewalk on the west side and provides an alternative route to pedestrians and cyclists to avoid some of the heavy vehicular traffic on Madera Boulevard.

180. Looking north from start of segment at Madera Blvd.
181. Looking north from midpoint of segment along Tamal Vista Blvd.
184. Looking north at end of segment at intersection of Tamal Vista Blvd and Wornum Way.

186. Looking west at end of segment at intersection of Tamal Vista Blvd and Wornum Way.

Transportation Authority of Marin drawing of Tamal Vista/Madera Blvd lane modifications and Class III bike route plan conducted for Highway 101 Greenbrae/Twin Cities Corridor Improvement project.

**Summary/ Opportunities and Constraints:** Heavy vehicle traffic. Room to extend Class II route sections by converting some of the Class III route sections into Class II sections. See Highway 101 Greenbrae/Twin Cities Corridor Improvements project, below.
Highway 101 Greenbrae/Twin Cities Corridor Improvements project

This section was also studied by the Transportation Authority of Marin for the Highway 101 Greenbrae/Twin Cities Corridor Improvements project. The Summary Report can be found at:


In brief, the goal of the Transportation Authority of Marin project is to plan and construct improvements to the Greenbrae Corridor along Highway 101 between Corte Madera and San Rafael. Among the key elements of the project are improvements to the Greenbrae interchange at Sir Francis Drake as well as potential changes to the Tamalpais Drive interchange and the on and off-ramps along the corridor.

Five objectives were developed in consultation with stakeholders for this project after reviewing the existing and future transportation conditions, including:

- Improve safety for motorists, bicyclists and pedestrians;
- Reduce traffic congestion and accommodate future traffic demand;
- Balance traffic on local roads and regional facilities;
- Maintain freeway access to and from local streets; and
- Enhance transit, bicycle and pedestrian use throughout the corridor.

Some of the Southbound Options of the study affect access to Madera Boulevard and/or Tamal Vista Drive and hence are relevant to the Mill Valley to Corte Madera Study.
Figure 2: Segments - Horse Hill Part 2
**Alternative B- Alto Tunnel Route**

**Segment 1:** Functions as part of Alto Tunnel & Horse Hill route. From the northern end of Mill Valley-Sausalito Path to Vasco Court. This pathway is designated as a pedestrian emergency evacuation route on the City of Mill Valley Evacuation Route Map.

- See Alternative A for detail.

**Segment 7:** Old railroad bed running from Vasco Court to Alto Tunnel. **See Figure 3**

- Segment is 1284 feet/0.24 miles long.
- Route starts at intersection of Vasco Court and the northern end of existing paved bike path, proceeds north on wide dirt path.
- After 1006 feet, becomes swampy and overgrown. Trail is not readily passable beyond this point.
- During a dry season, the swampy section was about a foot deep by 10 feet wide running about 200 feet toward the portal.
- The area is also heavily overgrown with trees, brush, blackberry bushes and poison oak.
- The portal entrance is concealed by a collapsed slope.
- About 5 residential access points (wooden stair cases, dirt trails) to trail have been constructed.
- Extensive BMX area constructed about 100’ east of swampy area of trail. About 12 large 6’ high earthen ramps have been constructed. Area contained some litter and tools scattered about.

![34. Start of dirt path, looking north from Vasco Ct.](image1)

![35. 100’ north along dirt path, looking north](image2)
Summary/ Opportunities and Constraints: Extending the existing Class I bike path that ends at Vasco Court would be feasible. 1284 feet of 8’ Class I bike path would need to be constructed. The route is relatively level and sufficiently wide. Numerous trees and shrubs would need to be removed or trimmed. Drainage near tunnel would need to be addressed – see separate Drainage Report.
Segment 8: Alto Tunnel. See Tunnel Evaluation Report. See Figure 3

- Segment is 2172 feet/0.41 miles long.
- Route starts at southern end of Alto tunnel, proceeds north through tunnel to the northern end of the tunnel.
- In 1975 a 125’ concrete plug was installed in northern end of tunnel.
- The southern end is concealed with a timber bulkhead.
- Tunnel is 16’ wide and 20’ high.
- The original tunnel has a slight curve to the west at the southern end.
- Tunnel was constructed in 1884 and maintained until 1971 when it was abandoned.

Summary/ Opportunities and Constraints: Assuming repair and structural issues addressed, the tunnel would provide a relatively direct, level route between the two towns which would be wheelchair accessible. See Tunnel Feasibility Report (Attachment B) and Section 4.2 for details.
Segment 9: From northern end of Alto Tunnel to Tamalpais Drive. See Figure 3

- Segment is 2660 feet/0.50 miles long.
- Route starts at northern end of Alto Tunnel, proceeds north on a swampy single track trail.
- First 200’ north of tunnel is swamping, overgrown.
- Next 300’ is passable on an existing single track trail, with swampy area on west edge of trail.
- About 500’ north from north portal entrance, single track trail widens into dirt fire road and swampy section ends.
- Dirt fire road continues until final 300’ feet.
- Final 300’ at northern end is paved 8’ wide concrete sidewalk next to public parking lot.
- Additional parking is available along Montecito Drive which borders the segment on the west.

53. Looking south, from about 1000’ south of northern end of segment, wide path.

57. Looking north, from about 1000’ south of northern end of segment, room for emergency access turning area.

68. Looking south from northern end of segment, from parking lot at Tamalpais Drive, paved section of path.

165. Northern end of single track section, looking south.
Summary/ Opportunities and Constraints: Extending the pavement at northern end of segment 2360 feet to the Alto Tunnel and creating a Class I bike path would be feasible. Segment is relatively level and sufficiently wide. Several trees and shrubs would need to be removed and area near tunnel would need to be drained and leveled.

This short segment presents some challenges because there are separate routes for pedestrians and bicyclists, a crossing of busy Redwood Avenue at a sharp bend where there
is no stop or signal, and the bicycle route follows Montecito Drive, which functions as a residential street connector, as well as a downtown parking area, with perpendicular parking on the east side.

The Town of Corte Madera has recently reconstructed this portion of Redwood Avenue and adjacent roads. Generally the roads, intersections, parking and paths are working well and changes are not desired. However, if the Alto Tunnel route is opened, with a projected 1 million users annually, improvements for north-south bicycle and pedestrian connections to this segment will be important to consider.

From the informal unpaved path on the railroad right-of-way there is an existing approximate 8’ wide concrete path paralleling Tamalpais Drive. It passes through a decorative bus stop shelter just south of Tamalpais. There is a matching shelter north of Redwood Avenue. The shelters are part of the overall park, streetscape and landscape improvements that enhance downtown Corte Madera.

North of Redwood Avenue there is no path, and pedestrians as well as bicyclists must mix with cars on the residential street/downtown parking lot to reach the Sanda Marker Trail. A separate Class I multi-use path connection to the existing Sandra Marker Trail would be desirable.

**Segment 10:** Existing Sandra Marker Trail. Completes connection to study end point

- Existing Class I bike path
- Located in the old railroad right-of-way
188. Sandra Marker Trail
Figure 3: Segments - Alto Tunnel
**Alternative C- Camino Alto/Corte Madera Ave Route**

**Segment 11**: Short connection along E. Blithedale Avenue from northern end of Mill Valley Sausalito Path to Camino Alto.  **See Figure 4**

- Segment is 676 feet/0.13 miles long.
- Camino Alto is designated as a primary emergency evacuation route on the City of Mill Valley Evacuation Route Map.
- Route starts at northern end of Mill Valley Sausalito Path, proceeds west on E. Blithedale Avenue to Camino Alto
- Cross walks with pedestrian activated traffic signals located at both ends of segment.
- E. Blithedale Avenue is 3 lanes both directions, with median and additional turning lane at Camino Alto and Lomita Drive.
- Road is 80 feet wide.
- No street parking on E. Blithedale along segment.
- There are 8’ – 12’ sidewalks and curbs on both sides of the entire stretch of segment along E. Blithedale Avenue.
- 3 driveways along northern side of segment and 4 driveways along southern side of segment for shopping mall parking and gas station.
- Several parking lots located near segment, and street parking along Lomita Drive.
- Posted speed limit is 35MPH.

![Image 1](image1.png)

21. Looking south across E. Blithedale Avenue, from beginning of segment, crosswalks.

![Image 2](image2.png)

22. Looking west from intersection of E. Blithedale Avenue and Camino Alto, end of segment, wide sidewalk.

**Summary/ Opportunities and Constraints**: A very busy section of road with traffic heading to/from freeway, Mill Valley, Corte Madera, and shopping facilities. Installing a Class II bike lane would be feasible with narrowing of median and/or removing one of the turning lanes from both ends of the segment. This would allow for 3 lanes of traffic on both sides of E. Blithedale Avenue. The sections of E. Blithedale just west and east of this segment have just 1 lane of traffic. The existing sidewalk is in good condition and sufficiently wide for pedestrian traffic. Alternately since the sidewalk is 8’ – 12’ wide, designating it as a Class I Path would be feasible and involve minimal expense.
Segment 12: Along Camino Alto Road from the intersection of E. Blithedale Avenue to Mill Valley/Corte Madera city limit. See Figure 4

- Segment is 7500 feet/1.42 miles long.
- Route starts at the intersection of E. Blithedale Ave and proceeds north along Camino Alto Road to city limit of Mill Valley.
- A narrow, winding, steep roadway serving as the primary link between Corte Madera and Mill Valley.
- Road width at beginning of segment is 55’. After about 400 feet road narrows to 22’ plus shoulders for most of remaining segment.
- Road is one lane both directions except for turning lane at beginning of segment.
- Posted speed limit is 25 MPH.
- Shoulder of 0’ – 6’ feet for most of segment.
- Sidewalk on both sides of road for first 315’, then no sidewalk the remaining segment.
- “Share the Road” bicycle signage at 400’ of segment.
- Segment climbs from 10’ elevation to 325’ elevation with six sections greater than 5% and one 11% section.
Summary/ Opportunities and Constraints: A very popular route for pedestrians and bicyclists. The slope is under 5% for much of the segment, however the sections above 5% would be quite steep for some cyclists. To create a bicycle and pedestrian route would require widening the road shoulder in some sections and install a class II bike lane. Several hundred feet of about 4’ high retaining walls would need to be constructed. The first 400
lineal feet (l.f.) of the segment has a 55’ wide paved section, including right turn and merge lanes. There is room to re-stripe for bike lanes or a climbing lane. There are sidewalks on both sides for the first 315’.

The next 1100 lineal feet, up to Azalea Drive typically has an approximate 28’ paved section – two 11’ lanes and typically an approximately 6’ wide paved shoulder on the east side, except from Azalea Drive to just north of Kite Hill Lane, where there is very little shoulder on the east, adjacent to a steep slope with groves of eucalyptus trees. Typically there is a curb on the west side. To construct the climbing lane or the bike lanes, an additional 4 - 6’ of pavement width would be required. Generally the widening would occur on the west side of the road. There is existing sidewalk on the west from Azalea Drive to Kite Hill Lane. This would have to be rebuilt in conjunction with widening.

From Azalea Drive to Overhill Road (approximately 2,000 lineal feet) the lane widths remain 11’ but the shoulder is narrower – typically from 3’ to 6’ wide on the east, but in some locations virtually zero. The side slopes are steeper than the section to the south, requiring higher retaining walls, and the adjacent vegetation is mixed grassland and oak bay woodland. Typically the road would need to be widened by 4’ to 10’ to provide room for bike lanes or a climbing lane. About ½ of this portion, or 1,000 l.f., could be constructed with minor grading and vegetation removal. Approximately 1/3 of the remainder, or 333 l.f. would require major grading and vegetation removal, including some small oaks and bays. Approximately 2/3, or 666 l.f. will require construction of a 4’ to 6’ high retaining wall, primarily on the west/uphill side of the road to provide space for widening. The retaining wall construction may require removal of a few trees, but will generally avoid impact on trees.

It would generally not be feasible to widen this portion enough to provide a sidewalk without significant additional expense in height of walls as well as impact on vegetation. An alternative would be to construct a separate 5’ wide A.C. path along the top of bank and above the retaining walls, which would require a railing or fence for safety.

From Overhill Road to the city limits (approximately 3,850 lineal feet), the road shoulder would need to be widened the entire length. Approximately 1,925 l.f. has sufficient relatively level space to widen with minor grading. Approximately 1,925 l.f. would require a retaining wall, primarily on the west/uphill side of the road.

Just south of the city limit line trails from the adjacent open space preserves intersect Camino Alto. Informal trailhead parking for up to approximately a dozen vehicles occurs on turnouts on the east side of the road. The Bob Middagh Trail intersects from the east, and the Camino Alo Fire Road intersects from the west. Widening the road for bikes would reduce the available space for parking, eliminating a few spaces.

This intersection occurs on a relatively long straight portion of Camino Alto, approximately 550 l.f. Heading north there is approximately 180 l.f. of sight distance to the trailhead on the east side, 145 feet from that trail to the trail on the west side, and 225 feet of sight distance heading south to the west side trail.
**Segment 13:** From Mill Valley/Corte Madera city limit to Redwood Avenue in Corte Madera.  See Figure 4

- Segment is 5430 feet/1.03 miles long.
- Route starts at city limits, proceeds north on Corte Madera Road to intersection with Tamalpais Road.
- Posted speed limit is 25 MPH and 15 MPH on some downhill bends.
- Segment descends from 325’ elevation to 65’ elevation with nine sections greater than 5% and two 14% section.
- The majority of the segment the road is 24’ with 0’-3’ shoulder on both sides.
- The last 500 feet of the segment the road widens to 38’
- There are 18 driveways on the west side and 18 driveways on the east side of the road.
- There is a sidewalk for the last 2640’ on the west side of the road.
- There is a sidewalk for the last 350’ on the east side of the road.

<table>
<thead>
<tr>
<th>236. Room to widen, driveway.</th>
<th>227. Typical section, no shoulder.</th>
</tr>
</thead>
<tbody>
<tr>
<td>248. Rudimentary sidewalk along northern end of segment.</td>
<td>228. Room to widen, tree beside road.</td>
</tr>
</tbody>
</table>
Summary/ Opportunities and Constraints: A very popular route for pedestrians and bicyclists. The first 3000’ is oak woodland without adjacent structures. The remaining 2430’ is flanked by houses on both sides and many driveways. The slope is quite steep for many cyclists.

Corte Madera Avenue is narrow and winding, passing through steep terrain, with an approximately 24’ wide roadway and 0’ to 3’ paved shoulders. This segment is primarily oak woodland bordered by open space without adjacent structures, but there are approximately six residential driveways on the east side toward the north end.

This portion of Corte Madera Avenue has several driveways connecting on the east side of the road that would need to be addressed in conjunction with widening. There are a number of locations where mature oaks or redwoods would need to be removed in conjunction with the widening.

It would not be feasible to create the width envisioned for bike lanes or a wide climbing lane on Camino Alto without major impacts on the adjacent residential properties, and removal of most or all parking. This would also alter the character and scenic resources of the neighborhood.

Along the last 500 feet of the segment on Corte Madera Avenue the roadway straightens, widens to 38 feet, and has sidewalks on both sides. There are striped shoulders outside of curbside parking, providing marginal space for bikes – approximately 10’ feet total, rather than the 12’ recommended for combined parking/bike lanes. Potentially the traffic lanes could be narrowed to provide the space for bike lanes, or a climbing lane on the east side.

The route then turns east along Redwood Avenue. There one east bound lane, and westbound right turn and left/through lanes, and no curbside parking. There is insufficient room to stripe for bike lanes without narrowing the lanes.

Adding a Class II bike lane would be feasible by widening the road for the first 4930’.

In total, to create a bicycle and pedestrian route 4930’ of road widening would be needed, of which:

- About 1643’ of road side has sufficient room to widen without constructing retaining walls.
- About 1643’ of hillside retaining walls would need to be constructed.
- About 1643’ of slope-side retaining walls would need to be constructed.

An alternative plan would be to restripe the lanes to create a wider uphill climbing lane and narrower downhill lane.

Segment 10: Existing Sandra Marker Trail. Completes connection to study end point
• Existing Class I bike path
• Located in the old railroad right-of-way
Figure 4: Segments - Camino Alto/Corte Madera Ave