3.0 ENVIRONMENTAL SETTING

3.1 LOCATION

The Master Plan corridor stretches the entire length of Santa Cruz County from the San Mateo County line north of Davenport past the Pajaro River in Watsonville. The trail would extend through unincorporated Santa Cruz County and portions of the cities of Santa Cruz, Capitola, and Watsonville. The southernmost segment (segment 20) would extend into Monterey County. The MBSST Network corridor would primarily align with the Santa Cruz Branch Rail Line right-of-way, a 32-mile, continuous travel corridor, 31-miles of which are now owned by the Santa Cruz County Regional Transportation Commission (RTC). The rail right-of-way would serve both rail service and bike/pedestrian trail functions. North of the railroad right-of-way, the trail would align along the west side of Highway 1 for 7.5 miles, for a combined trail length of 39.2 miles. Other proposed new trails outside of the primary MBSST corridor would comprise 10.4 additional miles of paved and un-paved coastal spur trails. The trail network would span a combined total of 49.6 miles of bicycle and pedestrian facilities. The railroad right-of-way generally runs along the coast, parallel to the Pacific Ocean, except where it turns inland near Manresa State Beach. From there, the tracks run inland toward Watsonville and ultimately end at the Watsonville Junction.

The Master Plan corridor is separated into three reaches: the northern reach extends from the San Mateo County line to the western Santa Cruz city limit; the central reach extends from the western Santa Cruz city limit to Seascape Boulevard; and the Watsonville reach extends from Seascape Boulevard to Railroad Avenue in Monterey County. These reaches are further divided into smaller "segments." Segments one through six fall within the northern reach; segments seven through 14 fall within the central reach; and segments 15 through 20 fall within the Watsonville reach.

Figures 2-1 and 2-2 in Section 2.0, *Project Description*, illustrate the regional location of the MBSST Network corridor as well as the three reaches within the MBSST Network, respectively.

3.2 PHYSIOGRAPHY AND CLIMATE

Because the Master Plan corridor stretches the entire length of Santa Cruz County, the physiographic setting of the MBSST Network varies. The topography of the 49.6-mile area varies from flat to steep and rugged. Along the primary alignment, the MBSST Network connects to the scenic coastal bluffs in the north county, traversing rural agricultural and open space lands in the south county. Dense urban areas characterize the central portion of the proposed alignment.

The majority of the MBSST Network corridor is located on lowlands west of the Santa Cruz Mountains and along the coastal bluffs in the northern extent of the County. The area of the corridor that turns inland toward Watsonville generally follows the flood plains of the Watsonville Slough and Pajaro River. Because the project is located on the lowlands of the Santa Cruz Mountains, moderate to steep slopes are prevalent throughout the alignment. Elevations throughout the corridor range from sea level to approximately 30 to 40 feet above sea level.

The MBSST Network would traverse through nearly every watershed in Santa Cruz County, and be located where the watersheds drain, due to its coastal location. A list of the watersheds within the MBSST Network is provided below. Because several watersheds fall within more than one reach of the MBSST Network, the watersheds are listed in order from north to south, rather than by reach.

- *Waddell*
- *Swanton Bluffs*
- *Scott Creek*
- *Davenport*
- *San Vicente Creek*
- *Liddell Creek*
- *Laguna Creek*
- *Majors*
- *Baldwin Wilder*
- *San Lorenzo River*
- *Arana Gulch – Rodeo*
- *Soquel Creek*
- *Aptos Creek*
- *Pajaro River*
- *Watsonville Slough*
- *San Andreas*

The watersheds cover almost all of Santa Cruz County, except for the less than 20 acres that are within the Año Nuevo Creek Watershed and the Pescadero Watershed. Each watershed consists of numerous tributaries, with over 50 tributaries combined.

The project is located within the North Central Coast Air Basin (NCCAB). A semi-permanent high pressure cell in the eastern Pacific is the basic controlling factor in the climate of the NCCAB. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends from the Pacific High, forming a stable temperature inversion of warm air over a cooler coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The airflow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High pressure cell. The Pacific High migrates southward during the winter and so has less influence on the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

3.3 ADJACENT LAND USES

Because the Master Plan corridor stretches the entire length of Santa Cruz County, the surrounding land uses vary from reach to reach and segment to segment. The general land use setting of each reach is described below.

Northern Reach. The northern reach of the MBSST Network begins at the San Mateo/Santa Cruz county line on Highway 1, just north of the Waddell Bluffs, and continues south to the northern Santa Cruz city limits near Schaffer Road (refer to Figure 2-5 in Section 2.0, *Project Description*). The northern reach is bounded primarily by steep coastal bluffs from Waddell Creek to Yellow Bank Beach at Coastal Dairies, transitioning to rural agricultural land and natural coastal mesas south to Schaffer Road. There are numerous small coves and beach strands with informal footpaths down to the beach shore. Large sections of the coastal edge are owned by California State

Parks with several scenic rest stops along Highway 1 providing passive recreation access to beaches, coastal bluffs, and inland parkland trails. Land uses within the vicinity of the more remote regions of the northern reach include agriculture and open space. Where the northern reach parallels the town of Davenport (segments 4 and sub-segment 5.1), land uses include residential, institutional, and religious institutions (i.e. places of worship).

Central Reach. The central reach begins at the City of Santa Cruz northern city boundary near Schaffer Road and extends southeast to Seascape Park just south of Aptos (refer to Figure 2-7 in Section 2.0, *Project Description*). This reach of the MBSST Network corridor traverses through densely populated coastal urban areas, including industrial, commercial, residential, and recreational land uses. The southern portion of the central reach parallels the coast, meandering atop steep coastal bluffs and multiple residential and resort areas.

Watsonville Reach. The Watsonville reach begins at railroad mile marker 10 near Seascape Village Park and ends at Railroad Avenue in Monterey County (refer to Figure 2-9 in Section 2.0, *Project Description*). At its start, this reach parallels the coastal edge for approximately one mile before it begins following the San Andreas Road alignment inland as it heads south and east. The surrounding landscape is primarily open space with some residential areas near Manresa, tapering off to rural farm and agricultural lands further to the south. The northern portion of the Watsonville reach (approximately segments 16 and 17) would be located adjacent to agricultural activity, while segments 18 and 19 would pass through industrial and commercial areas in the City of Watsonville. Segment 20 would extend into Monterey County.

This page intentionally left blank.