

CHAPTER 8:

Infrastructure and Public Services

This chapter describes the infrastructure systems and public services that will support the private development and public improvements described in the previous chapters, and how the systems and services will be provided. The infrastructure systems include water, wastewater, stormwater, gas, electricity, and telecommunications. The public services include recreation and parks, police and fire, and public educational facilities.

This chapter is organized into the following sections:

- 8.1. Utilities
- 8.2. Recreation and Parks
- 8.3. Public Safety
- 8.4. Public Educational Facilities
- 8.5. Infrastructure and Public Services Goals and Policies

8.1: UTILITIES

Water and Wastewater Supply

The City of Brentwood provides potable and non-potable water supplies and distribution to customers within the Specific Plan area. The City also provides wastewater collection, treatment, and disposal services for residents and businesses located in the Specific Plan area.

Water demands for the Specific Plan will be served using the City's existing and future portfolio of water supplies. The analysis of water demands generated by the Specific Plan is contained in the Water Supply Assessment prepared for this project, which is attached as Appendix C.

Wastewater generated by future development within the Specific Plan area would be conveyed to the City of Brentwood Wastewater Treatment Plant.

There is currently limited water and wastewater infrastructure located within the interior portions of the Specific Plan area. As such, water supply and wastewater conveyance infrastructure will need to be extended throughout the currently unserved portions of the Specific Plan area. The majority of the primary water supply and wastewater conveyance infrastructure will be constructed in conjunction with the Primary and Conceptual Circulation Networks, as shown on Figures 5.1 and 5.2, respectively. Water supply and wastewater conveyance infrastructure will be located underground, within the right-of-way footprint of future roadways in the Specific Plan area, and must be constructed to meet the requirements contained in the City of Brentwood Standard Plans and Specifications.

The majority of the water supply infrastructure will consist of 12" water mains and 8" non-potable water lines. The majority of the wastewater conveyance infrastructure will consist of 12" and 10" sewer mains. Additional details regarding the water and wastewater infrastructure needed within each Primary Circulation Network, as well as cost estimates, are provided in Appendix D: PA-1 Roadway and Utility Engineer's Estimate.

Stormwater Conveyance

The City provides storm drainage collection within the Specific Plan area, and is responsible for maintenance of the collection system. The Contra Costa County Flood Control and Water Conservation District is responsible for constructing and

maintaining regional flood control basins, channels, and creeks throughout the county, including the City of Brentwood.

All municipalities within Contra Costa County (and the County itself) are required to develop and implement restrictive surface water control standards for new development projects as part of the renewal of the Countywide NPDES permit. Known as the “C.3 Standards,” new development and redevelopment projects that create or replace a specified amount of impervious surface area must contain and treat stormwater runoff from the site. Future development projects within the Specific Plan area would be C.3 regulated projects, and are required to include appropriate site design measures, source controls, and hydraulically-sized stormwater treatment measures.

Solid Waste

The Solid Waste Division of the City of Brentwood Public Works Department provides municipal solid waste (MSW) collection services, including garbage, yard waste, and recycling, to residents and businesses within the Specific Plan area. All of the MSW is hauled to the City’s Solid Waste Transfer Station, located at 2300 Elkins Way, approximately 3 miles east of the Specific Plan area. At the transfer station, the MSW is checked for potentially hazardous waste material, and transferred onto larger trucks for ultimate disposal at a sanitary landfill or processed elsewhere. The City currently disposes and/or processes MSW (garbage, recycling, and green waste) at the Keller Canyon County Landfill, operated by Allied Waste Systems Republic Services and located within the unincorporated area of Contra Costa County, near the City of Pittsburg.

The City maintains contractual agreements with the Delta Diablo Sanitary District to provide household hazardous waste collection and disposal services in the Specific Plan area. Household hazardous waste can be taken to the Delta Household Hazardous Waste Collection Facility, located at 2550 Pittsburg-Antioch Hwy, in Pittsburg, or dropped off at one of several community collection events that take place in various locations in the City and throughout eastern Contra Costa County throughout the year.

The Specific Plan anticipates that the City’s solid waste collection, disposal, and processing services can accommodate the increased waste associated with buildout of the Specific Plan area.

Cable, Phone, Gas, and Electric

AT&T, Comcast, and Sonic currently provide telecommunication, cable television, and Internet services. This includes Sonic's symmetric Gigabit Fiber Internet service that transfers data at the rate of 1000 megabits per second. Utility infrastructure in the project area is located both aboveground on utility poles and belowground in public utility easements.

The Pacific Gas and Electric Company (PG&E) provides electric services in the project area. Electrical infrastructure in the project area is located aboveground on utility poles as well as belowground. PG&E also provides natural gas services in the project area. Natural gas pipelines are located belowground.

Infrastructure improvements will be required to adequately accommodate development projects in the Specific Plan area. These improvements will be determined on a project-specific basis and required to be constructed by the applicant or utility provider. As such, no cost should be borne by the City.

In conjunction with development, existing overhead facilities should be undergrounded to improve the aesthetics and the reliability of the utilities. Where feasible, undergrounding of utilities shall be coordinated with any improvements to the right-of-way to save time and resources.

8.2: PARKS & RECREATION

The Specific Plan area is not currently served by any parks or open space, but is located within close proximity to several parks and other open spaces in the surrounding areas. This includes Appaloosa Park and Palomino Park in the Brighton Station neighborhood to the east and Heidorn Park in the neighborhood to the west (Antioch).

To accommodate the Specific Plan area's residents, employees, and visitors' recreation needs, new development will be required to provide parks and recreation facilities consistent with the Specific Plan's open space requirements and the Parks and Recreation Department's standards. As part of these improvements, the City encourages enhancements to existing corridors, such as the Mokelumne Trail and Sand Creek corridors, and other potential corridors not currently identified, and the integration of these corridors into the Specific Plan's open space network.

8.3: PUBLIC SAFETY

Public safety consists of police, fire protection, and emergency services. In the Specific Plan area, police services are provided by the Brentwood Police Department, and fire protection and emergency services are provided by the East Contra Costa Fire Protection District (ECCFPD). The Brentwood Police Department is located at 9100 Brentwood Boulevard, approximately 3 miles southeast of the Specific Plan area. The ECCFPD station primarily responsible for serving the Specific Plan area, Station 52, is located at 201 John Muir Parkway, approximately 2 miles south of the Specific Plan area.

New development associated with the implementation of the Specific Plan, particularly the influx of additional residents and employees, will result in the increased demand for police, fire protection, and emergency services staff. The actual need for additional staff will be evaluated by the service providers as development occurs.

The Specific Plan envisions that police staffing increases will be accommodated by stations located outside of the Specific Plan area. To accommodate the ECCFPD's expanded service in the area, the Specific Plan includes a 1-acre parcel designated Public Facilities, located at the northwest corner of Shady Willow Lane and the Mokelumne Trail, which may accommodate a future fire station.

The future construction of an eBART station would also involve the introduction of BART Police services within the transit station area. The BART Police Department is funded through ridership fares and sales tax, which ensures adequate police services are provided to accommodate additional ridership.

8.4: PUBLIC EDUCATIONAL FACILITIES

The Specific Plan area is served by the Brentwood Union School District for kindergarten and grades 1 through 8 and the Liberty Union High School District for grades 9 through 12. New development associated with the implementation of the Specific Plan will result in an increased number of students residing in the Specific Plan area, and the associated demand for public school services. The actual need for additional services will be evaluated by the school districts as the student population increases, and the Specific Plan anticipates that this demand will be met by schools located outside of the Specific Plan area.

8.5: INFRASTRUCTURE AND PUBLIC SERVICES GOALS AND POLICIES

Goal IF-1: Provide adequate infrastructure to support the anticipated level of development intensity and protect health and safety.

Policy IF-1.1: Provide utility upgrades as needed to support increased density and intensity in the Specific Plan area.

Policy IF-1.2: Require development and infrastructure projects to be consistent with all applicable City infrastructure plans, including the Water Master Plan, the Wastewater Master Plan, the Brentwood Standard Plans and Specifications, and the Capital Improvement Program.

Goal IF-2: Ensure adequate water supply is available to serve existing and new development in the Specific Plan area.

Policy IF-2.1: Ensure that water system infrastructure is in place prior to occupancy of new development in the Specific Plan area.

Policy IF-2.2: Use recycled water for landscaping irrigation within roadways, parks, and facilities to the greatest extent feasible.

Policy IF-2.3: Reduce water consumption through a program of water conservation measures.

Policy IF-2.4: Include construction of needed water system improvements in the City's Capital Improvement Program as timing or conditions warrant.

Goal IF-3: Ensure adequate wastewater service capacity is available to serve existing and new development in the Specific Plan area.

Policy IF-3.1: Maintain existing levels of wastewater service and provide for new development by preserving and improving infrastructure in the Specific Plan area.

Policy IF-3.2: Ensure that wastewater system infrastructure is in place prior to occupancy of new development in the Specific Plan area.

Policy IF-3.3: Include construction of needed wastewater system improvements in the City's Capital Improvement Program as timing or conditions warrant.

Goal IF-4: Ensure that solid waste disposal needs for existing and new development are met, while providing opportunities for reduction, reuse, and recycling.

Policy IF-4.1: Expand recycling efforts in the Specific Plan area, and encourage recycling by all residents and employees.

Policy IF-4.2: Comply with the City's construction and demolition debris ordinance (Brentwood Municipal Code Chapter 8.40).

Policy IF-4.3: Encourage the use of recycled content building materials.

Goal IF-5: The City shall work with utility providers to ensure that the needs of existing and new development in the Specific Plan area are adequately met.

Policy IF-5.1: Provide adequate electrical and gas to support new development.

Policy IF-5.2: Incorporate energy conserving design and equipment into new development in order to promote energy conservation.

Policy IF-5.3: Allow co-generation systems utilizing all methods of alternative energy production where feasible.

Policy IF-5.4: Develop a plan to expand current fiber optic networks throughout the Plan Area to attract new high-tech businesses and provide new hotel development with a significant amenity to business travelers.

Policy IF-5.5: Require all new development projects to incorporate broadband infrastructure in their planning and construction. All development projects shall install telecommunications conduits in all streets that are affected by the development.

Policy IF-5.6: Ensure street improvement projects incorporate the laying of fiber and conduit.

Goals IF-6: Manage, maintain, and improve stormwater drainage and capacity in the Specific Plan area.

Policy IF-6.1: Require all development projects to demonstrate how stormwater runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the City's NPDES Municipal Regional Permit. Project applicants shall address any drainage impacts as necessary.

Policy IF-6.2: Maintain drainage channels in a naturalized condition to the greatest extent feasible, subject to health and safety requirements and as otherwise described in the Conservation and Open Space Element of the General Plan.

Policy IF-6.3: Incorporate sustainable stormwater management features in new development and public improvements, including low impact development (LID) features and swales, permeable pavers, and other similar features to manage stormwater runoff from public streets.

Policy IF-6.4: Incorporate recreational trails and parkway vegetation design in channel improvements, and explore utilizing detention basins for parks, ball fields, and equestrian areas.

Policy IF-6.5: Include construction of needed stormwater system improvements in the City's Capital Improvement Program as timing or conditions warrant.

Goal IF-7: Provide police services, and work collaboratively with fire and emergency service providers, to ensure the safety of the Specific Plan area.

Policy IF-7.1: Coordinate with the East Contra Costa Fire Protection District in planning for adequate fire and emergency service.

Policy IF-7.2: Require new development to comply with the Brentwood Police Department and the East Contra Costa Fire Protection District's regulations pertaining to site and building design.

Policy IF-7.3: Design roundabouts in the Specific Plan area to ensure that all fire service vehicles can safely and efficiently navigate through the intersection without rolling over any curb.

Goal IF-8: Coordinate with public education providers on the planning of educational facilities to meet the needs of students residing in the Specific Plan area.

Policy IF-8.1: Work with the Brentwood Union School District and the Liberty Union High School District in planning for adequate public school facilities. Coordinate with affected school districts to consider the impacts of residential development on school facilities and services. Help facilitate the school districts and developers in determining school related needs that result from development, and in addressing increased need through the imposition of development fees and other measures to the extent permitted by law.

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