

9 UTILITIES PLAN

The West Roseville Specific Plan (WRSP) includes utility infrastructure required to serve the Plan Area. Each component of the utility infrastructure system is designed to accommodate build out of the WRSP area. Phasing of infrastructure improvements and funding obligations are detailed in the Specific Plan development agreements. Table 9-1 summarizes the utility providers to the WRSP.

Table 9-1: WRSP Utility Providers

| Utility | Provider |
|----------------------------|--------------------------|
| Water | City of Roseville |
| Wastewater | City of Roseville |
| Recycled Water | City of Roseville |
| Drainage and Flood Control | City of Roseville |
| Electric Service | City of Roseville |
| Natural Gas | Pacific Gas and Electric |
| Communications | Various |
| Solid Waste Disposal | City of Roseville |

Utility infrastructure will be constructed, dedicated and easements provided consistent with this Specific Plan, the project development agreements and all applicable standards and requirements.

9.1 WATER

The City of Roseville will provide water service (supply, treatment and conveyance) to the WRSP. Water will be delivered to the Plan Area via the City's backbone system to four connection points along Fiddymont Road at Blue Oaks Boulevard, Hayden Parkway, Veterans Boulevard and Pleasant Grove Boulevard. The City will serve the plan during normal operations demand. Peak demand volumes will be stored in two on-site storage tanks located south of the PGWWTP on Parcel W-74. Reservoirs will be used to augment the City supply during peak and emergency system demands. Groundwater wells will be developed as a backup water supply.

The WRSP water demand is approximately 7,422 acre feet per year. The water supply for the WRSP will consist of a combination of sources for wet and dry year scenarios. While not included in the demand figure, City water conservation measures may reduce the projected water demand. Non-potable (recycled) water will be utilized for irrigation purposes in both wet and dry years (see Section 9-3). Potable water for the WRSP will be obtained through the City's existing contracts with Placer County Water Agency (PCWA) and the U.S. Bureau of Reclamation. In addition, a transfer of 3,200 acre feet per year from the San Juan Water District will supplement the City's water supply.

Water will be distributed within the WRSP via a looping system that parallels collector and arterial roadways on a transmission main grid. The transmission and distribution system consists of 12-inch to 24-inch diameter mains. Four water supply wells are planned to ensure service in emergency situations. Two potable water storage tanks will be constructed on Parcel W-74. The water distribution system, storage tanks and well locations are reflected on Figure 9-1.

9.2 WASTEWATER

Sanitary sewer service is provided to the WRSP by the City of Roseville. The City's wastewater treatment system utilizes the Pleasant Grove Wastewater Treatment Plant (PGWWTP) and Dry Creek Wastewater Treatment Plant (DCWWTP). The WRSP will generate approximately 2.03 mgd average daily wastewater flow. The WRSP will be served by the PGWWTP. The PGWWTP is located adjacent to the central portion of the Plan Area, west of Phillip Road and south of Blue Oaks Boulevard. The WRSP includes a 15-acre area (Parcel W-71), which could be used for a future expansion of the PGWWTP, if and when an expansion becomes necessary. A 765 foot to 1000 foot non-residential buffer encumbers the WRSP to the west, south and east of the PGWWTP. The City owns the parcels within the 1,000-foot non-residential buffer north of the PGWWTP and is committed to maintaining non-residential land uses for these parcels. This buffer is intended to ensure compatibility between the PGWWTP and adjacent uses. The 1000-foot non-residential buffer will be extended past the 15-acre future expansion area to insure compatibility south of the expansion area. WRSP land uses have been planned accordingly.

The location of the PGWWTP and the backbone wastewater collection system are reflected on Figure 9-2. Wastewater flows from the WRSP will be directed to PGWWTP by a network of pipes installed within street rights of way or easements. Sewer collection pipes will range in size from 8-inches to 33-inches. A small portion of the WRSP will connect to an existing City-owned 78-inch diameter pipe just north of the intersection of Blue Oaks Boulevard at Fiddyment Road south of Pleasant Grove Creek. As a result of site topography, the sanitary sewer system will not require lift stations. A siphon will be required near the Pleasant Grove Creek crossing by Phillip Road in order to allow sewer lines to gain the necessary depth to cross the creek. The siphon will consist of a deeper pipe connected by underground structures with surface manholes. All sewer improvements will be consistent with the Regional Wastewater Master Plan.

9.3 RECYCLED WATER

The City of Roseville will provide the WRSP with recycled water from the Pleasant Grove Wastewater Treatment Plant (PGWWTP). The City currently provides recycled water to several locations on the west side of the City of Roseville. The WRSP will utilize a semi-aggressive strategy of recycled water use by irrigating landscaping at parks, schools, commercial, business professional, industrial and multi-family projects as well as publicly landscaped areas (including roadway landscape corridors and medians). The use of recycled water offsets potable water demand and is an important component of the overall WRSP water supply. The estimated annual recycled water demand in the WRSP is 1.57 mgd (1,754 AF/yr).

A recycled water storage facility is planned off-site, south of Blue Oaks Boulevard and west of Phillip Road. This facility will store recycled water for use in the WRSP and other areas of western Roseville. The storage facility consists of two storage tanks with a capacity of 850,000 gallons each for a total of 1.7 mgd, and will include a backup potable water supply. A backbone of dedicated non-potable water lines ranging from 6-inches to 24-inches in diameter will be constructed within street rights of way to serve the WRSP. Figure 9-3 identifies the location of the recycled water storage facility and recycled water distribution system.

9.4 DRAINAGE AND FLOOD CONTROL

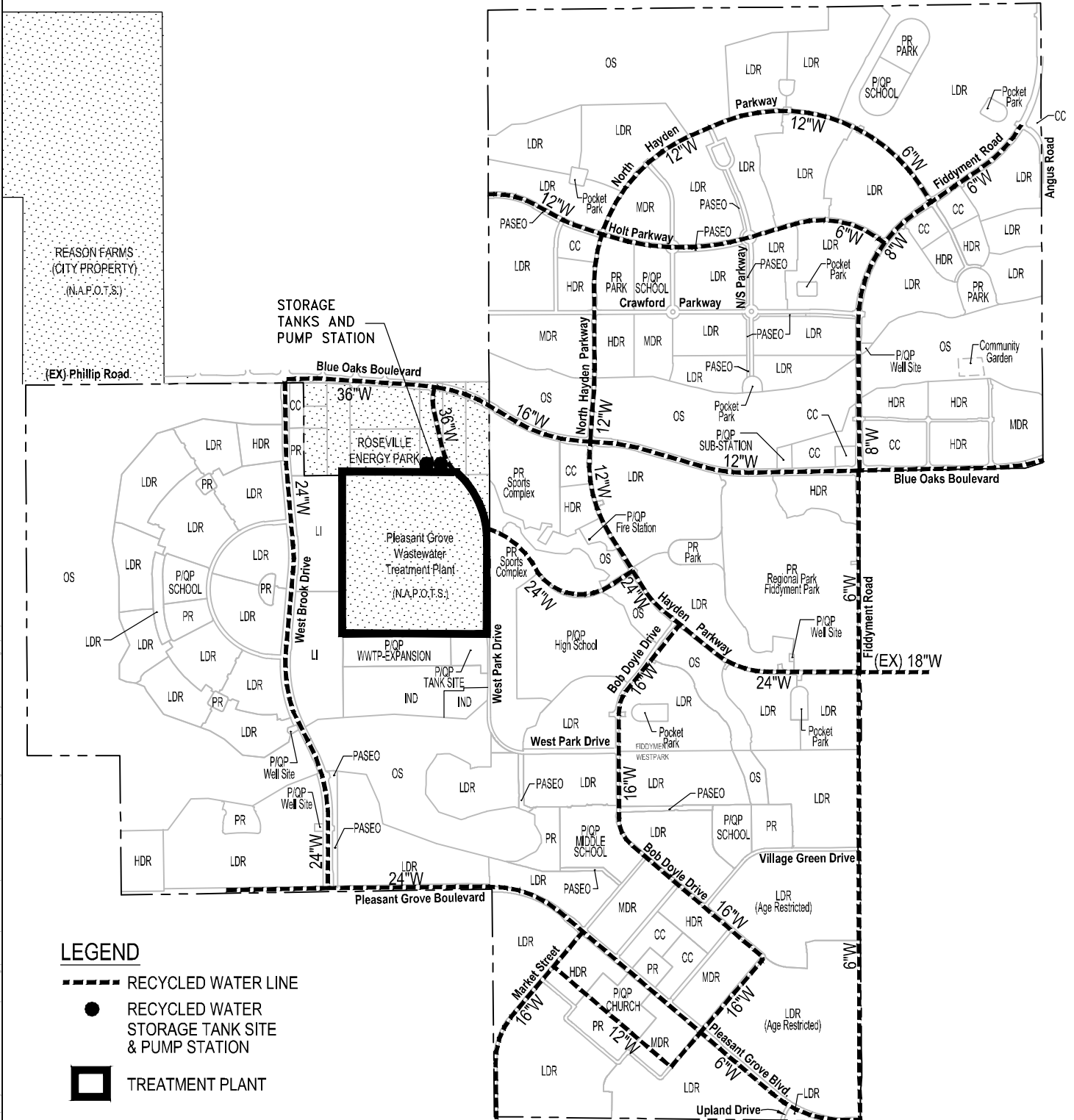
The WRSP is located within the Pleasant Grove Creek and Curry Creek watersheds, both of which are located within the larger Natomas Cross Canal watershed of northwestern Placer County and southeastern Sutter County. Approximately 64% of the WRSP, the northern and eastern portions, are within the Pleasant Grove Creek watershed. The remainder is within the Curry Creek watershed.

The main branch of Pleasant Grove Creek drains east to west for approximately 1.5 miles through the WRSP within an open space corridor (Parcels F-83, F-84, F-85) north of Blue Oaks Boulevard. The floodplain for Pleasant Grove Creek varies in width from 1,200 feet at the east Plan Area boundary to 300 feet at the west boundary. Other WRSP creeks that eventually drain into Pleasant Grove Creek include Kaseberg Creek, Coyote Creek and the South Branch of Pleasant Grove Creek.




A tributary of Curry Creek drains from east to west through the WRSP open space (Parcels W-81 and W-83) to the main branch of Curry Creek located a half-mile south of the Plan Area. Curry Creek has a floodplain varying in width from 150 to 700 feet.

RECYCLED WATER DISTRIBUTION SYSTEM

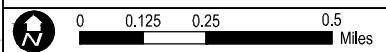
Figure 9-3



LEGEND

-  RECYCLED WATER LINE
-  RECYCLED WATER STORAGE TANK SITE & PUMP STATION
-  TREATMENT PLANT

Note: Underlying parcel basemap used in this figure is not regularly updated. Refer to Figure 4-1 for the most up to date parcel basemap.



Due to the location of that portion of the WRSP within the Pleasant Grove Watershed, hydrologic modeling indicates that onsite detention of runoff would likely contribute to peak flows downstream. This is because the peak WRSP discharge would occur before the most significant watershed peak, reducing the potential for un-detained peak flows to coincide downstream. As a result, no detention is proposed for the portion of the project within the Pleasant Grove Watershed. Conversely, within the Curry Creek watershed, hydrologic modeling indicates that onsite detention of runoff would contribute to a reduction of peak flows downstream. As a result, five detention basins are proposed on the Westpark property. Two of the basins are planned within open space parcels W-81 and W-83 and three of the basins are planned within LDR parcels W-8, W-11 and W-18. The final location of these detention basins will be determined with small lot tentative subdivision maps. Detail relating to the sizing, timing, construction, funding and maintenance of the basins is included in the Specific Plan development agreements. The detention basins will be included in the WRSP 404 permit and Preserve O&M Plan.

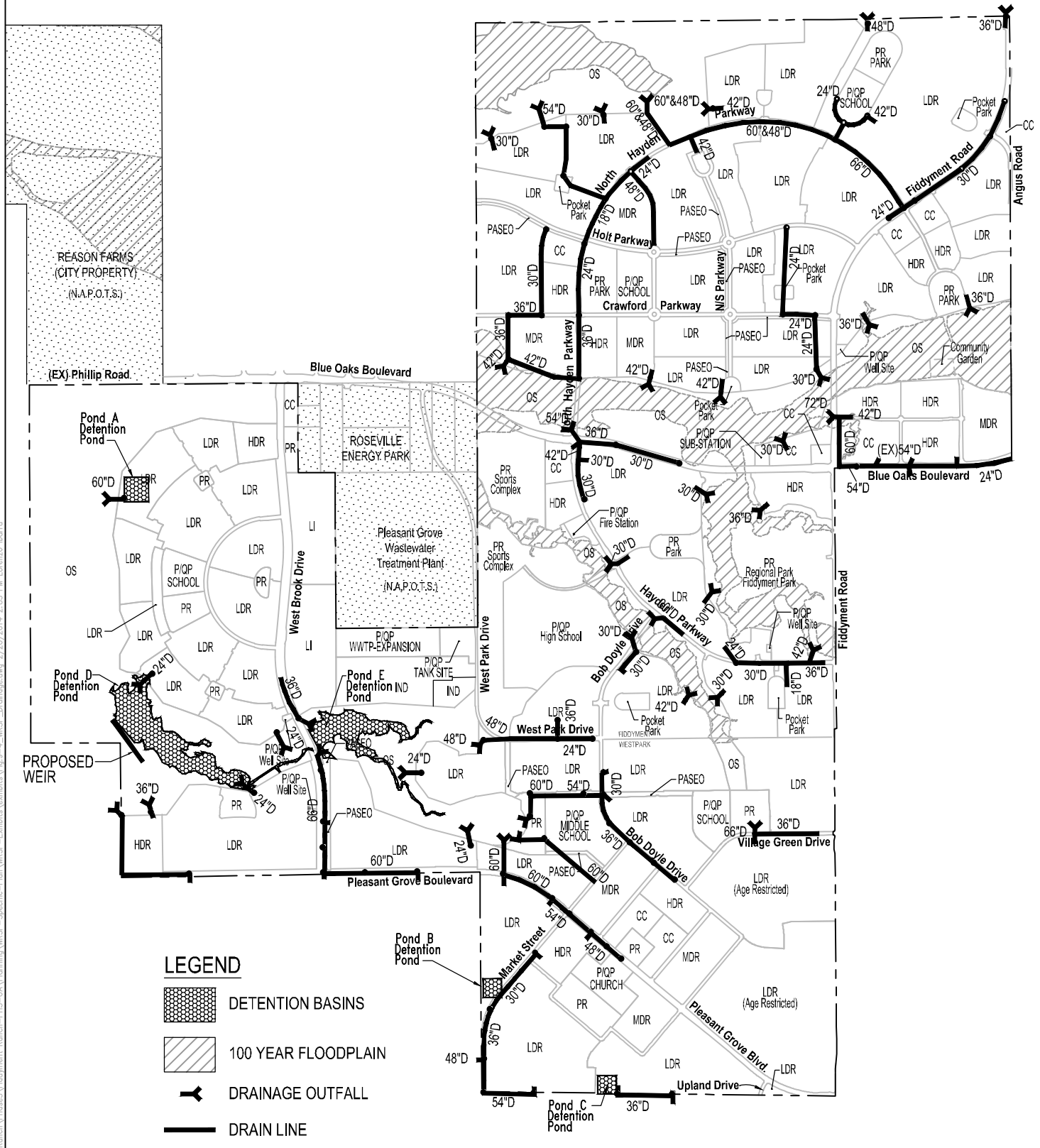
In addition to detention, the WRSP landowners will participate with the City of Roseville in constructing a regional retention basin to mitigate stormwater volume runoff. The WRSP's contribution to this basin is approximately 430 acre-feet. The regional retention basin will be located within the Pleasant Grove watershed west of the WRSP.

WRSP drainage improvements and floodplains are shown on Figure 9-4. On-site drainage improvements consist of a combination of conventional subsurface and surface drainage systems including rechannelization of minor tributaries, construction of pipe conveyance systems and construction of culverts and bridges over creek and tributary crossings. Stormwater will be discharged through outfalls into open space corridors. Settling basins, sand filters, grassy swales and other best management practices will be utilized at pipe outfalls or other appropriate locations for water quality management, and to convey stormwater runoff to receiving waters while minimizing impacts to open space resources.





Drainage facilities will be designed and constructed in conformance with City of Roseville Improvement Standards, the Placer County Flood Control Agency's Stormwater Management Manual, and the open space preserve Operations and Maintenance (O&M) Plan, the preparation of which is a requirement of the Clean Water Act 404 permit. The number and location of outfalls shown in Figure 9-4 is based on the best available information and is subject to refinement during the subdivision map approval process. The Preserve O&M Plan will include requirements to minimize erosion and direct drainage away from vernal pool habitat by employing conceptual drainage improvements to be outlined in the plan (swales, outfalls, energy dissipation and erosion control).

ON-SITE DRAINAGE IMPROVEMENTS

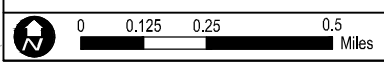
Figure 9-4



LEGEND

-  DETENTION BASINS
-  100 YEAR FLOODPLAIN
-  DRAINAGE OUTFALL
-  DRAIN LINE

Note: Underlying parcel basemap used in this figure is not regularly updated. Refer to Figure 4-1 for the most up to date parcel basemap.



9.5 ELECTRIC SERVICE

The Roseville Electric Department will supply electricity to the WRSP. Demand for electrical service is estimated to average 60.67 MW per year within the WRSP. An electric substation is planned on a 1.55-acre site (Parcel F-65) near the northwest corner of Blue Oaks Boulevard and Fiddymont Road. 60kV overhead transmission lines will loop through the Plan Area extending westerly on the north side of Blue Oaks Boulevard and south through a 35-foot power line easement west of the PGWWTP. The power line easements extend south and east outside of the WRSP to connect to the existing Fiddymont Substation near Pleasant Grove Boulevard and Fiddymont Road. Underground electrical distribution will be extended to individual projects in conjunction with roadway improvements. In addition, street lighting will be provided along all public streets as part of the roadway frontage improvements. All electric and street light facilities will be constructed to the City's then current standards.

The location of the proposed electric substation and the alignments of the 60kV power line easements are shown on Figure 9-5. The proposed alignment requires the purchase of off-site easements. Included on Figure 9-5 is an alternative 60kV power line alignment. If the off-site easements for the proposed 60kV alignment are not obtained at the beginning of Phase I, the alternate alignment will be constructed. The alternative alignment follows Pleasant Grove Boulevard east to the Fiddymont substation. If the alternate alignment is constructed, that portion of the 60kV line through the Village Center (from points 500 feet east and west along Pleasant Grove Boulevard), will be placed underground.

At the time of WRSP approval, the City had proposed the Roseville Energy Park. While not within the WRSP, the Roseville Energy Park will be located immediately adjacent to the Plan Area, north of the WWTP. Roseville Energy Park will be a City operated power generation facility planned to include a 150-megawatt natural gas generating facility, a one-megawatt photovoltaic solar energy site, and a Community Energy Center.

9.6 NATURAL GAS

Pacific Gas & Electric Company (PG&E) will provide natural gas upon request and in accordance with the rules and tariffs of the California Public Utilities Commission. PG&E's long-range plans provide for availability of gas service to accommodate increased demand. Service will be provided to the WRSP from existing infrastructure adjacent to the Plan Area. Delivery of gas service to individual projects in the WRSP will be reviewed by PG&E at the time of proposal.

9.7 COMMUNICATIONS

The WRSP is within the service areas of Roseville Telephone Company (SureWest Communications) and SBC/Pacific Bell. The exchange boundary between Roseville Telephone and SBC/Pacific Bell runs directly through the Plan Area in a north-south direction from below Pleasant Grove Boulevard west of the Village Center north to Pleasant Grove Creek and then east to the Plan Area boundary. One or more private cable television companies will provide service to the WRSP.

Distribution lines to individual parcels will be extended from existing infrastructure adjacent to the Plan Area and will occur as development takes place. The appropriate providers will review delivery of telephone and cable television services to individual projects in the WRSP at the time of proposal.

9.8 SOLID WASTE

The City of Roseville will provide solid waste services to the WRSP. Solid waste will be collected and delivered to the Western Placer Waste Management Authority facility located northwest of the City at Athens and Fiddymont Roads. The Authority owns a Material Recovery Facility (MRF) which receives, separates, processes and markets recyclable materials removed from the waste stream. Residual waste is transferred to the Authority's Western Regional Sanitary Landfill located on the same site.

A solid waste recycling area is planned within the WRSP on the west side of Phillip Road, south of the PGWWTP on a site designated for water storage tanks (Parcel W-74). Residents will be able to drive into the recycling area to off-load recyclable materials.

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