EV Charger Site Detail – City of San José

1. 3rd Street Garage @ 95 N. 3rd Street

Description and Context

The 3rd Street Garage is a six-story garage located along N 3rd Street, between E St John Street and E Santa Clara Street. The employee garage is the basement level within the public garage.

Location and Access

The site is in downtown San José, with access on the east side from N 3rd St. The garage is within a commercial area. Parking is available to the public for a fee, but fleet vehicles park in the basement level.

Fleet Electrification

Seven light-duty vehicles are domiciled at the 3rd Street Garage. None of these vehicles have been transitioned into EVs. This fleet is made up mostly of SUVs and pickup trucks, as well as one sedan. Vehicles domiciled at this facility have an average of 14 hours of dwell time per day which could be used for charging.

Parking

The garage has seven existing dual port L2 chargers for public use. Public parking is available on all floors, with the lower floor for fleet vehicles and employees.

Energy Requirements

The electrical demand for fleet operation is estimated to be 34 kWh/day, and fleet vehicles assigned to this location drive an average of 9.9 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet chargers is approximately 39.6 kW.

Fleet EV Charger Recommendations

Four dual-port low-output L2 chargers are recommended for this site. Of these chargers, two should be installed in Phase 1 of project implementation, and the remaining two chargers should be installed in Phase 2. This would give fleet vehicles the ability to charge about every other day.

Employee EV Charger Recommendations

No additional L2 charging stations are recommended for employee charging at this site. The chargers already recommended for this site should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee and fleet charging.

Electrical Service

Main electrical room not accessible during field review, need as-builts to determine capacity. Panel AR-2 services the existing chargers (400A, 120/208V). Based on field visits, the panel has space for 2 chargers, but electrical demand needs to be confirmed.

2. Airport @ 2385 Airport Blvd.

Description and Context

The airport facility is located between the Bayshore Freeway and the north end of the airport runway. This location is used by the Police Department Airport Division.

Location and Access

The parking lot for this site can be accessed from Airport Boulevard. The entire site is fenced and thus cannot be accessed by the public

Fleet Electrification

There are eighteen light-duty vehicles that are based at this site. These vehicles are made up of SUV and sedan patrol vehicles, none of which have been electrified. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

The main parking area for this site has 102 stalls available for fleet and employee parking

Energy Requirements

The electrical demand for fleet operation is estimated to be 206 kWh/day, and fleet vehicles assigned to this location drive an average of 21.2 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 63.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 chargers and one dual-port medium-output L2 chargers are recommended for this site, both of which should be installed in phase 1 of project implementation. This would give fleet vehicles the ability to charge about once every 4-5 days.

Employee EV Charger Recommendations

Nine dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

There is an existing utility transformer located near the western gate to this site which should have sufficient capacity to power the proposed charging infrastructure. A new 75 kVA step-down transformer and a new 250A 208V service panel should be installed at this site and to power recommended EV charger additions.

3. Airport Admin Parking Lot @ 1755 Airport Blvd.

Description and Context

This site is surrounded by a loop of Airport Blvd, adjacent to the main terminal of the airport. This location houses vehicles for the Airport department.

Location and Access

The admin parking lot is located along Airport Boulevard between terminal A parking garage and hourly lot 3. This lot is not open to the public and is used primarily for employee parking. Signs at the entrance of the parking lot label it "Permit Parking Only".

Fleet Electrification

There is one light-duty vehicle based at this site. This vehicle has already been transitioned into an EV. This vehicle has an average of 14 hours of dwell time per day.

Parking

The Admin Parking lot contains around 100 parking spaces. This includes 4 ADA accessible stalls and 32 stalls which are designated for vendor parking.

Energy Requirements

The electrical demand for fleet operation is estimated to be 0 kWh/day, and fleet vehicles assigned to this location drive an average of 1.9 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 25.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed in phase 2 of project implementation. This would allow for the single fleet vehicle at this site to charge every day.

Employee EV Charger Recommendations

Four dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

Electrical service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 150kVA 208V pad-mounted utility transformer and 200A 208V sub-panel are recommended. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

4. Airport – New Facilities Campus @ 1126 Coleman Ave.

Description and Context

This site is located at the southern corner of the airport runway, at the corner of Coleman Ave and Airport Blvd. This site houses vehicles for the Airport department.

Location and Access

The New Facilities Campus is located along Coleman Avenue near the southern corner of the airport runway. This site can be accessed from Coleman Avenue and is not available for public parking.

Fleet Electrification

There are thirty-seven light, fourteen medium, and three heavy-duty vehicles that are based at this site. Two LD vehicles have already been transitioned into EVs. The LD vehicles at this facility consist of a mix of SUVs, sedans, pickup trucks, and vans. The MD vehicles are made up of various utility trucks, and the HD vehicles are made up of two street sweepers and a paint striper. These vehicles have an average of 14 hours of dwell time per day.

Parking

The New Facilities Campus has parking stalls distributed through the paved lot, as well as multiple vehicle bays in the fleet maintenance building.

Energy Requirements

The electrical demand for fleet operation is estimated to be 546 kWh/day, and fleet vehicles assigned to this location drive an average of 12.5 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging and DC fast charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 543.6 kW.

Fleet EV Charger Recommendations

Eleven dual-port low-output L2 chargers and one dual-port 150 kW DC Fast Chargers are recommended for this site. No L2 charging stations are recommended for installation in phase 1 of project implementation. Eight additional dual-port low-output L2 charging stations are recommended for installation in phase 2. Three dual-port low-output L2, and one 150 kW DCFCs stations are recommended for installation in phase 3.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging. This would give fleet vehicles at this site the ability to charge about every other day.

Electrical Service

The New Facilities Campus is powered by a 1200A 480V main switchgear “MSA” located in the main electrical room. This site was recently constructed and as a result has significant spare capacity which can be used to power proposed EV charger additions. There is a 480V panel “HDEV” and a 208V panel “EV” which have both been dedicated to powering future charger additions and should be used to provide capacity for all charging stations described above. However, a more detailed load study and possible further coordination with the utility is recommended to confirm the existing electrical capacity.

5. Airport – Operations – Gate 19 Ramp @ 1701 Airport Blvd

Description and Context
This site is a part of operations for the jet bridge at gate 19.

Location and Access
This site is located on the air side of the main terminal, by boarding gate 19. It is not accessible to the public but can be accessed by a service road which follows the terminal.

Fleet Electrification
There are five light-duty vehicles based at this site. These are split between pickup trucks and SUVs. These vehicles have an average of 14 hours of dwell time per day.

Parking
There are 3 parking stalls roughly underneath the jet bridge for gate 19, directly off of the service road.

Energy Requirements
The electrical demand for fleet operation is estimated to be 114 kWh/day, and fleet vehicles assigned to this location drive an average of 50.1 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight DC slow charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed chargers is approximately 39.6kW.

Fleet EV Charger Recommendations

Two dual-port low-output L2 chargers are recommended for this site. Both of these dual-port low-output L2 charging stations are recommended for installation in phase 2 of project implementation. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations
It is not recommended to install any additional charger for employee charging at this site.

Electrical Service
The existing electrical infrastructure for this site is located adjacent to the parking stalls underneath the jet bridge. This includes a 400A 480V service and a 100A 480V sub panel. This equipment should have sufficient capacity. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

6. Airport – Terminal A Garage @ 2075 Airport Blvd

Description and Context

This site is located in the northern section of the main terminal area surrounded by Airport Blvd. This site houses vehicles for the airport department.

Location and Access

The Terminal A Garage is located along Airport Boulevard directly across from terminal A. The garage is open to the public.

Fleet Electrification

There are six light-duty vehicles that are based at this site. Four of these vehicles have already been transitioned into BEVs or plug-in hybrids. Most of these vehicles are either SUVs or sedans, with one passenger van. These vehicles have an average of 14 hours of dwell time per day.

Parking

There are 873 parking spaces in the Terminal A Garage and it costs about $24 per day to park in. The garage is illuminated 24 hours a day.

Energy Requirements

The electrical demand for fleet operation is estimated to be 15 kWh/day, and fleet vehicles assigned to this location drive an average of 6.2 miles per day. The total connected load of proposed fleet and employee chargers is approximately 44.4 kW. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site.

Fleet EV Charger Recommendations

Two dual-port low-output L2 chargers are recommended for this site. One of these dual-port low-output L2 charging stations is recommended for installation in phase 1 of project implementation, and the other should be installed in phase 2. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Six dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

To power these chargers, it is recommended to install a new 208V service with a 75 kVA transformer and a 200A 208V sub-panel. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

7. Airport – Terminal B Curb @ 1701 Airport Blvd

Description and Context

This site is a small curb on the ground side of the terminal consisting of parking stalls which have been striped for employee use.

Location and Access

This location is accessible from Airport Blvd and is located along the curb of the terminal building. The parking spaces are approximately 300’ north of the departures area.

Fleet Electrification

There is one light-duty pickup truck that is based at this site. This vehicle has an average of 14 hours of dwell time per day.

Parking

There are four street parking stalls labeled “authorized vehicles only” along the curb of Airport Boulevard which make up this site.

Energy Requirements

The electrical demand for fleet operation is estimated to be 41 kWh/day, and fleet vehicles assigned to this location drive an average of 65.6 miles per day.

Fleet EV Charger Recommendations

It is not recommended to install any additional charger for fleet charging at this site.

Employee EV Charger Recommendations

It is not recommended to install any additional charger for employee charging at this site.

Electrical Service

There is no electrical infrastructure which is easily accessible at this site. As no chargers are recommended for this site, no service upgrades will be needed.

8. Almaden Community Center @ 6445 Camden Avenue

Description and Context

This site is a community center consisting of one main building shared with the Almaden Branch Library and is adjacent to Parma Park. There are no fleet vehicles assigned to this site.

Location and Access

Almaden Community Center is located on Camden Ave with access from both Camden Ave to the north and Parma Dr to the south. The site is located in a residential neighborhood, and free parking is available to the public.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for employee vehicles only.

Parking

There is a large outdoor parking lot starting from the north of the main building and extends east to the corner of Camden Ave and Bose Ln. The lot is shared by public visiting vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee chargers is 12 kW.

Employee EV Charger Recommendations

Four dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power.

Electrical Service

Assuming that a smart charging system could be used to limit the output of each port to as low as 1.5 kW, the existing electrical infrastructure should have sufficient capacity to power the proposed chargers. However, a more detailed load study and possible further coordination with the utility is recommended to confirm the existing electrical capacity.

9. Almaden Lake @ 6099 Winfield Blvd.

Description and Context

This site is a small public recreation area to the south of Almaden Lake and consists of two buildings, an office, and a warehouse. The PRNS department houses vehicles at this site.

Location and Access

This site is located near the intersection of Almaden Expressway and Winfield Boulevard and can be accessed via Winfield Boulevard. The site is gated and inaccessible to the public.

Fleet Electrification

There are four light- and eight medium-duty vehicles based at this site. One light-duty vehicle has already been transitioned into an EV. The remaining ICE LD vehicles are all pickup trucks. The MD vehicles at this site are made up of a mix of Ford F-series and Hino 155s. These vehicles have an average of 14 hours of dwell time per day.

Parking

There are approximately 45 parking stalls at this site. Some of these parking stalls are being used for material storage with either shipping containers or gravel piles taking up the stall. There are 3 rows for parking: one along the eastern border of the site, one on the southern border, and one row between the two main buildings of this site.

Energy Requirements

The electrical demand for fleet operation is estimated to be 290 kWh/day, and fleet vehicles assigned to this location drive an average of 26.1 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 71.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger and two dual-port medium-output L2 chargers are recommended for this site. One dual-port low-output L2, and one dual-port medium-output L2 charging stations are recommended for installation in phase 1 of project implementation. The final dual-port medium-output L3 charging station is recommended for installation in phase 2. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Four dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

The existing panel in the building on the west side of the site should have sufficient capacity for the recommended charger installations for this site. A total of ten 50A breakers and four 70A breakers should be installed in this existing panel to provide power to these chargers. However, a more detailed load study and possible further coordination with the utility is recommended to confirm the existing panel will be able to support all charger additions.

10. Alum Rock Library @ 3090 Alum Rock Avenue

Description and Context

This site is a public library consisting of one main building and is adjacent to the James Lick Child Development Center. There are no fleet vehicles assigned to this site.

Location and Access

Alum Rock Library is located at the intersection of Alum Rock Avenue and S. White Road. The site is located in a commercial area, and free parking is available to the public.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for employee vehicles only.

Parking

There is a large outdoor parking lot south of the main building along S. White Road. The lot is shared by public visiting vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee chargers is 6 kW.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Electrical Service

Assuming that a smart charging system could be used to limit the output of each port to as low as 1.5 kW, the existing electrical infrastructure should have sufficient capacity to power the proposed chargers. However, a more detailed load study and possible further coordination with the utility is recommended to confirm the existing electrical capacity.

11. Animal Services @ 2750 Monterey Road

Description and Context

The San José Animal Care Center consists of one large building with parking areas on both the east and west side of the building. Animal Services offers pet adoption, licensing, lost and found pets, as well as other services. The Public Works department houses vehicles at this site.

Location and Access

Animal Services is located between Monterey Road and Aiello Drive south of the Santa Clara County Fairgrounds and can be accessed from both Monterey Road and Aiello Drive.

Fleet Electrification

There is one light-duty police interceptor based at this site. This vehicle has an average of 14 hours of dwell time per day.

Parking

The parking lot for this site is outdoors and is split between the northeast and southwest sides of the main building. The southwest lot is for public parking while the northeast lot is gated and used for fleet and employee parking.

Energy Requirements

The electrical demand for fleet operation is estimated to be 2 kWh/day, and fleet vehicles assigned to this location drive an average of 8 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 31.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed in phase 1 of project implementation. This would give the single fleet vehicle at this site the ability to charge daily.

Employee EV Charger Recommendations

Six dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for public, employee, and fleet charging.

Electrical Service

The existing main switchboard is located on the northeast wall of the building, in an external wall-mounted enclosure. The consultant team was not able to access the switchboard during the site visit because it was locked, and as-built drawings for this site were not provided. Based on the size of the building, it can be assumed that the switchboard is amply sized and has sufficient capacity to power the proposed EV charging loads. A new 200A breaker should be installed on the existing switchboard to feed a new 200A 208/120V subpanel, which will feed the proposed L2 chargers.

12. Arcadia @ 2208 Quimby Road

Description and Context

This site is a public recreation area with multiple baseball diamonds. The PRNS department houses vehicles at this site. This site has a small facility with one building, parking areas, and material storage that is attached to the northern parking lot via a driveway.

Location and Access

This site is located at the corner of Quimby Rd and Interlude St, with access from Quimby Rd to the north parking lot. The city facility for this site can be accessed from a driveway attached to the east side of this north parking lot. The site is gated and cannot be accessed by the public.

Fleet Electrification

There are five light-duty vehicles, and one medium-duty utility truck based at this site. One LD vehicle has already been transitioned into an EV. All of the remaining LD ICE vehicles are pickup trucks. These vehicles have an average of 14 hours of dwell time per day.

Parking

There are nine parking stalls dispersed throughout the site

Energy Requirements

The electrical demand for fleet operation is estimated to be 2 kWh/day, and fleet vehicles assigned to this location drive an average of 8 miles per day. The total connected load of proposed employee chargers is approximately 3 kW.

Fleet EV Charger Recommendations

No chargers are recommended for this site.

Employee EV Charger Recommendations

One dual-port low-output L2 charging station is recommended for employee charging at this site. This charger should utilize a smart charger system such as Driivz to dynamically allocate available power. This charging station should be made available for employee and public charging.

Electrical Service

The existing main switchboard is located at the northeast corner of the parking lot, within a fenced area accessible from Quimby Road. It is rated at 400A, 480V, and has sufficient electrical capacity to support the proposed EV chargers. A 50A circuit breaker should be installed in the existing switchboard to supply power to a 100A sub-panel via a 30kVA step-down transformer.

13. Asbury @ 485 Asbury Street

Description and Context

This site is made up of two buildings along the northwest border of the site and a parking lot making up the rest of the site. The PRNS department houses vehicles at this site.

Location and Access

The Asbury facility is located along Asbury Street on the block between Coleman Avenue and Walnut Street. The site is fenced and can be accessed from the singular entrance along Asbury Street.

Fleet Electrification

There are three light- and six medium-duty vehicles that are based at this site. These are all pickup trucks ranging from class 1 to class 4, none of which have been electrified. These vehicles have an average of 14 hours of dwell time per day.

Parking

There are approximately 38 parking stalls in the parking lot for Asbury, however multiple of these are unusable due to degradation in the asphalt and being used for material storage

Energy Requirements

The electrical demand for fleet operation is estimated to be 171 kWh/day, and fleet vehicles assigned to this location drive an average of 18.7 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed chargers is approximately 42.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger and one dual-port medium-output L2 charger are recommended for this site, and both are recommended for installation in phase 2 of project implementation. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

Due to the age and condition of this site, a new electrical service is recommended to provide sufficient capacity for the proposed charger installations. A new 150kVA 208V utility transformer and a 100A 208V will provide sufficient capacity. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

14. BART Berryessa Station@ 1620 Berryessa Rd

Description and Context

This site is not owned by the City of San José and will not be included for analysis.

15. Bascom Community Center @ 1000 S Bascom Ave.

Description and Context

This site is a community center consisting of one main building shared with the Bascom Branch Library and is open to the public between 9 a.m. and 6 p.m. There are no fleet vehicles assigned to this site.

Location and Access

Bascom community center is located along S Bascom Avenue and just north of Leon Drive. The site is located in a residential neighborhood, and free parking is available to the public.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for employee vehicles only.

Parking

There is an outdoor parking lot south of the main building which can be accessed by S. Bascom Avenue, which contains 99 parking spaces. Additional street parking is available along Del Mar Avenue to the east of the site. The lot is shared by public visiting vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee and public chargers is 117.6 kW.

Employee EV Charger Recommendations

Four dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Public EV Charger Recommendations

Four dual-port low-output L2 and four single-port low-output L2 charging stations are recommended for public charging at this site. Two of the single-port L2 charging stations should be installed at one existing ADA parking stall and one existing van accessible ADA parking stall.

Electrical Service

To power these chargers, it is recommended to install a new 150 kVA step-down transformer and a 400A 208V sub-panel into the existing service. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

16. Camden Community Center @ 3369 Union Ave

Description and Context

This site is a community center which is part of a larger complex with various community services and is open to the public between 8 a.m. and 8 p.m. There are no fleet vehicles assigned to this site.

Location and Access

Camden Community Center is located along Union Avenue and north of Camden Drive. The site is located in a residential neighborhood, and free parking is available to the public.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for public and employee vehicles only.

Parking

There is an outdoor parking lot which wraps around the north and east of the site. This parking lot can be accessed by Union Avenue and contains 195 parking spaces. The lot is shared by public visiting vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee and public chargers is 694.2 kW.

Employee EV Charger Recommendations

Five dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Public EV Charger Recommendations

Five dual-port low-output L2, one single-port low-output L2, and two dual-port 350 kW DCFCs stations are recommended for public charging at this site. One of the dual-port L2s and one of the single-port L2 charging stations should be installed at one existing ADA parking stall and one existing van accessible ADA parking stall.

Electrical Service

Electrical service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 1000kVA 480V pad-mounted utility transformer, 1600A 480V switchboard, 225 kVA step-down transformer, and a 400A 208V sub-panel are recommended. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

17. Central Service Yard @ 1661 Senter Road

Description and Context

Central Yard is a multi-building complex on the northwest corner of Senter Road and Phelan Avenue. This location houses multiple departments, such as Fleet Management, Plumbing/HVAC, Fire Department, and Police Department.

Location and Access

The site is in San José near the intersection of Senter Road and Phelan Avenue. The garage is within an industrial area. Parking is for fleet use only, with access being gate controlled. There are reserved stalls throughout the site for various department-specific vehicles.

Fleet Electrification

There are one hundred and ninety-two light, seventy-one medium, and ten heavy-duty vehicles, for a total of 273 vehicles based at the Central Service Yard. This includes 33 vehicles which have already been transitioned into battery EVs or plug-in hybrid vehicles. The LD vehicles at this facility are a mix of small passenger vehicles, pickup trucks, and vans. The MD vehicles are mostly pickup or utility trucks, with one mobile command station. The HD vehicles are made up of a mix of utility trucks such as dump trucks, fuel trucks, drill trucks, etc.

Parking

This location has several existing dual port L2 chargers around the complex, approximately ten in total. Fleet vehicles park in a gated area, with reserved stalls around the complex based on proximity to certain departments.

Energy Requirements

The electrical demand for fleet operation is estimated to be 4,134 kWh/day, and fleet vehicles assigned to this location drive an average of 27.5 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging, DC low output charging, and DC fast charging, should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 2,296.5 kW.

Fleet EV Charger Recommendations

Fifty dual-port low-output L2 chargers, fifteen dual-port high-output L2 chargers, three single-port 22.5 kW DC slow chargers, and three dual-port 150 kW DC Fast Chargers are recommended for this site. Fourteen dual-port low-output L2, three dual-port high-output L2, two single-port 22.5 kW DC slow chargers, and one dual-port 150 kW DCFCs should be installed during Phase 1 of project implementation. Thirty-three dual-port low-output L2, eight dual-port high-output L2, one single-port 22.5 kW DC slow charger, and two dual-port 150 kW DCFCs stations should be installed during Phase 2. The remaining three dual-port low-output L2 and four dual-port high-output L2 charging stations should be installed during Phase 3. This gives fleet vehicles the flexibility to charge about once every other day.

Employee EV Charger Recommendations

Thirty-one dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee and fleet charging.

Electrical Service

There are several switchboards, panels, and transformers throughout the property that can be utilized for EV charging. However, based on the large footprint of the location and amount of fleet vehicles based on field observation, electrical upgrades are required at this location to meet electrical demands. Further engineering analysis is needed by PG&E to evaluate if the existing transformer has available capacity to accommodate the EV charging loads or if an entirely new transformer would be required or upgrades to the existing transformer would be needed to provide power to the EV chargers.

18. City Hall Garage @ 200 E Santa Clara St.

Description and Context

The City Hall Garage is open to the public Monday-Friday 8 a.m. to 5 p.m.

Location and Access

The Garage is located in the San José City Hall building, and is accessible from S. 6th St.

Fleet Electrification

There are twenty light- and two medium-duty vehicles based at this site. Nine light-duty vehicles have already been transitioned into EVs. The 11 remaining ICE LD vehicles are a mix of sedans, SUVs, and vans. The MD vehicles at this site are an Isuzu NPR and a Hino 155. These vehicles have an average of 14 hours of dwell time per day.

Parking

There are 332 parking stalls in the City Hall Garage which are available for public, employee, and fleet use. Members of the public must pay to park.

Energy Requirements

The electrical demand for fleet operation is estimated to be 229 kWh/day, and fleet vehicles assigned to this location drive an average of 15.1 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of the proposed fleet and employee chargers is approximately 273.2 kW.

Fleet EV Charger Recommendations

Six dual-port low-output L2 chargers and one dual-port medium-output L2 chargers are recommended for this site. The medium output L2 and two low output L2s are recommended for installation during phase 1 of project implementation. Three low-output L2 are recommended to be installed during phase 2, and the final low-output L2 should be installed in phase 3. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Fifty-seven dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Electrical Service

Assuming that a smart charging system could be used to limit the output of each port to as low as 1.5 kW, the existing electrical infrastructure should have sufficient capacity to power the proposed chargers. However, a more detailed load study and possible further coordination with the utility is recommended to confirm the existing electrical capacity.

19. Cypress Community Center @ 403 Cypress Ave

Description and Context

The Cypress Community consists of one main building with a parking area to the east, and the Cypress Gardens to the west. The community center is open to the public Monday-Friday, 8:30 a.m. to 4:00 p.m. The PRNS department houses vehicles at this site.

Location and Access

Cypress Community Center is located along Cypress Avenue, near the intersection of Cypress Avenue and Judro Way. It is located in a residential neighborhood and can be accessed from two driveways along Cypress Ave.

Fleet Electrification

There are two light-duty passenger vans that are based at this site. Neither of these have been electrified. These vehicles have an average of 14 hours of dwell time per day.

Parking

The parking area at this site has 47 parking stalls which are used for public, fleet, and employee parking.

Energy Requirements

The electrical demand for fleet operation is estimated to be 7 kWh/day, and fleet vehicles assigned to this location drive an average of 4.2 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed chargers is approximately 16.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed in phase 1 of project implementation. This would give fleet vehicles at this site the ability to charge daily.

Employee EV Charger Recommendations

One dual-port low-output L2 charging station is recommended for employee charging at this site. This charger should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

The main electrical room is located in the west side of the building and houses the 600A, 208/120V main switchboard. The existing switchboard should have sufficient capacity to power the proposed EV charging loads. A single 40A breaker should be installed on the panel to feed the employee L2 charger (power share), and two 40A breakers should be installed to feed the fleet L2 charger (full 40A to each port).

20. Education Park Branch Library @ 1772 Educational Park Drive

Description and Context

This site is a public library consisting of one main building on the northwest corner of the Overfelt Gardens and is open to the public between 10 a.m. and 7 p.m.

Location and Access

The Educational Park Branch Library is located at the intersection of Educational Park Dr and Schulte Dr. The site is located in a public park in a mixed-use neighborhood, and free parking is available to the public.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for employee vehicles only.

Parking

There is an outdoor parking lot which wraps around the north, east, and south of the library that is accessible by Educational Park Drive and contains 114 parking spaces. The lot is shared by public visiting vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee and public chargers is 72 kW.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Public EV Charger Recommendations

Four dual-port low-output L2 and one single-port low-output L2 charging stations are recommended for public charging at this site. The one single-port L2 charging station should be installed at one existing ADA van accessible parking stall and one dual-port L2 should be split with one plug being used for an ADA stall and the other being used for a non-ADA stall.

Electrical Service

To power these chargers, it is recommended to install a new 100 kVA step-down transformer and a 200A 208V sub-panel into the existing service. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

21. Emma Prusch Farm Park @ 647 S King Rd.

Description and Context

The Emma Prusch Farm Park is a large recreational area with amenities such as community gardens, picnic areas, a barn, playground, and science center. The Park is open to the public from 8:30 a.m. to sunset. The PRNS department houses vehicles at this site.

Location and Access

This site is located along S King Road directly south of Joséph P. Sinclair Freeway. The main parking area can be accessed from South King Road.

Fleet Electrification

There are four light- and two medium-duty vehicles for a total of six vehicles that are based at this site. Of these, one is a passenger van, and the rest are pickup trucks. None of these have been electrified. These vehicles have an average of 14 hours of dwell time per day.

Parking

The main parking area for this site is a large parking lot adjacent to the Cornucopia Community Garden which can be accessed from both the east and west.

Energy Requirements

The electrical demand for fleet operation is estimated to be 81 kWh/day, and fleet vehicles assigned to this location drive an average of 17.5 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 35.4 kW.

Fleet EV Charger Recommendations

Two dual-port low-output L2 chargers are recommended for this site, both of which should be installed in phase 2 of project implementation. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Three dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

There is an upcoming site remodeling project which will include electrical service upgrades throughout the site. As part of the upgrades, a new service 225A, 208/120V panel "HEV" will be installed by the parking area to the northwest side of the park. This panel is dedicated for EV chargers and should be used to power the proposed L2 charging stations.

22. Employee Garage @ 50 N. 4th St.

Description and Context

This site is a six-story parking garage which is used for City employee parking on weekdays. The site is open to the public from 6:00 p.m. to 10:00 p.m. on weeknights and 6:00 a.m. to 10:00 p.m. on weekends. This site houses vehicles for Planning/Code, Fire, Transportation, City ITD, Housing, Environmental, and Library departments.

Location and Access

This site is located along N. 4th Street in the block between E. St. John Street and E. Santa Clara Street. The garage can be accessed from both N. 4th Street and N. 5th Street.

Fleet Electrification

At the time this analysis was initially conducted, there were 203 light-duty vehicles based at this site. Forty-eight of these had been transitioned into BEVs or plug-in hybrid vehicles. Most of these were SUVs or sedans, with some pickup trucks and vans. Vehicles at this site had an average of 14 hours of dwell time per day. Given that some domicile locations had changed after the analysis was completed, 30 vehicles previously domiciled at 4th St Garage now stay overnight at the Employee Garage, leaving a total of 185 fleet vehicles needing charging at this location.

Parking

This parking garage has 1,112 parking stalls available.

Energy Requirements

Based on the original 155 vehicles being evaluated at this domicile location, the electrical demand for fleet operation was estimated to be 929 kWh/day, and fleet vehicles assigned to this location drove an average of 25.3 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging and DC Fast Charging should be sufficient to charge all fleet vehicles domiciled at this site, including the additional 30 vehicles that were added to this domicile location after the analysis was completed. The total connected load of proposed fleet and employee chargers is approximately 1,213.4 kW.

Fleet EV Charger Recommendations

Twenty-two dual-port low-output L2 chargers, one dual-port medium-output L2 charger, and two dual-port 150 kW DC Fast Chargers are recommended for this site for both fleet and employee charging. This would give fleet vehicles at this site the ability to charge about once every 5-6 days.

Employee EV Charger Recommendations

One hundred dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employees and fleet charging.

Electrical Service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 1500kVA 480V pad-mounted utility transformer, 4000A 480V switchboard, three 300kVA stepdown transformers, and 208V sub-panels with a combined 2500A of capacity are recommended. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

23. Evergreen Community Center @ 4860 San Felipe Rd.

Description and Context

This site is a community center consisting of one main building at the edge of Evergreen Park and is open to the public from 9 a.m. to 5 p.m. This community center offers public events throughout the year as well as services to offsite locations such as welch park.

Location and Access

Evergreen Community Center is along San Felipe Road, southwest of the Evergreen Valley College. The site is located in a public park in a residential neighborhood, and free parking is available to the public.

Fleet Electrification

There is one light-duty vehicle that is based at this site. It is a passenger van and has not yet been electrified. This van has an average of 14 hours of dwell time per day.

Parking

There is an outdoor parking lot south of the community center that is accessible by San Felipe Road and contains 91 parking spaces. The lot is shared by visiting public vehicles, fleet vehicles, and employee vehicles.

Energy Requirements

The electrical demand for fleet vehicle operation is estimated to be 5 kWh/day, and fleet vehicles assigned to this location drive an average of 6.5 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed chargers for fleet, employee, and public is approximately 78 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed during phase 1. This would give the single fleet vehicle at this site the ability to charge daily.

Employee EV Charger Recommendations

Four dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and public charging.

Public EV Charger Recommendations

Two dual-port low-output L2 and two single-port low-output L2 charging stations are recommended for public charging at this site. The one single-port L2 charging station should be installed at one existing ADA van accessible parking stall, and one single-port L2 should be installed in an ADA stall.

Electrical Service

Assuming that a smart charging system could be used to limit the output of each non-fleet port to as low as 1.5 kW, the existing electrical infrastructure should have sufficient capacity to power the proposed chargers. However, a more detailed load study and possible further coordination with the utility is recommended to confirm the existing electrical capacity.

24. Evergreen Library @ 2635 Aborn Road

Description and Context

This site is a community center consisting of one main building shared with the Almaden Branch Library and is adjacent to Parma Park. There are no fleet vehicles assigned to this site.

Location and Access

Almaden Community Center is located on Camden Ave with access from both Camden Ave to the north and Parma Dr to the south. The site is located in a residential neighborhood, and free parking is available to the public.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for employee vehicles only.

Parking

There is a large outdoor parking lot starting from the north of the main building and extends east to the corner of Camden Ave and Bose Ln. The lot is shared by public visiting vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee and public chargers is 1,585.2 kW.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power.

Public EV Charger Recommendations

Six dual-port low-output L2 and five dual-port 150kW DCFCs stations are recommended for public charging at this site. One dual-port L2 should be installed such that it can be used by one restriped ADA van accessible parking stall and one restriped standard ADA stall.

Electrical Service

Assuming that a smart charging system could be used to limit the output of each port to as low as 1.5 kW, the existing electrical infrastructure should have sufficient capacity to power the proposed chargers. However, a

more detailed load study and possible further coordination with the utility is recommended to confirm the existing electrical capacity.

25. Family Camp @ 11401 Cherry Lake Road, Groveland, CA

Description and Context

This site is a campsite near Yosemite National Park with an office/dining hall as well as multiple smaller camp amenities. The PRNS department houses vehicles at this site.

Location and Access

Family Camp is located along Cherry Lake Rd in the Sierra Foothills about 120 miles away from the City of San José. It can be accessed from a driveway attached to Cherry Lake Road and is open to the public. However, it requires reservations and payment to be completed 1.5 months prior to arrival.

Fleet Electrification

There are two light duty vehicles that are based at this site. These are both pickup trucks and have not been transitioned to EVs yet.

Parking

Fleet vehicles at Family Camp Park in stalls located along the southern wall of the office/dining hall building.

Energy Requirements

The electrical demand for fleet operation is estimated to be 30 kWh/day, and fleet vehicles assigned to this location drive an average of 19.4 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed chargers is approximately 13.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed during phase 2 of project implementation to meet fleet and employee charging needs.

Employee EV Charger Recommendations

The L2 charger should utilize a smart charger system such as Driivz to dynamically allocate available power to meet the needs of both fleet and employee charging.

Electrical Service

Two 50A 2 pole breakers should be installed into an existing electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by the electrical utility provider to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or

26. Hank Lopez Community Center @ 1694 Adrian Way

Description and Context

This site is a community center consisting of one main building, multiple outdoor sports courts, and a playground at the southern corner of Hillview Park and is open to the public as needed. This community center is primarily used as an office space for the Youth Intervention Services team.

Location and Access

Hank Lopez Community Center is at the intersection of Adiran Way and Ocala Avenue. The site is located in a public park in a residential neighborhood, and free parking is available to the public.

Fleet Electrification

There are sixteen light-duty vehicles that are based at this site. This includes two sedans that have already been transitioned to EVs, and the rest are passenger vans which have not yet been electrified. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

There is an outdoor parking lot south of the community center that is accessible by either Adrian Way or Ocala Avenue and contains 97 parking spaces. The lot is shared by visiting public vehicles, fleet vehicles, and employee vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 139 kWh/day, and fleet vehicles assigned to this location drive an average of 20.9 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed chargers is approximately 796.8 kW.

Fleet EV Charger Recommendations

Seven dual-port low-output L2 chargers are recommended for this site. One of these L2 charging stations should be installed during phase 1 of project implementation, and the remaining six should be installed in phase 2. This would give fleet vehicles at this site the ability to charge almost daily, with only two vehicles not being able to charge on any given day.

Employee EV Charger Recommendations

Four dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Public EV Charger Recommendations

Six dual-port low-output L2, one single-port low-output L2, and two dual-port 350 kW DCFCs stations are recommended for public charging at this site. One dual-port L2 charging station should be installed such that it can be used by one restriped ADA van accessible parking stall and one restriped ADA stall.

Electrical Service

Electrical service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 1000kVA 480V pad-mounted utility transformer, 1600A 480V switchboard, 225 kVA step-down transformer, and a 400A 208V sub-panel are recommended. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

27. Happy Hollow Park and Zoo @ 748 Story Rd.

Description and Context

The Happy Hollow Park and Zoo is a part of a large recreational area including Kelly Park, the Japanese Friendship Garden, and multiple large parking lots. The PRNS department houses vehicles at this site.

Location and Access

The Happy Hollow Park and Zoo is part of the larger Kelley Park area, located near Senter Road and Story Road. The site is open to the public and can be accessed by walkways from Leininger Center or the Kelley Park east lot.

Fleet Electrification

There are three light- and one medium-duty vehicle for a total of four vehicles based at this site. None of these have been electrified. These included two passenger vans, an LD pickup truck, and an MD pickup truck. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

As there are multiple parking lots in the Kelley Park area, it is assumed that the Leininger Center parking lot is the main parking lot associated with the Happy Hollows site. The Leininger Center parking lot has 21 existing dual-port L2 charging stations which cover 42 parking stalls which have already been converted for EV charging.

Energy Requirements

The electrical demand for fleet operation is estimated to be 31 kWh/day, and fleet vehicles assigned to this location drive an average of 9.6 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 50.4 kW.

Fleet EV Charger Recommendations

Two dual-port low-output L2 chargers are recommended to meet fleet charging needs.

Employee EV Charger Recommendations

Eight dual-port low-output L2 charging stations are recommended for employee charging at this site.

Electrical Service

There is no need to modify the electrical service for this site.

28. Hillview Library @ 1600 Hopkins Drive

Description and Context

This site is a public library consisting of one main building and is adjacent to Clyde L Fischer Middle School. The Hillview Library is open to the public from 10 a.m. to 7 p.m.

Location and Access

Hillview Library is located at the intersection of Hopkins Drive and Simon Avenue and can be accessed from Hopkins Drive. The site is located in a residential neighborhood, and free parking is available to the public.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for employee vehicles only.

Parking

There is an outdoor parking lot north of the main building and extends east to the corner of Camden Ave and Bose Ln. The lot is shared by public visiting vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee chargers is 6 kW.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Electrical Service

Assuming that a smart charging system could be used to limit the output of each port to as low as 1.5 kW, the existing electrical infrastructure should have sufficient capacity to power the proposed chargers. However, a more detailed load study and possible further coordination with the utility is recommended to confirm the existing electrical capacity.

29. Kelley Park @ 1300 Senter Road

Description and Context

Kelley Park is a 172-acre park located north of Happy Hollow Park and Zoo. The park contains picnic areas, a disc golf course, multiple trails, a historic park, an amphitheater and the Japanese gardens. The PRNS department houses vehicles at this site

Location and Access

Kelley Park is located along Roberts Avenue, near the intersection with Story Road. There are multiple parking areas within this site which can be accessed via Senter Road, Phelan Avenue, and Story Road.

Fleet Electrification

There are twelve light- and two medium-duty vehicles that are based at this site. These are split between SUVs and pickup trucks, none of which have been electrified. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

There are four parking areas which can be used for this site, the East parking lot which can be accessed from Story Road, the Leininger Center parking lot, the Japanese gardens parking lot, and a parking lot near the start of the disc golf course. The Leininger Center parking lot has been discussed in the section for the Happy Hollow Park & Zoo and thus chargers discussed in this section should be considered for the East parking lot.

Energy Requirements

The electrical demand for fleet operation is estimated to be 112 kWh/day, and fleet vehicles assigned to this location drive an average of 14.2 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed chargers is approximately 218.4 kW.

Fleet EV Charger Recommendations

Seven dual-port low-output L2 chargers are recommended for this site. One of these L2 charging stations should be installed in phase 1 of project implementation, five in phase 2, and one in phase 3 in order to meet fleet charging needs. This would give fleet vehicles at this site the ability to charge daily.

Employee EV Charger Recommendations

Forty-two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee, fleet, and public charging.

Electrical Service

Electrical service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 300kVA 208V pad-mounted utility transformer and 208V sub-panels with a combined 700A of capacity and space for 98 2 pole breakers are recommended. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

30. Kirk Center @ 1601 Foxworthy Ave.

Description and Context

The Kirk Center consists of a public recreation area, a parking lot, and multiple buildings. This site is the headquarters for the BeautifySJ program. This site houses vehicles for the PRNS and Environmental departments.

Location and Access

The Kirk Community Center is located at the intersection of Foxworthy Ave and Briarwood Drive. The main parking area can be accessed by Foxworthy Avenue. A smaller parking area can be accessed by Briarwood Drive.

Fleet Electrification

There are seven light, twelve medium, and two heavy-duty vehicles for a total of twenty-one vehicles based at this site. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

The main parking lot for the Kirk Center is located on the west side of the site.

Energy Requirements

The electrical demand for fleet operation is estimated to be 1,113 kWh/day, and fleet vehicles assigned to this location drive an average of 42.9 miles per day. Given the average miles driven and expected battery size of

replacement EVs, overnight L2 charging, DC slow charging, and DC fast charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet, employee, and public chargers is approximately 2308.7 kW.

Fleet EV Charger Recommendations

Seven dual-port medium-output L2 chargers, eight dual-port high-output L2 chargers, one single-port 22.5 kW DC slow charger, and 2 dual-port 150 kW DC fast chargers are recommended for this site. Three dual-port medium-output L2, one dual-port high-output L2, one single-port 22.5kW DC slow charger, and one 150kW dual-port DCFCs should be installed during phase 2 of project implementation. The remaining four dual-port medium-output L2, seven dual-port high-output L2, and one dual-port 150kW DCFCs stations should be installed during phase 3. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Six dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee, fleet, and public charging.

Public EV Charger Recommendations

Four dual-port 150 kW DCFCs are recommended for public charging at this site.

Electrical Service

Electrical service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 1500kVA 480V pad-mounted utility transformer, 1600A 480V switchboard, two 300kVA stepdown transformers, and 208V sub-panels with a combined 1500A of capacity are recommended. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

31. Lake Cunningham @ 2305 S. White Road

Description and Context

The Lake Cunningham site includes a small maintenance building with a parking area and is located east of Lake Cunningham Action Sports Park. The PRNS department houses vehicles at this site.

Location and Access

This site is located on the eastern side of Lake Cunningham, adjacent to the intersection of S White Road and Tully Road, and it can be accessed via Park Road.

Fleet Electrification

There are three light- and eleven medium-duty vehicles for a total of 14 vehicles based at this site. None of these have been electrified. This includes pickup trucks and two Isuzu NPRHD trucks. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

The main parking area for the maintenance facility is gated and not available to the public. Across Park Road there is a gravel lot which is used by the city for equipment storage and fleet vehicle parking.

Energy Requirements

The electrical demand for fleet operation is estimated to be 227 kWh/day, and fleet vehicles assigned to this location drive an average of 17.9 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 71.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger and two dual-port medium-output L2 chargers are recommended for this site. One dual-port low-output L2 charging station should be installed in phase 1, one dual-port medium-output L2 charging station should be installed in phase 2, and the final one dual-port low-output L2 charging station should be installed in phase 3. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Four dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

There is an existing 400A 208V panel which appears to have sufficient capacity to power all proposed charger installations. A new 200A sub-panel should be installed in order to provide sufficient breaker slots for all EV chargers. This new sub-panel should be fed by a 200A breaker installed into the existing 400A panel. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

32. Mabury Yard @ 1404 Mabury Road

Description and Context

Mabury Yard is a service yard along Marbury Road, adjacent to highway 101. The yard serves multiple City departments, such as maintenance, landscape, and traffic signals. This location is accessible by the public.

Location and Access

The site is in San José along Marbury Road, adjacent to highway 101. The location is within an industrial area. The site is accessible via a driveway from Marbury Road.

Fleet Electrification

There are forty-six light, thirty medium, and five heavy-duty vehicles that are based at this site. This includes seven light duty vehicles which have already been converted into EVs. The LD vehicles at this facility consist of a mix of SUVs, sedans, pickup trucks, and vans. The MD vehicles at this site consist of mostly pickup trucks and larger vans, as well as some street sweepers. All of the HD vehicles at this site are street sweepers. Vehicles at this site have an average of 15.8 hours of dwell time per day.

Parking

Public parking is available at this location. There are stalls marked for fleet parking, near the front of the main building of Marbury Yard, and also behind the building. There are three existing L1 chargers for public and fleet use. There are ten existing single-port L2 chargers exclusively for fleet vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 2,911 kWh/day, and fleet vehicles assigned to this location drive an average of 32.9 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging and DC fast charging, should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 1019.6 kW.

Fleet EV Charger Recommendations

Twenty-three dual-port low-output L2 chargers, six dual-port medium-output L2 chargers, three dual-port high-output L2 chargers, and two dual-port 150 kW DC Fast Chargers are recommended for this site. This would give fleet vehicles the flexibility to charge about every other day.

Employee EV Charger Recommendations

Seventeen dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

A 600A switchboard services the building. The existing L2 chargers for fleet use are being serviced by a dedicated switchboard (400A capacity) near a 150 kVA transformer adjacent to the fleet charging locations.

33. Market/San Pedro St. Garage @ 45 N Market St.

Description and Context

This site is a public parking garage in a commercial area southeast of the Superior Court of Santa Clara County. This parking garage is open to the public 24 hours a day.

Location and Access

This parking garage is located between Market Street and N San Pedro St and can be accessed from Market St. Public parking at this site is free for the first 90 minutes then costs $1 for each additional 15 minutes an individual stays parked.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for public vehicles only.

Parking

This parking garage is operated by the City of San José and includes 1,393 parking spaces available to the public.

Energy Requirements

The proposed connected load of public chargers is 1,500 kW without load management.

Public EV Charger Recommendations

Five dual-port 150kW DCFCs stations are recommended for public charging at this site. One dual-port DCFCs station should be installed such that it can be used by one restriped ADA van accessible parking stall and one restriped standard ADA stall.

Electrical Service

Electrical service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 1000kVA 480V pad-mounted utility transformer and 1600A 480V switchboard are recommended. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

34. Martin Luther King Library @ 150 E San Fernando St.

Description and Context

This site consists of a main library building connected to the campus of San José State University. The Library Department parks vehicles here.

Location and Access

The MLK Library is located at the intersection of E San Fernando St and S 4th Street and can be accessed by vehicle only from the loading bay on S 4th St.

Fleet Electrification

There are two medium-duty trucks that are based at this site. Neither of these have been electrified. These vehicles have an average of 14 hours of dwell time per day.

Parking

There is no parking lot dedicated to this site. The only parking area is the load bay S. 4th St, which can hold up to six vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 96 kWh/day, and fleet vehicles assigned to this location drive an average of 36.8 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet chargers is approximately 23 kW.

Fleet EV Charger Recommendations

One dual-port medium-output L2 charger is recommended for this site and should be installed in phase 1 of project implementation. This would give fleet vehicles at this site the ability to charge daily.

Employee EV Charger Recommendations

No additional chargers are recommended to be installed at this site for employee charging.

Electrical Service

The main electrical room is located on the basement level near the southeast corner of the building. The electrical infrastructure for this site is complex, consisting of a main switchboard with two sides each rated at

3200A, 480/277V. This MSB feeds multiple sub-panels and step-down transformers across all floors of the building. Based on site visit findings, panels EDPH-LLA and EDPH-LLB have spare breaker slots which can be used to power the proposed EV charger.

35. Mayfair Community Center @ 2039 Kammerer Ave.

Description and Context

The Mayfair community center consists of one central building surrounded by recreation areas along Kammerer Ave. The community center is open to the public Monday-Friday from 8:30 a.m. to 5:30 p.m. The PRNS department houses a vehicle at this site.

Location and Access

This site is located Along Kammerer Avenue just north of the Renaissance Academy at Mathson and can be accessed by Kammerer Avenue.

Fleet Electrification

There is one light-duty vehicle that is based at this site. It is a passenger van and has not been electrified. This van has an average of 14 hours of dwell time per day.

Parking

There is street parking for this site along Kammerer Avenue as well as a small parking lot on the west side of the community center. There are a total of 28 stalls available for this site.

Energy Requirements

The electrical demand for fleet operation is estimated to be 2 kWh/day, and fleet vehicles assigned to this location drive an average of 2.8 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet, employee, and public chargers is approximately 61.8 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed during phase 1 of project implementation. This would give the single fleet vehicle at this site the ability to charge daily.

Employee EV Charger Recommendations

Three dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and public charging.

Public EV Charger Recommendations

Two dual-port low-output L2 and one single-port low-output L2 charging stations are recommended for public charging at this site. The single-port L2 station should be installed such that it can be used by one restriped ADA van accessible parking.

Electrical Service

The main electrical room is located on the southwest side of the main building, and contains the 800A, 480V main switchboard. Based on site visit findings, the existing MSB has sufficient capacity to power the proposed EV chargers. A new 150A breaker should be installed on the MSB to power a new 75 kVA step-down transformer and 200A, 208V sub-panel, installed on the exterior wall of the building slightly north of the electrical room.

36. North Side Community Center @ 488 N. 6th St.

Description and Context

The North Side Community Center consists of one large building with assembly and dining amenities. The center is open to the public on an as needed basis. The PRNS department houses one vehicle here.

Location and Access

This site is located along E Empire Street on the block between N 6th Street and N 7th Street. It can be accessed by N 6th Street.

Fleet Electrification

There is one light-duty vehicle that is based at this site. It is a passenger paratransit van and has not yet been electrified. This van has an average of 14 hours of dwell time per day.

Parking

This site does not have a dedicated parking lot or garage. Street and curbside parking are available to the north and west sides of the building, along N 6th St and E Empire St.

Energy Requirements

The electrical demand for fleet operation is estimated to be 5 kWh/day, and fleet vehicles assigned to this location drive an average of 6.9 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 19.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed during phase 1 of project implementation. This would give the single fleet vehicle at this site the ability to charge daily. As there is no parking lot, the charger will need to be installed along the side of the roadway for curbside charging.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and public charging. As there is no parking lot, the chargers will need to be installed along the side of the roadway for curbside charging.

Electrical Service

Electrical upgrades are required at this site to power the proposed charging stations. A new 208V service panel should be installed, fed from the existing pole-mounted transformer on E Empire St.

37. Overfelt @ 2145 McKee Rd.

Description and Context

The Overfelt gardens are a large green space and is connected to the Chinese Cultural Gardens and south of the Educational Park Branch Library. The park is open to the public from 10:00 a.m. to sunset. The PNRS department houses vehicles at this site.

Location and Access

This site is located near the intersection of McKee Road and Educational Park Drive and can be accessed via Educational Park Drive.

Fleet Electrification

There are three light- and eleven medium-duty vehicles for a total of fourteen vehicles based at this site. None of these have been electrified. These consist of trucks and pickup trucks. These vehicles have an average of 14 hours of dwell time per day.

Parking

The main parking area for this site is an outdoor lot located south of the Educational Park Branch Library.

Energy Requirements

The electrical demand for fleet operation is estimated to be 336 kWh/day, and fleet vehicles assigned to this location drive an average of 24.9 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet, employee, and public chargers is approximately 978 kW.

Fleet EV Charger Recommendations

Three dual-port medium-output L2 chargers are recommended for this site. Two dual-port medium-output L2 charging stations are recommended for installation during phase 2 of project implementation, and the remaining one dual-port medium-output L2 charging station should be installed in phase 3. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Three dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and public charging.

Public EV Charger Recommendations

Three dual-port 150kW DCFCs stations are recommended for public charging at this site. One dual-port DCFCs station should be installed such that it can be used by one restriped ADA van accessible parking stall and one restriped standard ADA stall.

Electrical Service

Based on site visit findings, the parking lot lacks sufficient electrical infrastructure to support the proposed EV chargers. An electrical service upgrade consisting of a new 1500A, 480V pad-mounted utility transformer, 2000A 4800V switchboard, 75 kVA step-down transformer, and 200A 208V sub-panel is recommended at this site to power the proposed EV chargers.

38. Police Garage @ 825 N. San Pedro Street

Description and Context

This site is a large police garage which contains multiple sub parking lots and a main multi-level parking garage. The Police department is the only department which stores vehicles at this site.

Location and Access

This site is located along N San Pedro Street and is bordered by Juvenile Hall Access Road. The site can be accessed from N San Pedro Street.

Fleet Electrification

There are 559 light-, four medium-, and one heavy-duty vehicle for a total of 564 vehicles based at this site. The vast majority of these are either patrol motorcycles or patrol sedans, none of which are marked as having been electrified yet. Vehicles at this site have an average of 8.8 hours of dwell time per day.

Parking

This site consists of multiple large parking areas which surround the SJPD main building. The main garage is a two-story structure located on the north end of the site. Additionally, there are two other large parking lots to the east and west of the SJPD building. All parking areas are gated and access controlled, except for a small lot by the main entrance of the SJPC building, which is for public use.

Energy Requirements

The electrical demand for fleet operation is estimated to be 14,788 kWh/day, and fleet vehicles assigned to this location drive an average of 53.3 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging, DC slow charging, and DC fast charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 6,933.7 kW.

Fleet EV Charger Recommendations

Thirty-four dual-port low-output L2 chargers, eleven dual-port medium-output L2 chargers, sixty-six dual-port high-output L2 chargers, one single-port 22.5 kW DC slow charger, and twelve dual-port 150 kW DC fast chargers. Twelve dual-port low-output L2, six dual-port medium-output L2, forty-eight dual-port high-output L2, one single-port 22.5kW DC slow charger, and eight dual-port 150kW DCFCs stations are recommended for installation in phase 1 of project implementation. Twenty-two dual-port low-output L2, four dual-port medium-output L2, seventeen dual-port high-output L2, and three dual port 150kW DCFCs stations should be installed in phase 2. One dual-port medium-output L2, one dual-port high-output L2, and one dual-port 150kW DCFCs stations should be installed in phase 3. This would give fleet vehicles at this site the ability to charge about every 2-3 days.

Employee EV Charger Recommendations

Twenty-five dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

The main electrical room and existing switchboard is located on the second level of the open parking structure for police vehicles. Based on site visit findings, the existing switchboard has the capacity to install a 600A, 480V breaker in one of the empty slots to power up to approximately 30 L2 chargers via a step-down transformer. To power the remaining L2 chargers and DCFCs, an electrical service upgrade will be required, including a 5000 kW, 480V utility transformer, up to 6000A switchgear, and multiple step-down transformers and sub-panels.

39. Police Southern Station @ 6087 Great Oaks Parkway

Description and Context

The Southern Station consists of one central Recruiting building and a large parking. The Police are the only department that houses vehicles at this site.

Location and Access

This site is located along Great Oaks Parkway near the intersection with Brooklyn Avenue and can be accessed from Great Oaks Parkway.

Fleet Electrification

There are one hundred and six light-duty vehicles that are based at this site. These are primarily a mix of motorcycle, SUV, and sedan patrol vehicles, none of which are marked as having been electrified. The vehicles at this site have an average of 12.3 hours of dwell time per day.

Parking

This site has a large outdoor parking lot to the south of the main building which is gated and fully fenced. The lot is accessible from two driveways along Great Oaks Parkway and is used by employee and fleet vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 1,214 kWh/day, and fleet vehicles assigned to this location drive an average of 31.5 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging and DC fast charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 1,910.4 kW.

Fleet EV Charger Recommendations

Ten dual-port low-output L2 chargers, six dual-port high-output L2 chargers, and 5 dual-port DC fast chargers are recommended for this site. Four dual-port low-output L2, four dual-port high-output L2, and three dual-port 150kW DCFCs stations should be installed during phase 1 of project implementation. Five dual-port low-output L2, two dual-port high-output L2, and two dual-port 150kW DCFCs stations should be installed during phase 2. The final dual-port low-output L2 station should be installed during phase 3. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Sixteen dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

Due to the significant power demands of the proposed chargers, electrical service upgrades are required at this site. Based on charger demands, a 1500kVA 480V pad-mounted utility transformer, 2400A 480V switchboard, 300 kVA step-down transformer, and an 800A 208V sub-panel are recommended. A more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

40. Rancho Del Pueblo Golf Course @ 1649 Hermocilla Way

Description and Context

This site is a golf course consisting of one main building and a single parking lot on the east side of the golf course and north of Zolezzi park.

Location and Access

The Rancho Del Pueblo Golf Course is located at the intersection of S. King Road and Hermocilla Way. The site is located in a residential neighborhood.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for employee and public vehicles only.

Parking

There is an outdoor parking lot east of the main building that is accessible by Hermocilla Way and contains 100 parking spaces. The lot is shared by visiting public vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee and public chargers is 1,532.4 kW without load management.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Public EV Charger Recommendations

Two dual-port low-output L2, and five dual-port 150kW DCFCs stations are recommended for public charging at this site. One dual-port L2 should be installed such that it can be used by one restriped ADA van accessible parking stall and one restriped standard ADA stall.

Electrical Service

Electrical service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 1000kVA 480V pad-mounted utility transformer, 1600A 480V switchboard should be installed, as well as installing breakers for all L2 chargers into the existing 400A 240V main switchboard. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

41. Roosevelt Community Center @ 901 E Santa Clara St.

Description and Context

The Roosevelt Community Center is located at the southern end of Roosevelt Park and consists of multiple sports fields and various parking lots. The community center is open from 8:00 a.m. to 6:00 p.m. on weekdays and 9:00 a.m. to 1:00 p.m. on Saturdays. The PRNS department houses one vehicle at this site.

Location and Access

This site is located along N. 21st Street and East Santa Clara Street and can be accessed via both streets.

Fleet Electrification

There is one light-duty vehicle that is based at this site. It is a passenger van and has not yet been electrified. This vehicle has an average of 14 hours of dwell time per day.

Parking

There is an outdoor parking lot north of the community center building which is shared with Roosevelt Park. The lot is accessible from N. 21st St and contains 176 parking spaces. The lot is shared by the visiting public, employees, and fleet vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 4 kWh/day, and fleet vehicles assigned to this location drive an average of 4.6 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet, employee, and public chargers is approximately 1588.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed in phase 1 of project implementation. This would give the single fleet vehicle at this site the ability to charge daily.

Employee EV Charger Recommendations

Three dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Public EV Charger Recommendations

Three dual-port low-output L2, two single-port low-output L2 and five dual-port 150kW DCFCs stations are recommended for public charging at this site. One single-port L2 should be installed such that it can be used by one restriped ADA van accessible parking stall, and one single-port L2 should be installed such that it can be used by one restriped standard ADA stall.

Electrical Service

This site has an existing 1200A, 480V switchboard which has sufficient capacity to power up to 5 level 2 chargers. However, due to the high demand loads of the DCFCs, electrical service upgrades will be required at this site to power all the recommended charging stations. Based on charger demands, a 1000kVA 480V pad-mounted utility transformer, 1600A 480V switchboard, 100 kVA step-down transformer, and a 250A 208V

sub-panel are recommended. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

42. San José Municipal Water System @ 3025 Tuers Rd.

Description and Context

The San José Municipal Water System complex is located at the southern end of the Los Lagos Golf Course and consists of multiple small buildings and a parking lot. The Environmental department houses vehicles at this site.

Location and Access

This site is located along Tuers Road adjacent to the Los Lagos Golf Course and can be accessed from Tuers Road.

Fleet Electrification

There are twenty-eight light-, four medium-, and one heavy-duty vehicle for a total of thirty-three vehicles based at this site. None of these vehicles have been electrified. The LD vehicles are made up of SUVs and pickup trucks, the MD vehicles are all Ford F-series trucks, and the HD vehicle is a semi-truck. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

Parking at this site consists of stalls located around the Administration Building and Storage Building which line the perimeter of the site. There is a gate which divides the northern portion of the lot, which is for public parking, and the southern portion of the lot, which is for employee and fleet parking.

Energy Requirements

The electrical demand for fleet operation is estimated to be 577 kWh/day, and fleet vehicles assigned to this location drive an average of 27.6 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging and DC slow charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 244.5 kW.

Fleet EV Charger Recommendations

Fifteen dual-port low-output L2 chargers and one single-port 11.5 DC slow charger are recommended for this site. Three dual-port low-output L2 charging stations should be installed in phase 1 of project implementation. Eleven dual-port low-output L2 and one single-port 11.5kW DC charging stations should be installed in phase 2, and the final dual-port low-output L2 charging station should be installed in phase 3. This would give fleet vehicles at this site the ability to charge about daily.

Employee EV Charger Recommendations

Five dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

This site has recently gone through a renovations project which completely revamped the buildings layout, parking layout, and electrical infrastructure. As part of the project, the electrical system has been upgraded to provision for future EV chargers, and included the installation of an 800A, 480/277V panel "HEV" and an 800A, 208/120V panel "LEV", both of which are dedicated for EV chargers. All proposed chargers can be fed from panel LEV, and the spare conduits and pull boxes which were also installed as part of the renovations should be used to route power conductors to the proposed EV chargers.

43. San José-Santa Clara Regional Wastewater Facility @ 700 Los Esteros Rd.

Description and Context

The San José-Santa Clara Regional Wastewater Facility is a large complex along Los Esteros Rd. The Environmental department domiciles vehicles at this site.

Location and Access

This site is located south of the Bay, and the entire site is bordered by Los Esteros Road and Zanker Road. The plant can be accessed by multiple locations along these two roads.

Fleet Electrification

There are twenty-six light, ten medium, and three heavy-duty vehicles for a total of thirty-nine vehicles that are based at this site. Five of the LD vehicles have already transitioned into BEVs. The LD vehicles are a mix of SUVs, sedans, pickup trucks, and cargo vans. All MD vehicles are utility trucks. The three HD vehicles are dump trucks. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

There are multiple parking lots at this site which are used by fleet and employee vehicles. The main administrative building is located near the north end of the site, and there is a fleet parking lot to the west of the building. There is also a small fleet parking lot by the building to the northeast corner of the site. Fleet vehicles also park at the maintenance facilities near the middle of the plant. Finally, one lot directly east of the Maintenace facility and the lot by the Environmental Services building are used for both employee and fleet parking.

Energy Requirements

The electrical demand for fleet operation is estimated to be 462 kWh/day, and fleet vehicles assigned to this location drive an average of 17.3 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging and DC slow charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 495.1 kW.

Fleet EV Charger Recommendations

Eight dual-port low-output L2 chargers, one single-port 11.5 DC slow charger, and one dual-port 150 kW DC fast charger are recommended for this site. Two dual-port low-output L2 and one single-port 11.5kW DC slow charging stations are recommended for installation in phase 1 of project implementation. The remaining six dual-port low-output L2, and one dual-port 150kW DCFCs stations should be installed in phase 2. This would give fleet vehicles at this site the ability to charge about every other day.

Employee EV Charger Recommendations

Twenty-six dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

Due to the plant's large size and dispersed parking areas, consolidating EV charging infrastructure is recommended to minimize the need for multiple utility service upgrades and reduce installation costs. Based on the current vehicle parking assignments, two possible EV charging "hub" locations have been identified for the site. The first is the fleet parking lot near the administrative building, and the second is the shared fleet and employee lot near the maintenance facility at the center of the site. To support the proposed EV charging loads, a single 4160V to 208V transformer is needed. The Administration Building does not have available power capacity for the chargers, so a new power feed will need to be brought in from one of the main 4160V switchgears.

44. Seven Trees Community Center @ 3590 Cas Drive

Description and Context

The Seven Trees Community Center consists of one main building which is shared with the Seven Trees branch library, multiple sports fields and a single parking lot to the south of the main building. The community center is open to the public from 9 a.m. to 8 p.m.

Location and Access

The Seven Trees Community Center is located along Cas Drive east of E. Capitol Expressway and can be accessed by Cas Drive. The site is located in a residential neighborhood south of KIPP Heritage Academy.

Fleet Electrification

There are no fleet vehicles domiciled at this site, and chargers are recommended for employee and public vehicles only.

Parking

There is an outdoor parking lot south of the main building that is accessible by Cas Drive and contains 158 parking spaces. The lot is shared by visiting public vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee and public chargers is 104.4 kW.

Employee EV Charger Recommendations

Four dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Public EV Charger Recommendations

Six dual-port low-output L2 and one single-port low-output L2 charging stations are recommended for public charging at this site. The one single-port L2 should be installed in an existing ADA van accessible parking stall.

Electrical Service

Electrical service upgrades will not be necessary at this site in order to power the recommended charging stations. A new 150 kVA step-down transformer and 400A subpanel should be added to the existing electrical service in order to power all proposed EV charging stations. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

45. South Yard @ 4420 Monterey Road

Description and Context

West Yard is located on Williams Road near Moorpark Avenue intersection.

Location and Access

The site is in San José near the intersection of Williams Road and Moorpark Avenue. The location is within a residential area. Access to the area is gated with no public parking.

Fleet Electrification

There are 21 light-, 28 medium-, and 23 heavy-duty vehicles based at this site. This includes three light-duty vehicles which have already been converted into EVs. The LD vehicles at this facility are made up of a mix of SUVs, sedans, pickup trucks, and vans. The MD and HD vehicles at this facility are made up entirely of various utility trucks. Vehicles at this site have an average of 15.3 hours of dwell time per day.

Parking

Parking at this location is for fleet and employees only. The front of the property adjacent to Williams Road is a mix of employee and fleet parking, with marked stalls further back into the property for fleet use only.

Energy Requirements

The electrical demand for fleet operation is estimated to be 2,341 kWh/day, and fleet vehicles assigned to this location drive an average of 24.4 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging, low output DC slow charging, and DC fast charging, should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 1,025.8 kW.

Fleet EV Charger Recommendations

Four dual-port low-output L2 chargers, five dual-port high-output L2 chargers, three single-port 11.5 kW DC slow chargers, nine single-port 22.5 kW DC slow chargers, and two dual-port 150 kW DC Fast Chargers are recommended for this site. Of these charging stations, two dual-port low-output L2, two dual-port medium-output L2, two single-port 11.5 kW DC slow charger, five single-port 22.5 kW DC slow chargers, one dual-port 150 kW DCFCs stations are recommended for installation during Phase 1 of project implementation to meet fleet charging needs. One dual-port low-output L2, one dual-port medium-output L2, one single-port 11.5 kW DC slow charger, three single-port 22.5 kW DC slow charger, and one dual-port 150 kW DCFCs are recommended for installation during Phase 2. The remaining one dual-port low-output L2, two dual-port medium-output L2, and one single-port 22.5 kW DC slow charging stations are recommended for installation during phase 3. This gives fleet vehicles the flexibility to charge about once every other day.

Employee EV Charger Recommendations

Seven dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee and fleet charging.

Electrical Service

West Yard is serviced by a main switchboard with 400A capacity. Electrical upgrades are required at this location based on electrical demands from heavy duty vehicles. Further engineering analysis is needed by PG&E to evaluate if the existing transformer has available capacity to accommodate the EV charging loads or if an entirely new transformer would be required or upgrades to the existing transformer would be needed to provide power to the EV chargers.

46. Southside Community Center @ 5585 Cottle Road

Description and Context

The Southside Community Center consists of multiple buildings surrounded by parking areas. The community center is open to the public from 8:30 a.m. to 6 p.m.

Location and Access

The Southside Community Center is located at the intersection of Cottle Road and Poughkeepsie Road and can be accessed from both roads. The site is located in a commercial area.

Fleet Electrification

There are no fleet vehicles domiciled at this site and chargers are recommended for employee and public vehicles only.

Parking

There is an outdoor parking lot that surrounds the community center and contains 100 parking spaces. The lot is shared by visiting public vehicles and employee vehicles.

Energy Requirements

The proposed connected load of employee and public chargers is 6 kW.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power between fleet and employee charging as needed.

Electrical Service

Assuming that a smart charging system could be used to limit the output of each port to as low as 1.5 kW, the existing electrical infrastructure should have sufficient capacity to power the proposed chargers. However, a more detailed load study and possible further coordination with the utility is recommended to confirm the existing electrical capacity.

47. Station 1 @ 225 N. Market Street

Description and Context

Fire Station 1 houses vehicles from the Fire Department and consists of one main station building with three drive-through vehicle bays and a gated parking area.

Location and Access

Station 1 is located at the intersection of Market Street and Devine Street. The vehicle bays can be accessed from Market Street and the parking lot can be accessed from N San Pedro St. The main parking lot is gated, and there is no public parking available for this site.

Fleet Electrification

There is one medium-duty pickup truck that is based at this site. It is not yet electrified. The dwell time for this vehicle is unknown.

Parking

The main parking area has 10 parking spaces available for light and medium-duty vehicles, and three vehicle bays available for medium and heavy-duty fire fighting vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 14 kWh/day, and fleet vehicles assigned to this location drive an average of 35.2 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 19.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed during phase 3 of project implementation. This would give the single fleet vehicle at this site the ability to charge daily.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

Six 50A 2 pole breakers should be installed into an existing electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

48. Station 10 @ 511 S. Monroe Street

Description and Context

Fire Station 10 houses vehicles from the Fire Department and consists of one main station building with three vehicle bays and a gated parking area.

Location and Access

Station 10 is located on and can be accessed by Monroe Street. The main parking lot is gated, and there is no public parking available for this site.

Fleet Electrification

There are five light, and one medium-duty vehicle for a total of six vehicles based at this site. None of these have been electrified. The LD vehicles are made up of SUVs and one cargo van, and the MD vehicle is a pickup truck. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

The main parking area has 13 parking spaces available for light and medium-duty vehicles, and three vehicle bays available for medium and heavy-duty fire fighting vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 74 kWh/day, and fleet vehicles assigned to this location drive an average of 35.2 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 54.6 kW.

Fleet EV Charger Recommendations

Three dual-port low-output L2 chargers are recommended for this site. One dual-port low-output L2 charging station should be installed in phase 1 of project implementation, and the remaining two dual-port low-output L2 charging stations should be installed in phase 2. This would give fleet vehicles at this site the ability to charge daily.

Employee EV Charger Recommendations

Five dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

Electrical service upgrades will be necessary at this site in order to power the recommended charging stations. Based on charger demands, a 150kVA 208V pad-mounted utility transformer, 200A 208V switchboard should be installed, as well as installing 16 50A breakers to provide power to all L2 chargers proposed for this site. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

49. Station 12 @ 5912 Cahalan Ave.

Description and Context

Fire Station 12 houses vehicles from the Fire Department and consists of one main station building with two vehicle bays and a parking area.

Location and Access

This site is located at the intersection of Cahalan Avenue and Calero Avenue and can be accessed from Cahalan Avenue. There is a paved area on the east side of the fire station which is gated and cannot be accessed by the public.

Fleet Electrification

There are no vehicles recommended for electrification based at this site.

Parking

There are no parking stalls in the gated area to the east of the station. There is a small parking lot with 12 parking stalls to the south of the station, which is ungated.

Energy Requirements

The total connected load of proposed employee chargers is approximately 6 kW.

Fleet EV Charger Recommendations

No chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

Four 50A 2 pole breakers should be installed into an existing electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

50. Station 13 @ 4380 Pearl Ave.

Description and Context

Fire Station 13 houses vehicles from the Fire Department and consists of one main station building with three drive-through vehicle bays and a parking area.

Location and Access

Station 13 is located along Pearl Avenue adjacent to the intersection with Knollfield Way and south of the Pearl Avenue Branch Library. Parking for this site can be accessed from Pearl Avenue and is not available for public use.

Fleet Electrification

There are no fleet vehicles recommended for electrification based at this site.

Parking

The main parking area has 14 parking spaces available for light and medium-duty vehicles, and three vehicle bays available for medium and heavy-duty fire fighting vehicles.

Energy Requirements

The total connected load of proposed employee chargers is approximately 6 kW.

Fleet EV Charger Recommendations

No chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

Four 50A 2 pole breakers should be installed into an existing electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

51. Station 19 @ 3292 Sierra Road

Description and Context

Fire Station 19 houses vehicles from the Fire Department and consists of one main station building with two drive-through vehicle bays and a parking area.

Location and Access

Station 19 is located at the intersection of Sierra Road and Piedmont Road. The vehicle bays are accessible via Sierra Road, and the main employee parking lot can be accessed from Piedmont Road. The site is gated and not available to the public.

Fleet Electrification

There are no vehicles recommended for electrification based at this site.

Parking

There is a small parking area south of the main station building where employees for this facility park. Medium and heavy-duty firefighting vehicles park within the two vehicle bays in the station building.

Energy Requirements

The total connected load of proposed employee chargers is approximately 6 kW.

Fleet EV Charger Recommendations

No fleet chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

Four 50A 2 pole breakers should be installed into an existing electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

52. Station 2 @ 2949 Alumrock Ave.

Description and Context

Fire Station 2 houses vehicles from the Fire Department and consists of one main station building with three drive-through vehicle bays and a parking area.

Location and Access

Station 2 is located along Alum Rock Avenue near the intersection with Cedar Lane and south of the James Lick High School Football Field. The site can be accessed from Alum Rock Avenue. The parking area for this site is gated and not available for public use.

Fleet Electrification

There is one medium-duty pickup truck based at this site. It has not yet been electrified. This vehicle has an average of 14 hours of dwell time per day.

Parking

The main parking area for this station is located north of the main building. There are 13 parking stalls which are covered with solar canopies and about 10 more stalls not under a solar canopy.

Energy Requirements

The electrical demand for fleet operation is estimated to be 3 kWh/day, and fleet vehicles assigned to this location drive an average of 43.2 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 19.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed in phase 3 of project implementation. This would give the single fleet vehicle at this site the ability to charge daily.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Six 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

53. Station 24 @ 1924 Yerba Buena Road

Description and Context

Fire Station 24 houses vehicles from the Fire Department and consists of one main station building with two drive-through vehicle bays and a parking area.

Location and Access

This station is located at the intersection of Silver Creek Road and Yerba Buena Road. The drive through vehicle bays can be accessed from either of these roads, and the parking lot for this site can only be accessed from Yerba Buena Road. There is a small parking lot which is accessible to the public, but the rest of the site is gated and not accessible to the public.

Fleet Electrification

There are no vehicles recommended for electrification based at this site.

Parking

There is a small public parking lot at this site bordered by Yerba Buena Road and a powered gate on the other side. This public parking lot has 1 ADA accessible stall and 2 non-ADA stalls. The powered gate leads to an employee parking lot adjacent to the public lot with 16 parking stalls.

Energy Requirements

The total connected load of proposed employee chargers is approximately 6 kW, so two L2 chargers should be sufficient.

Fleet EV Charger Recommendations

There are no fleet vehicles based at this site.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Four 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

54. Station 27 @ 6027 San Ignacio Ave.

Description and Context

Fire Station 27 houses vehicles from the Fire Department and consists of one main station building with two drive-through vehicle bays and a parking area.

Location and Access

This site is located at the intersection of Bernal Road, Via Serena and Bernal Way. The vehicle bays can be accessed from Via Serena and the employee parking area can be accessed from Bernal Way. The entire site is gated and cannot be accessed by the public.

Fleet Electrification

There are no fleet vehicles based at this site.

Parking

The parking area for this station has 8 parking stalls which can be used for employee vehicle parking as well as LD fire department vehicles which may visit. Medium and heavy-duty firefighting vehicles can park in the two vehicle bays.

Energy Requirements

The total connected load of proposed employee chargers is approximately 6 kW.

Fleet EV Charger Recommendations

No chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Four 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and

service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

55. Station 28 @ 19911 McKean Road

Description and Context

Fire Station 28 houses vehicles from the Fire Department and consists of one main station building with two drive-through vehicle bays and a parking area.

Location and Access

Station 28 is located along McKean Road adjacent to the Challenger School and can be accessed from McKean Road. The site is not gated but is not accessible for public use.

Fleet Electrification

There are no vehicles recommended for electrification based at this site.

Parking

The employee parking area is located south of the station building and consists of 5 parking stalls as well as open paved areas where employees park.

Energy Requirements

The total connected load of proposed employee chargers is approximately 6 kW.

Fleet EV Charger Recommendations

No chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Four 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

56. Station 29 @ 199 Innovation Drive

Description and Context

Fire Station 29 houses vehicles from the Fire Department and consists of one main station building with three drive-through vehicle bays, a smaller garage, and a parking area.

Location and Access

Station 29 is located at the intersection of Zanker Road and Innovation Drive and can be accessed by Innovation Drive. The site is not gated and has parking which is accessible to the public.

Fleet Electrification

There are no fleet vehicles recommended for electrification based at this site.

Parking

The parking lot for this site contains 23 parking stalls that are wrapped around the east and north sides of the fire station. Multiple of these stalls are used to store trailers owned by the fire department. Medium and heavy-duty firefighting vehicles domicile in the three vehicle bays inside of the station.

Energy Requirements

The total connected load of proposed employee chargers is approximately 6 kW.

Fleet EV Charger Recommendations

No chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Four 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

57. Station 30 @ 454 Auzerais Ave.

Description and Context

Fire Station 30 houses vehicles from the Fire Department and consists of one main station building with three drive-through vehicle bays, a smaller garage, and a parking area.

Location and Access

Station 30 is located at the intersection of Auzerais Avenue and Minor Avenue. The main parking area can be accessed from Minor Avenue. The two vehicle bays and smaller garage can be accessed from Auzerais Avenue. The entire site is gated and is not accessible to the public.

Fleet Electrification

There are no vehicles recommended for electrification based at this site.

Parking

The main parking lot for this site has 14 parking stalls available for employee parking and light/medium duty fire vehicles. Medium and heavy-duty firefighting vehicles park in the drive through vehicle bays.

Energy Requirements

The total connected load of proposed employee chargers is approximately 6 kW.

Fleet EV Charger Recommendations

No fleet chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Four 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

58. Station 34 @ 1634 Las Plumas Ave.

Description and Context

Fire Station 34 houses vehicles from the Fire Department and consists of one main station building with three drive-through vehicle bays and a parking area.

Location and Access

Station 34 is located along Las Plumas Avenue near the intersection with Lenfest Road and can only be accessed from Las Plumas Avenue. The site is gated and not accessible to the public except for a small public parking lot.

Fleet Electrification

There is one medium-duty flatbed truck based at this site. It has not yet been electrified. This vehicle has 14 hours of dwell time a day

Parking

The public parking lot is located on the north end of the site and consists of one ADA stall and one non-ADA stall. The main parking area for this site is wrapped around the east and south of the station and consists of 20 parking stalls which can be used for employee parking as well as parking for light/medium duty fleet vehicles. Medium and heavy-duty firefighting vehicles domicile in the three drive-through vehicle bays. There is a covered parking area south of the main parking area which is being used by heavy-duty fleet vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 12 kWh/day, and fleet vehicles assigned to this location drive an average of 32.3 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of the proposed fleet and employee chargers is approximately 16.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site and should be installed in phase 2 of project implementation. This would give the single fleet vehicle at this site the ability to charge daily.

Employee EV Charger Recommendations

One dual-port low-output L2 charging station is recommended for employee charging at this site. This charger should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee and fleet charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Four 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

59. Station 35 @ 135 Poughkeepsie Road

Description and Context

Fire Station 35 houses vehicles from the Fire Department and consists of one main station building with three drive-through vehicle bays and a parking area.

Location and Access

Station 34 is located along Poughkeepsie Road west of the intersection of Poughkeepsie Road and Cottle Road and can be accessed from Blossom Hill Road. The site is gated and is not accessible to the public.

Fleet Electrification

There are no fleet vehicles recommended for electrification based at this site.

Parking

The main parking area is north of the main station building. There are 17 parking stalls which can be used by employee vehicles as well as light or medium-duty fleet vehicles. Medium and Heavy-duty firefighting vehicles park inside the drive-through vehicle bays.

Energy Requirements

The total connected load of proposed employee chargers is approximately 9 kW.

Fleet EV Charger Recommendations

No chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Three dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Six 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

60. Station 5 @ 1380 N. 10th Street

Description and Context

Fire Station 5 houses vehicles from the Fire Department and consists of one main station building with two drive-through vehicle bays, a smaller garage in the main station building, and a parking area.

Location and Access

Station 5 is located between N 10th Street and Old Bayshore Highway. The site is gated and inaccessible to the public. The drive-through vehicle bays and garage can be accessed from N. 10th Street, and the main parking area can be accessed from Old Bayshore Highway.

Fleet Electrification

There are no vehicles recommended for electrification based at this site.

Parking

The main parking area contains 13 stalls which can be used by employees as well as light or medium-duty fleet vehicles. Medium and Heavy-duty firefighting vehicles park inside the drive-through vehicle bays.

Energy Requirements

The total connected load of proposed employee chargers is approximately 9 kW.

Fleet EV Charger Recommendations

No chargers are recommended to be installed at this site.

Employee EV Charger Recommendations

Three dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available only for employee charging.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Six 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and

service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

61. Training Center @ 1591 Senter Road

Description and Context

The San José Fire Training Center consists primarily of empty structures in a large concrete area that are used for training purposes by the Fire Department. The main building for this site is a centrally located multi-story training building, and the north border of the site is lined with small buildings. The Fire Department stores vehicles at this site.

Location and Access

The Training Center is located along Senter Road directly adjacent to the Japanese Friendship Gardens. This site is gated and inaccessible to the public. It can be accessed from Senter Road as well as a side road which connects to S 10th Street.

Fleet Electrification

There are four light, and one medium-duty vehicles for a total of five vehicles based at this site. None of these have been electrified. The LD vehicles include two SUVs, a passenger van, and a pickup truck, and the MD vehicle is a Ford F-550. Vehicles at this site have an average of 14 hours of dwell time per day.

Parking

The main parking area for the Training Center makes up the southern section of the site. It is paved with asphalt and there are no painted parking stalls. Instead, there are two rows' vehicles can use to park. Heavy-duty vehicles can park along the eastern border of the site adjacent to the main training building.

Energy Requirements

The electrical demand for fleet operation is estimated to be 34 kWh/day, and fleet vehicles assigned to this location drive an average of 9.9 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet chargers is approximately 26.4 kW.

Fleet EV Charger Recommendations

Two dual-port low-output L2 chargers are recommended for this site, both of which should be installed in phase 1 of project implementation. This would give fleet vehicles at this site the ability to charge daily or every other day.

Employee EV Charger Recommendations

No additional chargers are recommended for employee vehicle charging at this site.

Electrical Service

A new 100A subpanel should be installed on the existing service at this site. Four 50A 2 pole breakers should be installed into this new electrical panel at this site in order to provide power to the chargers planned for installation. Further engineering analysis is needed by PG&E to evaluate if the existing transformer and service panel have available capacity to accommodate the EV charging loads or if upgrades to the existing transformer or a new sub-panel would be needed to provide power to the EV chargers.

62. Tully Library @ 880 Tully Road

Description and Context

The Tully Library consists of one main building and is directly north of a public recreation area with multiple baseball fields. The library is open to the public from 10:00 a.m. to 7:00 p.m. There are no fleet vehicles assigned to this site.

Location and Access

Tully Library is located on Tully Road near the intersection with Kenoga Drive and is accessible from Tully Road. The site is located in a residential neighborhood, and free parking is available to the public.

Fleet Electrification

There are no fleet vehicles domiciled at this site and chargers are recommended for employee vehicles only.

Parking

There is an outdoor parking lot containing 121 parking stalls starting from the north of the main building and extending to the east corner of the site. The lot is shared by public visiting vehicles and employee vehicles.

Energy Requirements

The proposed connected load of public and employee chargers is 98.4 kW.

Employee EV Charger Recommendations

Two dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee charging only.

Public EV Charger Recommendations

Seven dual-port low-output L2 charging stations are recommended for public charging at this site. One dual-port L2 charging station should be installed such that it can be used by one restriped ADA van accessible parking stall and one restriped standard ADA stall.

Electrical Service

Electrical service upgrades will not be necessary at this site in order to power the recommended charging stations. A new 150 kVA step-down transformer and 400A subpanel should be added to the existing electrical service in order to power all proposed EV charging stations. However, a more detailed load study and possible further coordination with the utility is recommended to confirm these additions.

63. West Yard @ 5090 Williams Road

Description and Context

The West Yard is a mostly empty lot with multiple dispersed parking areas and material storage slots. There are two main buildings on the north end of the site.

Location and Access

The site is in San José near the intersection of Williams Road and Moorpark Avenue. The location is within a residential area. Access to the area is gated with no public parking.

Fleet Electrification

There are ten light, eight medium, and eight heavy-duty vehicles that are based at the West Yard. None of the vehicles at this facility have been transitioned into EVs. All LD vehicles at this facility are pickup trucks. The MD vehicles consist of one mobile command center, a sewer inspection van, and various utility trucks. The HD vehicles primarily consist of dump trucks, as well as one utility crane, and one excavator. Vehicles at this site have an average of 19.4 hours of dwell time per day.

Parking

Parking at this location is for fleet and employees only. The front of the property adjacent to Williams Road is a mix of employee and fleet parking, with marked stalls further back into the property for fleet use only.

Energy Requirements

The electrical demand for fleet operation is estimated to be 1,213 kWh/day, and fleet vehicles assigned to this location drive an average of 40.4 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging, low output DC slow charging, and DC fast charging, should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 575 kW.

Fleet EV Charger Recommendations

Five dual-port medium-output L2 chargers, two single-port 22.5 kW DC slow chargers, one dual-port 50kW DC slow charger, and one dual-port 150 kW DC Fast Charger are recommended for this site. One dual-port medium-output L2 charging station is recommended for installation in Phase 1 of project implementation. The remaining four dual port medium-output L2, two single-port 22.5 kW DC slow chargers, one single-port 50 kW DC slow charger, and one dual-port 150 kW DCFCs stations are recommended for installation in Phase 2. There are no recommended charger additions in phase 3 of project implementation. This gives fleet vehicles the flexibility to charge about once every other day.

Employee EV Charger Recommendations

Five dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These L2 chargers should be made available for employee and fleet charging.

Electrical Service

West Yard is serviced by a main switchboard with 400A capacity. Electrical upgrades are required at this location based on electrical demands from heavy duty vehicles. Further engineering analysis is needed by PG&E to evaluate if the existing transformer has available capacity to accommodate the EV charging loads or if an entirely new transformer would be required or upgrades to the existing transformer would be needed to provide power to the EV chargers.

64. Willow Glen Community Center @ 2175 Lincoln Ave

Description and Context

The Willow Glen Community Center consists of a single building with multiple small grass areas, and a main parking area to the southwest of the building. The community center is open to the public from 9:00 a.m. to 6:00 p.m. on weekdays and 9:30 a.m. to 1 p.m. on Saturdays.

Location and Access

This site is located near the intersection of Lincoln Court and Lincoln Avenue and can be accessed from Radio Avenue. The main parking area is open to the public.

Fleet Electrification

There are two light-duty passenger vans based at this site. These have not been electrified. These vehicles have an average of 14 hours of dwell time per day.

Parking

The main parking lot for this site contains 160 parking stalls and is shared with Fire Station 37. The lot is used by employee, fleet and public vehicles.

Energy Requirements

The electrical demand for fleet operation is estimated to be 6 kWh/day, and fleet vehicles assigned to this location drive an average of 3.5 miles per day. Given the average miles driven and expected battery size of replacement EVs, overnight L2 charging should be sufficient to charge all fleet vehicles domiciled at this site. The total connected load of proposed fleet and employee chargers is approximately 22.2 kW.

Fleet EV Charger Recommendations

One dual-port low-output L2 charger is recommended for this site which should be installed during phase 1 of project implementation. This would give fleet vehicles at this site the ability to charge daily.

Employee EV Charger Recommendations

Three dual-port low-output L2 charging stations are recommended for employee charging at this site. These chargers should utilize a smart charger system such as Driivz to dynamically allocate available power. These charging stations should be made available for employee, fleet, and public charging.

Electrical Service

The main electrical room is located in the southwest corner of the building, and contains the 600A, 208/120V main switchboard.

For more information about this report, please contact:

Ari Sanjar, Frontier Energy – asanjar@frontierenergy.com

Thomas Paddon, DKS Associates – thomas.paddon@dksassociates.com