

AUGUST 2022

SITE PLANPREPARED FOR

Nipomo Community Services District

PREPARED BY

SWCA Environmental Consultants

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE BLACKLAKE SEWER SYSTEM CONSOLIDATION PROJECT, NIPOMO, SAN LUIS OBISPO COUNTY, CALIFORNIA

Prepared for

Nipomo Community Services District

P.O. Box 326 Nipomo, CA 93444-0326 Attn: Peter Sevcik, P.E.

Prepared by

Cassidy Williams, B.S.

SWCA Environmental Consultants

1422 Monterey Street, Suite C200 San Luis Obispo, CA 93401 (805) 543-7095 www.swca.com

SWCA Project No. 63924

August 2022

CONTENTS

| En | vironm | ental Determination Form | 1 |
|-----|----------|--|----|
| 1 | Enviro | nmental Checklist and Environmental Evaluation | 9 |
| | I. | Aesthetics | 10 |
| | II. | Agriculture and Forestry Resources | 15 |
| | III. | Air Quality | 17 |
| | IV. | Biological Resources | |
| | V. | Cultural Resources | 51 |
| | VI. | Energy | 54 |
| | VII. | Geology and Soils | |
| | VIII. | Greenhouse Gas Emissions | 61 |
| | IX. | Hazards and Hazardous Materials | 64 |
| | X. | Hydrology and Water Quality | 68 |
| | XI. | Land Use and Planning. | 71 |
| | XII. | Mineral Resources | 73 |
| | XIII. | Noise | 74 |
| | XIV. | Population and Housing | 77 |
| | XV. | Public Services | 78 |
| | XVI. | Recreation | 81 |
| | XVII. | Transportation | 82 |
| | XVIII. | Tribal Cultural Resources | 84 |
| | XIX. | Utilities and Service Systems | 86 |
| | XX. | Wildfire | 88 |
| | XXI. | Mandatory Findings of Significance | 90 |
| 2 | Refere | nces | 92 |
| | | Appendices | |
| | | A. Blacklake Sewer System Consolidation Project Lift Station Site Plan | |
| | | B. Blacklake Sewer System Consolidation Project Force Main Pipeline Limits of Disturb | |
| | | C. Blacklake Sewer System Consolidation Project Southland WWTF Capacity EvaluatioD. CalEEMod Output Files and Summary Table | n |
| _ | | E. Biological Resources Species Lists | |
| | | F. California Red-Legged Frog Habitat Assessment for the Blacklake Sewer System | |
| - 1 | r | Consolidation Project | |
| Αp | pendix (| G. Mitigation Monitoring and Reporting Program | |

Figures

| Figure 1. Project Vicinity Map. | 6 |
|--|----|
| Figure 2. Project Location Map. | 7 |
| Figure 3. View of the easternmost treatment pond at the Blacklake WRF site, facing northeast | |
| (February 19, 2021) | 11 |
| Figure 4. View of easternmost treatment pond at the Blacklake WRF site, facing southeast | |
| (February 19, 2021). | 11 |
| Figure 5. View of Sundale Way near Sundale Way/Camino Caballo intersection, facing north | |
| (February 19, 2021) | 12 |
| Figure 6. View of Camino Caballo near Camino Caballo/Pomeroy Road intersection, facing west | |
| (February 19, 2021) | |
| Figure 7. Sensitive Receptor Locations Within 300 feet of Eastern Portion of Project Site | |
| Figure 8. Sensitive Receptor Locations Within 300 feet of Western Portion of Project Site | |
| Figure 9. Vegetation Map (Sheet 1 of 6). | |
| Figure 10. Vegetation Map (Sheet 2 of 6). | |
| Figure 11. Vegetation Map (Sheet 3 of 6). | 32 |
| Figure 12. Vegetation Map (Sheet 4 of 6). | 33 |
| Figure 13. Vegetation Map (Sheet 5 of 6). | 34 |
| Figure 14. Vegetation Map (Sheet 6 of 6). | 35 |
| | |
| | |
| Tables | |
| Table 1. Project Earthwork Estimates | 4 |
| Table 2. SLOAPCD Thresholds of Significance for Construction Activities | 19 |
| Table 3. Proposed Project Estimated Construction Emissions ¹ | 23 |
| Table 4. Special-status Plant Species with Suitable Habitat Conditions Present in the BSA | 39 |
| Table 5. Special-Status Animal Species with Suitable Habitat Present in the BSA | |
| Table 6. Estimated Project Construction GHG Emissions | |
| Table 7. Maximum Allowable Exterior Noise Level Standards ¹ | |
| Table 8. Construction Equipment Noise Emission Levels | 76 |
| Table E Special-Status Animal Species Investigated for Potential Occurrence | 7 |

ENVIRONMENTAL DETERMINATION FORM

1. Project Title:

Blacklake Sewer System Consolidation Project

2. Lead Agency Name and Address:

Peter Sevcik, Director of Engineering and Operations Nipomo Community Services District P.O. Box 326 Nipomo, CA 93444-0326

3. Contact Person and Phone Number:

Peter Sevcik Nipomo Community Services District 805-929-1133

4. **Project Location:**

The proposed Blacklake Sewer System Consolidation Project (project) is located in the unincorporated community of Nipomo, San Luis Obispo County, California. The proposed Blacklake Sewer System Consolidation Project would include the construction of a new lift station on the eastern side of the existing Blacklake Water Reclamation Facility (Blacklake WRF) site located on Willow Road (Appendix A), installation of 4.15 miles of new force main pipeline from the new lift station to the Southland Wastewater Treatment Facility (Appendix B), and decommissioning of the existing Blacklake WRF. The pipeline would be located within Nipomo Community Services District property and easements under County of San Luis Obispo (County) roadway right-of-way along Willow Road, Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street (see Figures 1 and 2). Equipment and material staging would also occur on the Nipomo Community Services District-owned parcel located at the northeast corner of the intersection of Sundale Way and Camino Caballo (Assessor Parcel Number [APN] 091-232-016).

5. Project Sponsor's Name and Address:

Nipomo Community Services District P.O. Box 326 Nipomo, CA 93444-0326

6. General Plan Designation:

Blacklake WRF: Recreation

• Pipeline Alignment: County roadway right-of-way, Residential Rural

7. Zoning:

N/A

8. Project Background:

The Nipomo Community Services District (NCSD) currently operates two wastewater treatment facilities to serve its service area: the Southland Wastewater Treatment Facility (WWTF) and the Blacklake Water Reclamation Facility (WRF). The Southland WWTF currently serves approximately 2,500 connections within the community of Nipomo and other proximate unincorporated County areas. The Southland WWTF was upgraded between 2012 and 2014. Pursuant to the California Environmental Quality Act (CEQA), an Environmental Impact Report (EIR) was prepared to address the potential environmental impacts resulting from the upgrades (State Clearinghouse Number 2009051120). The Southland WWTF currently has a capacity of 900,000 gallons per day and was designed to be able to expand as the community of Nipomo continues to grow. Based on a comparison of the Southland WWTF design capacity and the existing flows and nutrient loading, the Southland WWTF flows are currently at approximately 60% capacity on an average annual flow basis, but certain nutrient loads are at or slightly above the plant design capacity (MKN Associates 2021; Appendix C).

The Blacklake WRF was built in 1984, annexed into NCSD service area in 1993, and was expanded between 1995 and 1996. The Blacklake WRF currently serves 559 connections and is physically separate from the rest of NCSD sewer system facilities (MKN Associates 2017; see Appendix C). Upon completion of Southland WWTF upgrades, an engineering study found that the needed upgrades of the Blacklake WRF to serve projected future wastewater flows and meet current discharge requirements would be very costly; therefore, NCSD explored the possibility of consolidation with the Southland WWTF.

An engineering study found that the existing Blacklake WRF sludge removal process is more energy and cost intensive in comparison to the recently upgraded treatment process of the Southland WWTF. The study also determined that the consolidation of current Blacklake WRF flows with the Southland WWTF would have a 50-year lifespan, and such a consolidation project would financially break even at year 10. The NCSD proposed the formation of an assessment district to fund construction of the consolidation project and residents voted overwhelmingly in favor of the consolidation project, with the alternative being upgrading the existing Blacklake WRF.

9. Description of Project:

The NCSD proposes the construction of a new 160-gallon-per-minute (gpm) lift station and associated facilities at the existing Blacklake WRF, installation of approximately 4.15 miles (21,930 linear feet) of new 6-inch force main pipeline from the proposed lift station to the existing Southland WWTF and the decommissioning and demolition of the existing Blacklake WRF after the new lift station is completed and operating (project).

The project would be carried out and overseen by the NCSD, which is a California Community Services District organized pursuant to Government Code Sections 61000 et seq. The powers of special districts such as the NCSD are limited solely to those conferred by the Legislature. The NCSD's powers do not include legislative and executive powers over zoning and land use. However, use and/or expansion of existing NCSD service infrastructure (excluding changes in land use, etc.) falls within the NCSD's expressed and implied powers. Therefore, NCSD projects would not be subject to County regulations, such as the *County of San Luis Obispo Title 22 – Land Use Ordinance* (LUO) or *County of San Luis Obispo General Plan Conservation and Open Space Element* (COSE).

Lift Station

The project includes construction and installation of a new lift station consisting of an 8-foot diameter, 15-foot deep wet-well (a chamber for receiving and storing sewage until it can be pumped out), an 8-foot by 12-foot dry-pit, a pump vault, a 6-foot by 6-foot valve vault, electrical and instrumentation equipment, a back-up generator, a wet/dry well canopy shade structure, and a supervisory control and data acquisition (SCADA) tower (see Appendix A). Additional site features would include security lighting and permanent security fencing. Construction of the lift station at this location would require treatment Pond 3 to be drained, and the Blacklake WRF would operate using two of the three treatment ponds during project construction. Pond 3 would be taken out of service and used as a staging area while the new lift station is constructed.

All trees and the existing berm located south of the proposed site would be left in place to provide visual screening from Willow Road. All areas within the proposed fenced area would have an aggregate base course (ABC) surface. The new lift station components would be predominately sub-surface, with the exception of proposed fencing, the SCADA radio antenna tower, standby generator, electrical control panels, and a permanent canopy structure over the pump pit.

Access to the new lift station location would utilize the existing paved access road off of Willow Road. A new fence would be constructed around the lift station with a gate at the driveway entrance. Adequate space to allow chemical delivery trucks or vacuum trucks to turn around would be provided within the site.

Force Main Pipeline

The proposed force main pipeline would be located within NCSD-owned property and existing NCSD easements under County roadway right-of-way, within existing roadways and roadway shoulders, maintaining a minimum distance of 10 feet from existing waterlines, and 50 feet from public water supply wells (see Figure 2; see Appendix B). A fiber optic conduit would be installed in the same trench as the force main to provide high speed communications connectivity between the new lift station and the District's SCADA system. The pipeline alignment would begin at the new lift station location at the Blacklake WRF and would be installed within County right-of-way along Willow Road, Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street, and the pipeline would connect with an existing sewer pipeline at the intersection of Juniper Street and Mary Avenue which ultimately conveys flow to the Southland WWTF.

The planned pipeline alignment evaluated in this document includes an alternative alignment section that would traverse the NCSD-owned property located at the northeastern corner of the intersection of Sundale Way and Camino Caballo if needed to maintain adequate distance from existing utilities located within the intersection. The connection point from the force main pipeline to the existing Southland WWTF pipeline would require an air gap (transition from pressure main to gravity main) at the intersection of Juniper Street and Trevino Street. The air release valve would include installation of odor abatement technology to reduce odor emissions. The existing gravity sewer line from the Juniper Street/Trevino Drive intersection to the Juniper Street/Mary Avenue intersection would be upsized from an 8-inch diameter gravity sewer line to a 12-inch diameter gravity sewer line. Staging areas for the force-main pipeline have yet to be determined. One staging area will be located on the 5-acre NCSD property located at northeast corner of Sundale/Camino Caballo intersection. Other staging areas for the force-main pipeline have yet to be determined.

Decommission of the Blacklake WRF

Upon completion and operation of the new lift station and force main pipeline, the project would include the decommissioning of the Blacklake WRF. However, the area in which Blacklake WRF is located, on an existing easement, would continue to be used by the NCSD to collect wastewater from the Blacklake service area and for other public service needs related to the Blacklake service area. Decommissioning activities would include the following:

- Draining and removing sludge from each of the remaining effluent treatment ponds,
- Removing and disposing of the High Density Polyethylene (HDPE) pond liners,
- Filling ponds and existing depressions with engineered fill and grading the area to a smooth finish matching adjacent surfaces,
- Demolishing and removing all buried structures, conduits, and piping on-site,
- Demolishing and removing the WRF Control building,
- Removing and disposing of all surface improvements, paving, walkways, and fencing, and
- Completion of final site improvements and fencing of new lift station site.

Project Construction Schedule and Operation

Project construction would generally occur in two phases, with construction and installation of the force main pipeline occurring first (Phase 1), and construction of the new lift station and decommissioning of the Blacklake WRF occurring second (Phase 2). The project would require approximately 23,600 cubic yards of cut, 25,700 cubic yards of fill, and 14,600 cubic yards of imported fill materials, as detailed in Table 1 below.

Table 1. Project Earthwork Estimates

| Location | Cut (cubic yards) | Fill (cubic yards) | Imported Fill (cubic yards) |
|--|----------------------|-----------------------|-----------------------------|
| Force Main and Gravity Main Excavations | 13,350 | - | - |
| Southland WWTP Borrow Site | 10,250 | - | - |
| Force Main and Gravity Main Bedding and Slurry Backfill | - | - | 12,500 |
| Blacklake WRF Pond 3 | - | 8,500 | - |
| Blacklake WRF Ponds 1 and 2 | - | 17,200 | - |
| Future imported fill material to level Blacklake WRF Ponds 1, 2, 3 | - | - | 2,100 |
| Totals | 23,600 | 25,700 | 14,600 |

Cut materials produced by the excavations for the proposed installation of the force main pipeline would be used to fill the treatment ponds at the existing Blacklake WRF. Materials excavated from the pipeline trenching would be stockpiled at the NCSD-owned property located at the northeastern corner of the intersection of Sundale Way and Camino Caballo until it can be utilized at the Blacklake WRF site. Approximately 12,500 cubic yards of imported sand bedding and slurry would be used for backfilling of the pipeline excavations following pipeline installation, which would be imported from a local ready-mix and/or quarry source. In addition, it is anticipated that approximately 2,100 cubic yards of needed imported fill material would come from nearby construction/development projects that produce excess fill materials.

Construction of the new lift station, installation of the pipeline, and demolition of the Blacklake WRF would occur over a 2-year anticipated work period. While the majority of construction activities would occur during daytime hours, some work associated with connections to existing wastewater infrastructure in service would likely need to be completed during nighttime hours when wastewater flows are low. Once construction is complete, the consolidation would result in a net energy savings due to the current Blacklake system being reliant on a total of 50 to 60 horsepower motors for the aerators while the Southland WWTF uses modern technology with higher energy efficiency.

10. Surrounding Land Uses and Setting:

The existing Blacklake WRF site is surrounded by the Blacklake Golf Course and a residential subdivision to the north, east, and west, and Willow Road, agricultural uses, and rural residential uses to the south.

The proposed force main pipeline alignment would be located within NCSD-owned property and County right-of-way along Willow Road, Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street. Surrounding uses located adjacent to the pipeline alignment include rural residential uses, undeveloped woodlands, and two public service well sites along Sundale Way; single-family residential neighborhoods, agricultural uses, rural residential uses, and open space uses along Camino Caballo; and single-family residential uses along Pomeroy Road and Juniper Street.

11. Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

- U.S. Fish and Wildlife Service Incidental Take Permit
- County of San Luis Obispo Encroachment Permit (non-discretionary)
- San Luis Obispo County Air Pollution Control District Construction Permit (if necessary)
- State Water Resources Control Board Construction General Permit

12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

Pursuant to Public Resources Code Section 21080.3.1, the NCSD (the CEQA Lead Agency) sent a notification letter with an invitation for consultation on April 26, 2021, to the yak tit^yu tit^yu - Northern Chumash Tribe. A request for a copy of the Phase I Archaeological Survey Report prepared for the project was received by the yak tit^yu tit^yu - Northern Chumash Tribe. The Phase 1 Archaeological Survey Report prepared for the project was forwarded on March 15, 2022, to the yak tit^yu tit^yu - Northern Chumash Tribe and no subsequent comments were received. A discussion of the project's potential impacts to tribal cultural resources is provided under Section XVIII, *Tribal Cultural Resources*, below.



Figure 1. Project Vicinity Map.

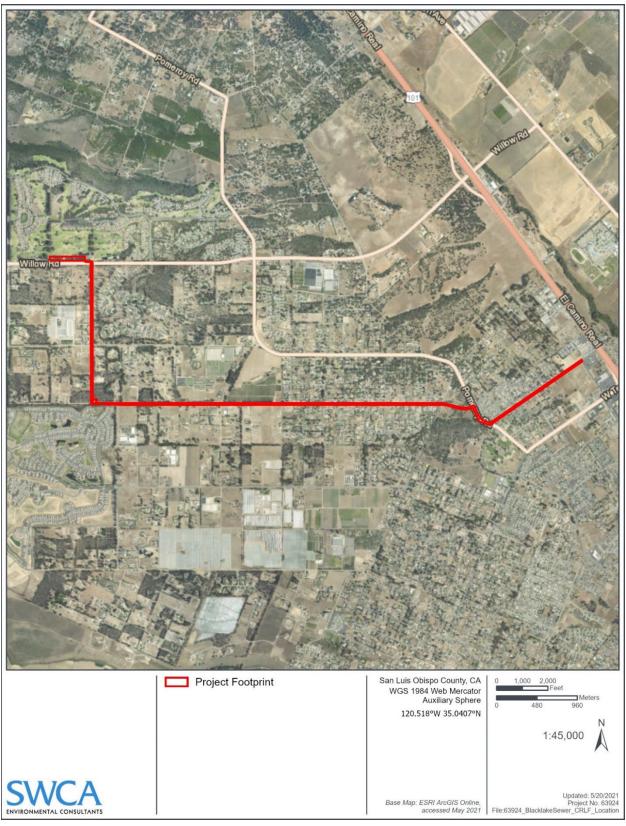


Figure 2. Project Location Map.

This page intentionally left blank.

1 ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The proposed project could have a "Potentially Significant Impact" for environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

| | Aestnetics | \boxtimes | Greennouse Gas Emissions | Ш | Public Services | | |
|-------------|---|-------------|---|-------------|---------------------------------------|--|--|
| | Agriculture and Forestry Resources | \boxtimes | Hazards and Hazardous Materials | | Recreation | | |
| \boxtimes | Air Quality | | Hydrology and Water Quality | \boxtimes | Transportation | | |
| \boxtimes | Biological Resources | \boxtimes | Land Use and Planning | \boxtimes | Tribal Cultural Resources | | |
| \boxtimes | Cultural Resources | | Mineral Resources | \boxtimes | Utilities and Service Systems | | |
| \boxtimes | Energy | \boxtimes | Noise | \boxtimes | Wildfire | | |
| \boxtimes | Geology and Soils | | Population and Housing | \boxtimes | Mandatory Findings of Significance | | |
| | RONMENTAL DETERM | | TION | | | | |
| On the | e basis of this initial evaluation | 1: | | | | | |
| | I find that the proposed proje NEGATIVE DECLARATION | | OULD NOT have a significant ll be prepared. | effe | ct on the environment, and a | | |
| | I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. | | | | | | |
| | I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. | | | | | | |
| | I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. | | | | | | |
| | I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. | | | | | | |
| Date: | | s | igned: | | | | |
| | | | | | | | |

I. Aesthetics

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|--|--------------------------------------|--|------------------------------------|-------------|
| Exc | ept as provided in Public Resources Code Section 21099 | , would the proje | ct: | | |
| (a) | Have a substantial adverse effect on a scenic vista? | | | \boxtimes | |
| (b) | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | |
| (c) | In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | | |
| (d) | Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | | \boxtimes |

Setting

A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints. Some scenic vistas are officially or informally designated by public agencies or other organizations. A substantial adverse effect on a scenic vista would occur if the project would significantly degrade the scenic landscape as viewed from public roads or other public areas. A proposed project's potential effect on a scenic vista is largely dependent upon the degree to which it would complement or contrast with the natural setting, the degree to which it would be noticeable in the existing environment, and whether it detracts from or complements the scenic vista.

There are no scenic resources mapped within or immediately adjacent to the project site. The nearest designated scenic resource to the project site includes the Blacklake Canyon Sensitive Resource Area (SRA). The County LUO defines a Sensitive Resource Area (SRA) combining designation that applies to areas having high scenic quality and/or special ecological or educational significance. These designated areas are considered visual resources by the County and the LUO establishes specific standards for projects located within these areas. The Blacklake Canyon SRA consists of a narrow marsh area extending inland from Dune Lakes and is one of the few remaining freshwater marshes in the area used by migratory waterfowl. The South County Area Plan states that this area should be protected as a wildlife refuge and any development on adjacent uplands should be carefully controlled to prevent sedimentation of the marsh (County of San Luis Obispo 2018).

California's Scenic Highway Program was created by the State Legislature in 1963 with the intention of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors. Based on the Department of Transportation (Caltrans) California Scenic Highways map, the portion of U.S. Highway 101 (US 101) within proximity to the project site is designated as Eligible for listing as a State Scenic Highway (California Department of Transportation [Caltrans] 2021). The nearest project component to US 101 is the force main pipeline and connection to existing Southland WWTF facilities, located approximately 600 feet southwest of US 101.

The existing Blacklake WRF is currently visible from the adjacent Blacklake Golf Course located north of the WRF site (Figure 3) and is well-screened from viewers travelling along Willow Road via existing eucalyptus trees and other vegetation located along the southern border of the WRF site (Figure 4).



Figure 3. View of the easternmost treatment pond at the Blacklake WRF site, facing northeast (February 19, 2021).



Figure 4. View of easternmost treatment pond at the Blacklake WRF site, facing southeast (February 19, 2021).

The project is located within the unincorporated community of Nipomo, located south of the city Arroyo Grande in San Luis Obispo County. The existing Blacklake WRF site is surrounded by the Blacklake Golf Course and residential subdivision to the north, east, and west, and Willow Road, agricultural uses, and rural residential uses to the south.

The proposed force main pipeline alignment would be located within the County right-of-way along Willow Road, Sundale Way (Figure 5), Camino Caballo (Figure 6), Pomeroy Road, and Juniper Street. Surrounding uses located adjacent to the pipeline alignment include rural residential uses, undeveloped woodlands, and a public service well site along Sundale Way, single-family residential neighborhoods, agricultural uses, rural residential uses, and open space uses along Camino Caballo, and single-family residential uses along Pomeroy Road and Juniper Street.



Figure 5. View of Sundale Way near Sundale Way/Camino Caballo intersection, facing north (February 19, 2021).



Figure 6. View of Camino Caballo near Camino Caballo/Pomeroy Road intersection, facing west (February 19, 2021).

Environmental Evaluation

a) Would the project have a substantial adverse effect on a scenic vista?

The proposed project includes construction of a new lift station within the existing Blacklake WRF site, installation of an underground pipeline within existing County right-of-way along Willow Road, Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street, and decommissioning and demolition of existing Blacklake WRF facilities. Construction of the new lift station and decommission of the existing Blacklake WRF would be located approximately 0.5 mile south of the mapped Blacklake Canyon SRA, and due to the distance from the SRA and existing recreational and residential uses located between them, neither construction, demolition, nor operation of these components would affect views of the Blacklake Canyon or otherwise adversely affect it.

The project is not located within an identified scenic vista, visually sensitive area, scenic corridor, or an area of high scenic quality that would be seen from key public viewpoints. Therefore, the project would not have a substantial adverse effect on a scenic vista and potential impacts would be *less than significant*.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The portion of US 101 within proximity to the project is currently designated as an Eligible State Scenic Highway. Based on the sub-surface nature of the proposed force-main pipeline, and distance from proposed above-ground components, the project would not result in a noticeable change in views of the project area as seen from US 101. Therefore, the project would not substantially damage scenic resources within a state scenic highway and potential impacts would be *less than significant*.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project would be located within the unincorporated community of Nipomo. Construction of the new lift station, installation of the new force main pipeline, and demolition of the existing Blacklake WRF would result in use of construction equipment and material staging areas and movement of cut and fill materials. Construction, staging, and demolition activities within the Blacklake WRF site would be largely screened from surrounding public viewpoints, such as Willow Road, by existing trees and vegetation. Installation of the force-main pipeline and associated staging areas would result in temporary visual changes along each of the roadways along the proposed pipeline alignment. However, none of the roadways that would be affected have a scenic designation, pipeline installation activities would be visually consistent with other typical construction activities in the area, and installation activities would be short-term in nature.

Operation of the new lift station would occur within the existing developed Blacklake WRF site and the main components, such as the wet well and lift station pumps would be sub-surface. The new lift station site would also include several above-ground improvements, including proposed fencing, installation of an 80-foot-tall SCADA radio antenna tower, a standby generator, electrical control panels, and a permanent canopy structure over the pump pit. In addition, the existing radio signal pole that is located approximately 600 feet west of the proposed lift station site would be removed. Replacement of this radio signal pole at the new location would not substantially change the existing views of the site and surrounding areas. In addition, existing eucalyptus trees located along the southern boundary of the Blacklake WRF would remain in place and serve as an effective vegetative screen of the existing WRF and proposed lift station site from viewers travelling along Willow Road (see Figure 4).

Proposed improvements would be predominantly subsurface, and aboveground infrastructure would be consistent with the existing visual character and quality of the site and its surroundings. The project would not substantially degrade visual character or quality of public views and would not conflict with applicable zoning or other regulations governing scenic quality during construction or operation. Therefore, potential impacts would be *less than significant*.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project does not propose the use or installation of highly reflective materials that would create a substantial source of glare. The project would include installation of security lighting and permanent security fencing at the new lift station site. The project would generally be consistent with the level of existing development in the project vicinity and does not propose the installation or use of outdoor lighting that would differ substantially from other proximate development. Therefore, the project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area and *no impacts would occur*.

Conclusion

Potential impacts to aesthetic resources would be less than significant and no mitigation measures are necessary.

Mitigation Measures

No mitigation measures are necessary.

II. Agriculture and Forestry Resources

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | | | |
|----------------------------------|---|--------------------------------------|--|------------------------------------|-------------|--|--|--|
| Calinan of including Depth Asset | In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | | | | |
| (a) | Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | | | | |
| (b) | Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | \boxtimes | | | |
| (c) | Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | | | | | |
| (d) | Result in the loss of forest land or conversion of forest land to non-forest use? | | | | \boxtimes | | | |
| (e) | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | | | | | |

Setting

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and current land use. For environmental review purposes under CEQA, the FMMP categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land are considered "agricultural land." Other non-agricultural designations include Urban and Built-up Land, Other Land, and Water.

The Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agriculture or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The project site does not include land within the Agriculture land use designation and is not within or adjacent to lands subject to a Williamson Act contract.

According to Public Resources Code Section 12220(g), forest land is defined as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Timberland is defined as land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a

commercial species used to produce lumber and other forest products, including Christmas trees. The project site does not support any forest land or timberland.

Environmental Evaluation

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) identifies the land within the project area as Urban and Built-Up Land, Farmland of Local Potential, Other Land, Unique Farmland, Farmland of Statewide Importance (California Department of Conservation [CDOC] 2016).

The proposed lift station and decommission of the Blacklake WRF would occur within Urban and Built-Up Land and would therefore not result in the conversion of Farmland. The proposed force main pipeline would be located within existing paved road right-of-way, adjacent roadway shoulder areas, and the NCSD-owned parcel located at the northeast corner of the intersection of Sundale Way and Camino Caballo (if the alternative pipeline alignment through this parcel is constructed). The NCSD-owned parcel is currently designated as Farmland of Local Potential and currently supports an existing NCSD well and pump station, therefore, project components within that parcel would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Force main pipeline to be located within paved road right-of-way and adjacent road shoulders would have little to no potential to be used for agricultural purposes in the future due to the very small square footage and thin shape of the area. Further, public roadways are not mapped within the FMMP land designations, but if they were, these areas would be designated as Urban and Built-Up Land. Therefore, potential impacts related to the conversion of important farmland would be *less than significant*.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project would include activities within the existing Blacklake WRF site, County road right-of-way, and the NCSD-owned parcel. The existing Blacklake WRF is located within the Recreation land use designation, and the NCSD-owned parcel is located within the Residential Rural land use designation. The project site does not include land within the Agriculture land use designation or land subject to a Williamson Act contract. Therefore, the project would not result in a conflict with existing zoning for agricultural use or a Williamson Act contract and *no impacts would occur*.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The project would include activities within the existing Blacklake WRF site, which is within the Recreation land use designation, County road right-of-way, and the NCSD-owned parcel, which is located within the Residential Rural land use designation. The project site does not include land use designations or zoning for forest land or timberland; *no impacts would occur*.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The proposed project is located within the community of Nipomo and would be surrounded by recreational, suburban and rural residential, and commercial land uses. The project would include ground disturbance activities within the existing developed Blacklake WRF site and existing roadway right-of-way, neither of which meet the definition of forest land. The project also includes an alternative pipeline alignment section that would traverse the NCSD-owned parcel located at the northeastern corner of the intersection of Sundale Way and Camino Caballo. The area in which the force main pipeline would be installed on this parcel consists of grassland and the limits of disturbance would be restricted to a 20-footwide corridor. Several oak trees are located within proximity to this area with canopies that extend into the NCSD easement area. The project would have the potential to result in impacts to several individual trees but would not result in the removal or conversion of forest land. The proposed project would not result in the loss of or conversion of forestland; therefore, *no impacts would occur*.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The project would include activities within the existing Blacklake WRF site, County road right-of-way, and the NCSD-owned parcel, which currently supports an existing public-serving well and fenced area, grassland, ruderal disturbed areas, and scattered oak and eucalyptus trees. The project would not adversely affect existing proximate agricultural uses, agricultural support services, or agricultural infrastructure or resources. Therefore, potential impacts would be *less than significant*.

Conclusion

The proposed project would not result in a significant adverse impact to Agricultural and Forest Resources, and no mitigation is necessary.

Mitigation Measures

No mitigation measures are necessary.

III. Air Quality

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | | | |
|-----|--|--------------------------------------|--|------------------------------------|-----------|--|--|--|
| | Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | | | | |
| (a) | Conflict with or obstruct implementation of the applicable air quality plan? | | | \boxtimes | | | | |
| (b) | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | | | | | | | |
| (c) | Expose sensitive receptors to substantial pollutant concentrations? | | \boxtimes | | | | | |
| (d) | Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | \boxtimes | | | | |

Setting

San Luis Obispo County is part of the South Central Coast Air Basin, (SCCAB) which also includes Santa Barbara and Ventura Counties. Air quality within the SCCAB is regulated by several jurisdictions including the U.S. Environmental Protection Agency (EPA), California Air Resources Board (ARB), and the San Luis Obispo County Air Pollution Control District (SLOAPCD). Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. The California ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA) of 1988. The State Department of Public Health established California Ambient Air Quality Standards (CAAQS) in 1962 to define the maximum amount of a pollutant (averaged over a specified period of time) that can be present without any harmful effects on people or the environment. The California ARB adopted the CAAQS developed by the Department of Public Health in 1969, which had established CAAQS for 10 criteria pollutants: particulate matter (PM₁₀ and PM_{2.5}), ozone (O₃), nitrogen dioxide (NO₂), sulfate, carbon monoxide (CO), sulfur dioxide (SO₂), visibility reducing particles, lead (Pb), hydrogen sulfide (H₂S), and vinyl chloride.

The Federal Clean Air Act (FCAA) later required the U.S. EPA to establish National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment, and also set deadlines for their attainment. The U.S. EPA has established NAAQS for six criteria pollutants (all of which are also regulated by CAAQS): CO, lead, NO₂, ozone, PM₁₀ and PM_{2.5}, and SO₂.

California law continues to mandate compliance with CAAQS, which are often more stringent than national standards. However, California law does not require that CAAQS be met by specified dates as is the case with NAAQS. Rather, it requires incremental progress toward attainment. The SLOAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions within the county are maintained.

SLOAPCD Thresholds

The SLOAPCD has developed and updated their CEQA Air Quality Handbook (most recently updated with a November 2017 Clarification Memorandum) to help local agencies evaluate project specific impacts and determine if air quality mitigation measures are needed, or if potentially significant impacts could result.

The SLOAPCD has established thresholds for both short-term construction emissions and long-term operational emissions. Use of heavy equipment and earth moving operations during project construction can generate fugitive dust and engine combustion emissions that may have substantial temporary impacts on local air quality and climate change. Combustion emissions, such as nitrogen oxides (NOx), reactive organic gases (ROG), greenhouse gases (GHGs) and diesel particulate matter (DPM), are most significant when using large, diesel-fueled scrapers, loaders, bulldozers, haul trucks, compressors, generators and other heavy equipment. SLOAPCD has established thresholds of significance for each of these contaminants. Table 2 lists SLOAPCD's general thresholds for determining whether a potentially significant impact could occur as a result of a project's construction activities.

Table 2. SLOAPCD Thresholds of Significance for Construction Activities

| | Threshold ¹ | | | | |
|--|------------------------|-----------------------|------------------|--|--|
| Pollutant | Daily | Quarterly Tier 1 | Quarterly Tier 2 | | |
| Diesel Particulate Matter (DPM) | 7 lbs | 0.13 tons | 0.32 tons | | |
| Reactive Organic Gases (ROG) + Oxides of Nitrogen (NO _X) | 137 lbs | 2.5 | 6.3 tons | | |
| Fugitive Particulate Matter (PM ₁₀), Dust ² | | 2.5 tons ² | | | |

¹ Daily and quarterly emission thresholds are based on the California Health and Safety Code and the CARB Carl Moyer Guidelines.

Operational impacts are focused primarily on the indirect emissions (i.e., motor vehicles) associated with residential, commercial, and industrial development. Certain types of projects can also include components that generate direct emissions, such as power plants, gasoline stations, dry cleaners, and refineries, referred to as stationary source emissions. The SLOAPCD has established several different methods for determining the significance of project operational impacts:

- Demonstrate consistency with the most recent Clean Air Plan for San Luis Obispo County;
- Demonstrate consistency with a plan for the reduction of GHG emissions that has been adopted by the jurisdiction in which the project is located that complies with State CEQA Guidelines Section 15183.5;
- Compare predicted ambient criteria pollutant concentrations resulting from the project to state and federal health standards, when applicable;
- Compare calculated project emissions to SLOAPCD emission thresholds; and,
- Evaluate special conditions which apply to certain projects.

San Luis Obispo County Clean Air Plan

The SLOAPCD's San Luis Obispo County 2001 Clean Air Plan (CAP) is a comprehensive planning document intended to evaluate long-term air pollutant emissions and cumulative effects and provide guidance to the SLOAPCD and other local agencies on how to attain and maintain the state standards for ozone and PM₁₀. The CAP presents a detailed description of the sources and pollutants which impact the jurisdiction's attainment of state standards, future air quality impacts to be expected under current growth trends, and an appropriate control strategy for reducing ozone precursor emissions, thereby improving air quality.

Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) is identified as a toxic air contaminant by the California Air Resources Board (CARB). Serpentine and other ultramafic rocks are fairly common throughout the county and may contain NOA. If these areas are disturbed during construction, NOA-containing particles can be released into the air and have an adverse impact on local air quality and human health. Based on the SLOAPCD's map of areas of concern for NOA, the project is not located within an area with known potential for NOA to occur (SLOAPCD 2021a).

Sensitive Receptors

Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants, such as the elderly, children, people with asthma or other respiratory illnesses, and others who are at a heightened risk of negative health outcomes due to exposure to air pollution. Some land uses

² Any project with a grading area greater than 4 acres of worked area can exceed the 2.5-ton PM₁₀ guarterly threshold.

are considered more sensitive to changes in air quality than others, due to the population that occupies the uses and the activities involved. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, convalescent homes, and residences.

The project site is located within two census tracts, both which are within percentiles of 40 or less for asthma and cardiovascular disease, which means these census tracts experience lower rates of these conditions than 60% of all census tracts within the state of California (California Office of Environmental Health Hazard Assessment 2018). The project would result in construction activities within 1,000 feet of numerous sensitive receptor locations (Figures 7 and 8). The majority of these sensitive receptor locations consist of residential land uses.

Environmental Evaluation

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The proposed project would include the construction of a new lift station and associated components within the Blacklake WRF site, the construction and underground installation of a pipeline within existing County roadway right-of-way, and demolition and removal of the existing Blacklake WRF. In order to be considered consistent with the 2001 San Luis Obispo County CAP, a project must be consistent with the land use planning and transportation control measures and strategies that are outlined in the CAP (SLOAPCD 2012).

The CAP land use planning and transportation control measures include a variety of measures to reduce long-term regional air pollutant emissions through strategic land use and transportation strategies such as balancing jobs and housing, improving transit service and transit facilities, improving bicycle facilities, and encouraging beneficial employment practices such as teleworking. The project would consolidate existing sewer system facilities to serve existing and future Blacklake service area customers' wastewater flows and would not alter or create a new use in the project area. The proposed wastewater treatment consolidation would not directly result in a substantial increase in population or long-term employment opportunities and would not generate a significant increase in operational vehicle trips over existing conditions. Therefore, the CAP land use and transportation control measures would not be applicable to the project. Furthermore, the project would not contribute to long-term generation of significant levels of any air contaminants during operation and would not conflict or obstruct the implementation of the SLOAPCD's Clean Air Plan or other applicable regional and local air quality planning documents. Therefore, impacts would be *less than significant*.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The county is currently designated as non-attainment for ozone and PM₁₀ under state ambient air quality standards. Construction and operation of the project would result in emissions of ozone precursors, including reactive organic gases (ROG), nitrogen oxides (NO_x), and fugitive dust emissions (PM₁₀).

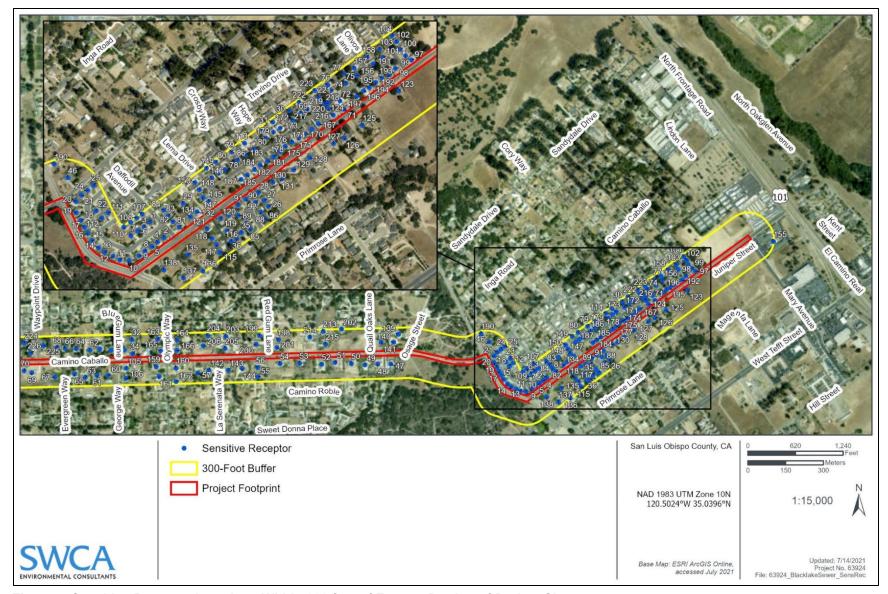


Figure 7. Sensitive Receptor Locations Within 300 feet of Eastern Portion of Project Site.

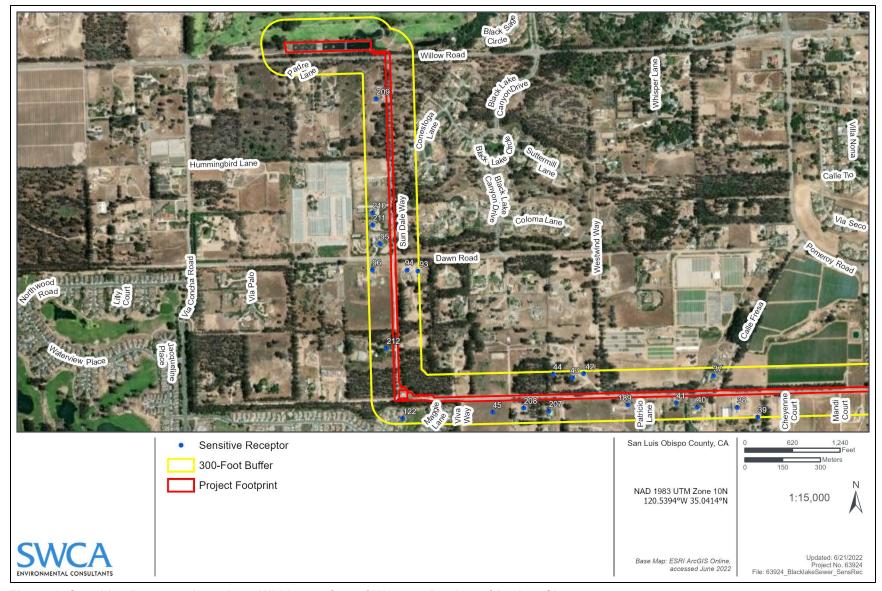


Figure 8. Sensitive Receptor Locations Within 300 feet of Western Portion of Project Site.

CONSTRUCTION EMISSIONS

The project would result in approximately 32.5 acres of ground disturbance and earthwork including 23,600 cubic yards of cut, 25,700 cubic yards of fill, and use of 14,600 cubic yards of imported fill materials, for a total of 40,300 cubic yards of total material moved. Construction of the proposed project would result in the temporary generation of emissions associated with site grading and excavation, paving, motor vehicle exhaust associated with construction equipment, worker trips, and haul truck trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., ROG and NO_x) and emissions of particulate matter. Emissions of ozone precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne particulate matter would be largely dependent on the amount of ground disturbance associated with site preparation activities.

Estimated emissions of air pollutants associated with the construction of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod; see Appendix D) and are shown in Table 3.

Table 3. Proposed Project Estimated Construction Emissions¹

| | | | | PM ₁₀ | | PM _{2.5} | | | |
|--|------|-------|--------------|------------------|----------------------|-------------------|----------|---------|-------|
| | ROG | NOx | ROG + NOx | Fugitive | Exhaust ³ | Total | Fugitive | Exhaust | Total |
| Daily Summer Emissions (Total) ² | 3.89 | 46.87 | 50.76 | 10.17 | 1.71 | 11.88 | 3.91 | 1.57 | 5.48 |
| SLOAPCD Threshold | | | 137 | | 7 | | | | |
| Exceeds Threshold? | | | No | | No | | | | |
| Daily Winter Emissions (Total) ² | 3.9 | 47.09 | 50.99 | 10.17 | 1.71 | 11.88 | 3.91 | 1.57 | 5.48 |
| SLOAPCD Threshold | | | 137 | | 7 | | | | |
| Exceeds Threshold? | | | No | | No | | | | |
| Quarterly Emissions | | | 1.15 | 0.23 | 0.04 | 0.27 | 0.27 | 0.09 | 0.12 |
| SLOAPCD Tier 1 Threshold | | | 2.5 | 2.5 | 0.13 | | | | |
| Exceeds Threshold? | | | No | No | No | | | | |

Source: See Appendix D.

Notes

As shown in Table 3, the project would not exceed the daily or quarterly emissions threshold for combined ROG and NO_x, fugitive dust, or DPM during grading and construction activities. Therefore, potential impacts associated with construction emissions would be *less than significant*.

¹ A conservative assumption of 14,600 cubic yards of material to be hauled. Haul truck distances, equipment usage, worker trips, and vehicle travel distances were based on model defaults.

² Emissions were quantified for both summer and winter conditions for a conservative comparison to SLOAPCD's daily significance thresholds.

³ Assumes total exhaust emissions are diesel exhaust emissions for comparison to SLOAPCD's DPM significance threshold.

OPERATION-RELATED EMISSIONS

The SLOAPCD's CEQA Air Quality Handbook no longer includes an up-to-date operational screening criteria table to determine a project's potential to exceed SLOAPCD operational emissions thresholds. Therefore, a qualitative analysis was conducted to evaluate the project's potential to exceed SLOAPCD operational emissions thresholds.

During operation, the new lift station would pump wastewater flows from the previous Blacklake WRF through the 4.15-mile force main pipeline to a connection to existing pipelines to the Southland WWTF. The lift station pump, lighting, and other equipment would run on electricity, with a diesel fuel backup generator to be used in the event of a power outage. If the proposed generator is 50 horsepower or more, it would require a permit from the SLOAPCD to ensure compliance with applicable regulations. The backup generator would only be used in the event a power outage occurs; therefore, it would be used seldomly and only on a temporary basis until power is restored. The proposed pump station would be designed for automatic unattended operation. Therefore, operation of the project would result in an overall reduction of needed maintenance and supervision and associated vehicle trips in comparison to the existing Blacklake WRF. Therefore, due to the scope of proposed facilities and consistency with existing operations, operation of the project would not result in a significant increase of air pollutant emissions over existing conditions and would not result in the exceedance of operational emission thresholds set forth by SLOAPCD.

Based on the analysis above, potential impacts associated with the cumulatively considerable increase of criteria pollutants for which the region is designated as nonattainment would be *less than significant*.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

The project would result in construction activities within 1,000 feet of numerous sensitive receptor locations (see Figure 7 and Figure 8). The majority of these sensitive receptor locations consist of residential land uses. As discussed under impact discussion III.b, on-site construction equipment emissions would not exceed SLOAPCD quarterly emissions thresholds. However, the project would include earthwork and construction activities within 1,000 feet of three sensitive receptor locations during the 12-month construction period. Localized concentrations of air pollutant emissions may result in temporary exceedances of SLOAPCD daily emissions thresholds and adversely affect nearby sensitive receptors.

Mitigation Measures AQ-1 and AQ-2 have been identified to require all applicable SLOAPCD construction emission control measures to be implemented and included on project design plans. All three project alternatives are considered to have potential to exceed the daily emissions threshold for DPM during construction activities. Mitigation Measure AQ-3 has been identified to require DPM control measures to be implemented on-site and to be included on project design plans. Potential impacts would be *less than significant with mitigation*.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction could generate odors from heavy diesel machinery and materials used for excavation and asphalt replacement. The generation of odors during the construction period would be temporary, would be consistent with odors commonly associated with roadway construction, and would dissipate within a short distance from the active work area.

During operation, wastewater flows would be pumped from the lift station located at the Blacklake WRF through the pipeline to connect to an existing Southland WWTF pipeline. The connection point from the force main pipeline to the Southland WWTF pipeline would require an air release valve located at the intersection of Juniper Street and Trevino Drive, from which odors produced by untreated wastewater could be released. The project would include installation of carbon scrubbers or other odor abatement technology to reduce odor emissions at the intersection of Juniper Street and Trevino Drive. Odors produced at this location would vary depending on factors such as volume and speed at which the flows are being conveyed. With implementation of proposed odor abatement technology, odors produced at this location would be minor, would dissipate considerably over distance, and would not affect a substantial number of people. Therefore, potential impacts would be *less than significant*.

Conclusion

Mitigation has been identified to reduce potentially significant impacts associated with air pollutant effects on nearby sensitive receptors during construction activities. With implementation of mitigation identified below, impacts associated with air quality would be less than significant.

Mitigation Measures

- AQ-1 During all site preparation and ground-disturbing activities, the applicant shall implement the following particulate matter control measures and detail each measure on the project grading and building plans:
 - 1. Reduce the amount of disturbed area where possible.
 - 2. Use water trucks or sprinkler systems in sufficient quantities and, at times necessary, to prevent airborne dust from leaving the site and from exceeding San Luis Obispo County Air Pollution Control District's limit of 20% opacity for no greater than 3 minutes in any 60-minute period. Increased watering frequency shall be required whenever wind speeds exceed 15 miles per hour during construction and grading activities shall be ceased during periods of winds over 25 miles per hour. Reclaimed (non-potable) water is to be used in all construction and dust-control work when feasible.
 - 3. All dirt stockpile areas (if any) shall be sprayed at least daily and covered with tarps or other dust barriers as needed.
 - 4. Permanent dust control measures identified in the approved project revegetation and landscape plans shall be implemented as soon as possible, following completion of any soil-disturbing activities.
 - 5. Exposed grounds that are planned to be reworked at dates greater than 1 month after initial grading shall be sown with a fast-germinating, non-invasive, grass seed and watered until vegetation is established.
 - 6. All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical binders, jute netting, or other methods approved in advance by the San Luis Obispo County Air Pollution Control District.
 - 7. All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
 - 8. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.

- 9. All trucks hauling dirt, sand, soil, or other loose materials, are to be covered or shall maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114.
- 10. Install wheel washers where vehicles enter and exit unpaved roads onto streets or wash off trucks and equipment leaving the site. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads.
- 11. Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible.
- 12. All particulate matter 10 micrometers or less in diameter (PM₁₀) mitigation measures required shall be shown on grading and building plans.
- 13. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints and reduce visible emissions below the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for no greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Nipomo Community Services District and San Luis Obispo County Air Pollution Control District Compliance Division prior to the start of any grading, earthwork, or demolition.
- AQ-2 The following San Luis Obispo County Air Pollution Control District-recommended Standard Mitigation Measures shall be implemented to reduce construction-generated nitrogen oxides, reactive organic gases, and diesel particulate matter.
 - 1. Maintain all construction equipment in proper tune according to manufacturer's specifications;
 - 2. Fuel all off-road and portable diesel-powered equipment with California Air Resources Board-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
 - 3. Diesel-fueled construction equipment shall meet, at a minimum, California Air Resources Board's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines and comply with the State Off-Road Regulation. Off-road equipment meeting California Air Resources Board's Tier 3 and Tier 4 emission standards shall be used to the extent locally available:
 - 4. Use on-road heavy-duty trucks that meet the California Air Resources Board's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
 - Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g., captive or nitrogen oxide-exempt area fleets) may be eligible by proving alternative compliance;
 - 6. All on- and off-road diesel equipment shall not idle when equipment is not in use. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the idling restrictions;

- 7. Equipment staging and queuing areas shall be located at the maximum distance feasible from sensitive receptor locations. Signs shall be posted identifying these areas;
- 8. Electrify equipment when possible;
- 9. Substitute gasoline-powered in place of diesel-powered equipment, where possible;
- 10. Use alternative-fueled construction equipment on-site where possible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel; and
- 11. The contractor or builder shall designate a person or persons to monitor the implementation of the measures detailed above. Signage on-site shall be provided near project site entrances that detail the name and telephone number of the on-site monitor. The monitor shall be responsible for fielding questions and addressing concerns received from the public on an as-needed basis. Significant concerns shall be relayed to the Nipomo Community Services District.
- AQ-3 During all construction activities and use of diesel vehicles, the applicant shall implement the following idling control techniques:
 - 1. Idling Restrictions Near Sensitive Receptors for Both On- and Off-Road Equipment.
 - a. Staging and queuing areas shall be located at the greatest distance from sensitive receptor locations as feasible;
 - b. Diesel idling when equipment is not in use is not permitted;
 - Use of alternative-fueled equipment shall be used whenever possible;
 and
 - d. Signs that specify the no-idling requirements shall be posted and the requirements shall be enforced at the construction site.
 - 2. California Diesel Idling Regulations. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:
 - a. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation.
 - b. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.

Signs must be posted in the designated queuing areas and job sites to remind drivers of the idling limits. The specific requirements and exceptions in the regulation can be reviewed at the following website: www.arb.ca.gov/msprog/truck-idling/2485.pdf. These requirements shall be detailed on all project plan sets.

IV. Biological Resources

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-----------|
| Wo | uld the project: | | | | |
| (a) | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | | | |
| (b) | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | | | |
| (c) | Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | |
| (d) | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | | |
| (e) | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | \boxtimes | | |
| (f) | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | |

Setting

The project footprint consists of the Blacklake WRF, a staging area located at the northeast corner of the Sundale Way/Camino Caballo intersection, and approximately 4 miles of dirt and asphalt road within the County right-of-way along Willow Road, Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street, where the pipeline would connect with existing Southland WWTF pipeline. The project Biological Study Area (BSA) includes the Blacklake WRF and the adjacent effluent storage lake easement area buffered by 200 feet, the 5-acre NCSD-owned parcel where the staging area would be located, and the entire width (60 feet) of the County right-of-way along project alignment areas. Although most anticipated ground disturbance would be in the developed asphalt of the existing roads, the entire 60-foot County right-of-way was included in the BSA and potential impacts to those habitats were assessed.

Habitats

Habitat types present within the BSA for the project include developed, Eucalyptus woodland, landscaped, ruderal/disturbed vegetation, a stormwater basin, the effluent storage lake, maintained nonnative grassland, and veldt grass grassland. A map of existing habitats is included in Figures 9 through 14. A complete plant list is provided in Appendix E.

DEVELOPED AREA AND SEWAGE TREATMENT BASINS

The developed area totals 15.6 acres, or 25% of the BSA. Within the Blacklake WRF, the developed areas consist of the three concrete and plastic-lined sewage aeration basins, a facilities control building, paving, walkways, and fencing. The developed areas within the County right-of-way consist of the dirt and asphalt roadway plus any sidewalks or additional paved areas. The developed area within the NCSD-owned parcel consists of the existing fenced well site in the southwest corner of the property. Wildlife within the sewage basins included mosquitofish (*Gambusia affinis*), mallards (*Anas platyrhynchos*), American coots (*Fulica americana*) and a great blue heron (*Ardea herodias*).

EUCALYPTUS WOODLAND

Large groves of blue gum (*Eucalyptus globulus*) trees occur within and around the Blacklake WRF, along the proposed pipeline route within the County right-of-way, and on the 5-acre NCSD-owned parcel at the intersection of Sundale Way and Camino Caballo. This habitat is consistent with the *Eucalyptus* spp. Woodland Semi-Natural Alliance as described by Sawyer et al. (2009). Within the County right-of-way, most of the area mapped as eucalyptus woodland only include the tree canopies because most of the trunks occur beyond the extent of the right-of-way. The majority of the NCSD-owned parcel, with the exception of a small portion along the southern edge, consists of eucalyptus woodland. In total, eucalyptus woodland encompasses 19.8 acres or approximately 31% of the BSA. In these areas understory vegetation is limited due to the allelopathic chemicals in the leaves and bark that drop from the trees. These volatile organic chemicals are known to prevent other plants from growing under eucalyptus trees (Zhange and Fu 2009). Eucalyptus groves are known to support a wide range of wildlife from nesting birds and raptors to providing winter roosting habitat for monarch butterflies.

LANDSCAPED / ORNAMENTAL VEGETATION

Landscaped or ornamental vegetation does not fit the description of any of the vegetation alliances described by Sawyer et al. (2009) or Holland (1986). These are landscape plantings that consist of trees and shrubs that may or may not be native to the area and were established around the treatment facility as a visual buffer and in the front yards of homes along the right-of-way. Species include Deodar cedar (*Cedrus deodara*), Layland cypress (*Cupressus* × *leylandii*), river birch (*Betula nigra*), coast redwood (*Sequoia sempervirens*), coast live oak (*Quercus agrifolia*), and ngaio (*Myoporum laetum*). In total, landscaped areas encompasses 7.9 acres or approximately 13% of the BSA. Even though landscaped habitats do not represent natural environments, they can still provide important habitat for native wildlife such as nesting birds.

RUDERAL/DISTURBED

Ruderal vegetation does not fit the description of any of the vegetation alliances described by Sawyer et al. (2009) or Holland (1986). This vegetation type primarily occurs along the right-of-way adjacent to the roadways and is dominated by weedy nonnative species such as perennial veldt grass (*Ehrharta calycina*), ripgut brome (*Bromus diandrus*), slender wild oats (*Avena barbata*), foxtail barley (*Hordeum murinum*), Italian thistle (*Carduus pycnocephalus*), black mustard (*Brassica nigra*), long beaked and redstem filaree (*Erodium botrys* and *cicutarium*). The rights-of-way is frequently disturbed by mowing, thus creating the perfect environment for invasive non- native species to establish and thrive. In total, ruderal areas encompass 6.8 acres or approximately 11% of the BSA.

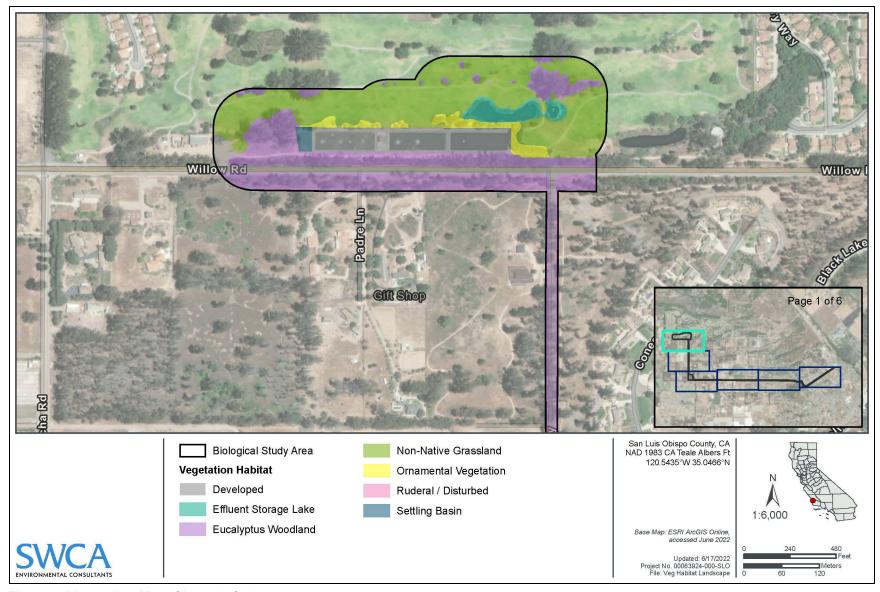


Figure 9. Vegetation Map (Sheet 1 of 6).

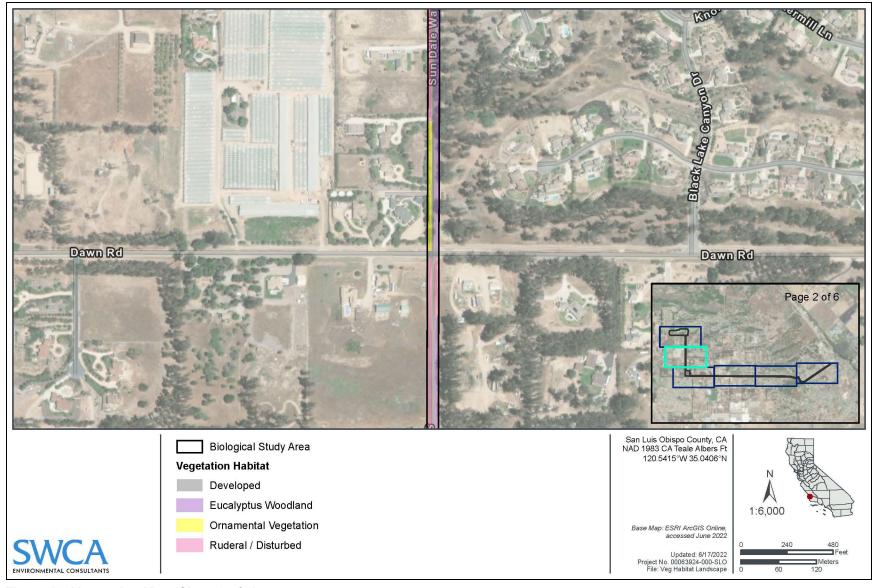


Figure 10. Vegetation Map (Sheet 2 of 6).

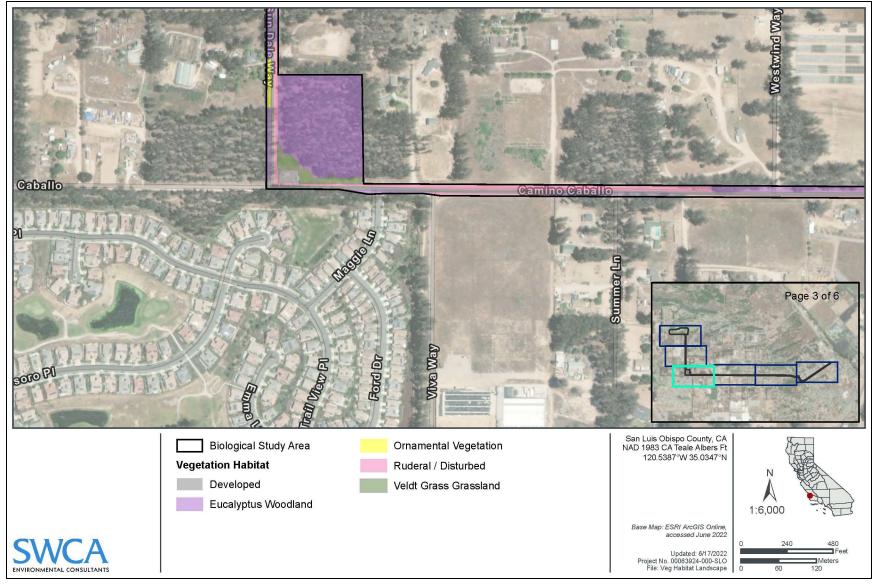


Figure 11. Vegetation Map (Sheet 3 of 6).

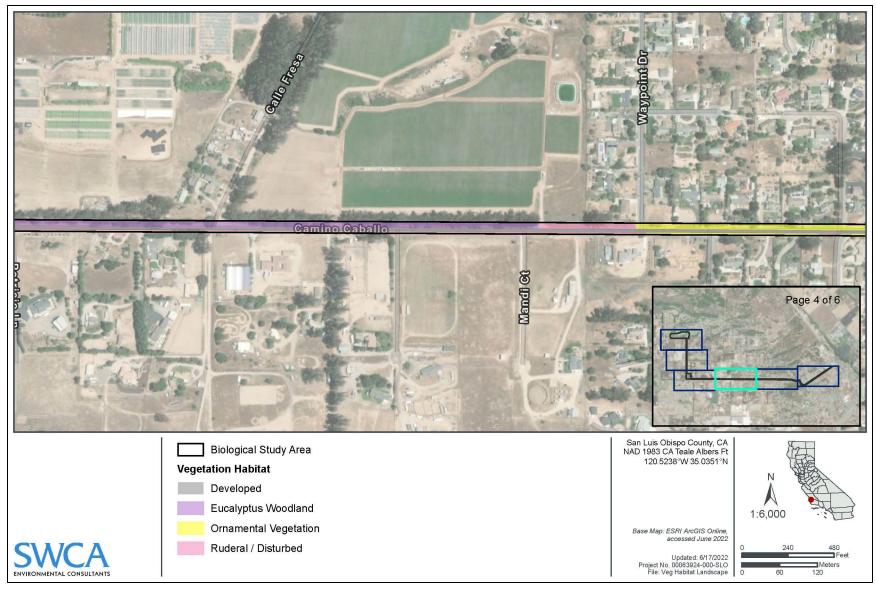


Figure 12. Vegetation Map (Sheet 4 of 6).

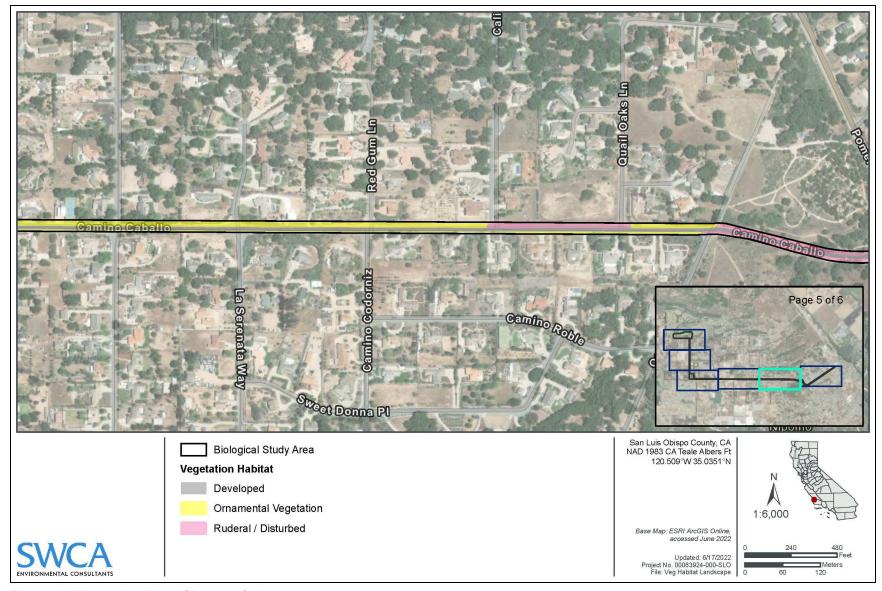


Figure 13. Vegetation Map (Sheet 5 of 6).

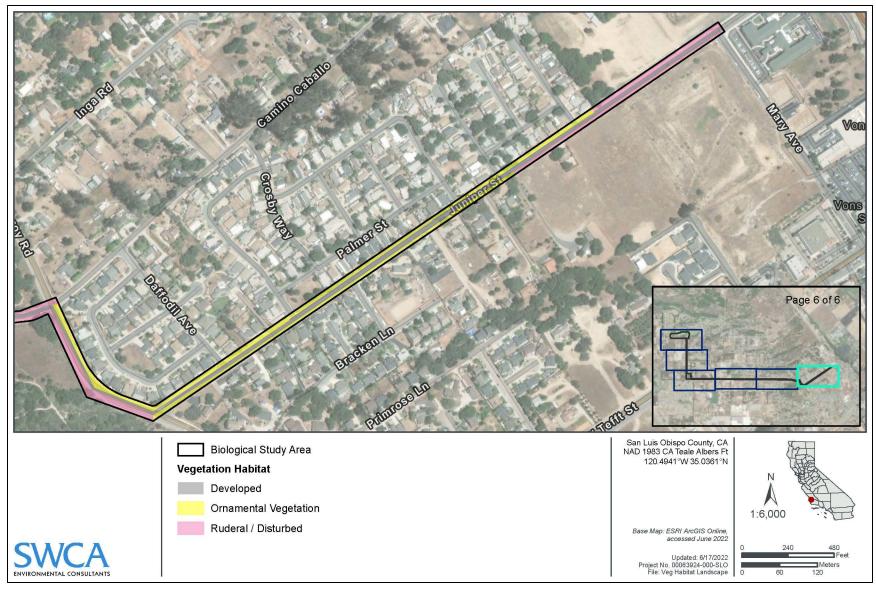


Figure 14. Vegetation Map (Sheet 6 of 6).

VELDT GRASS GRASSLAND

Perennial veldt grass is a perennial bunchgrass that is not native to California; therefore, it does not fit the description of any of the vegetation alliances described by Sawyer et al. (2009). In addition to being a dominant species of the disturbed vegetation mapped along the roadsides, it is also the dominant vegetation in the open areas of the NCSD owned parcel at the northeast corner of the Sundale/Camino Caballo intersection (see Figure 11). Perennial veldt grass is rated by the California Invasive Plant Council as highly invasive. This plant grows in well drained soils and crowds out other plants. In total, veldt grass grassland encompasses 0.5 acre or approximately 1% of the BSA.

MAINTAINED NON-NATIVE GRASSLAND

The fairways of the golf course may be loosely considered non-native grassland. This area appears to be planted with perennial fescue (*Festuca* sp.) and Bermudagrass (*Cynodon dactylon*). It is regularly disturbed by mowing and the golf course actively deters small mammal populations from burrowing on or near the course, so it supports minimal plant and wildlife diversity. In total, the maintained non-native grassland area encompasses 7 acres or approximately 14% of the BSA.

STORMWATER BASIN

There is a man-made stormwater basin in the Blacklake WRF project footprint directly adjacent to the treatment facility. It contains non-native grasses and some intermittent tall flatsedge (*Cyperus eragrostis*) in the lowest portions. The basin comprises only 0.22 acres and is not considered Waters of the State or Waters of the United States.

EFFLUENT STORAGE LAKE

Immediately north of the Blacklake WRF is a man-made lake used as storage for the effluent produced from the WRF. Treated water is discharged from Basin 3 within the Blacklake WRF into this effluent storage lake prior to it being disposed throughout the golf course grounds within the effluent disposal area. The water levels in the lake fluctuate daily, but the total area is approximately 1.14 acres and is not considered Waters of the State or Waters of the US. Vegetation in the lake consists of tall stands of emergent California bulrush (*Schoenoplectus californicus*), common duckweed (*Lemna minor*), and a small patch of pondweed (*Potamogeton* sp.). Two adult California red-legged frogs (*Rana draytonii*) and 13 juveniles were observed in the lake during a September survey. The lake also supports pacific chorus frogs (*Pseudacris regilla*), which was heard vocalizing during a May survey, and mosquitofish. Mallards, American coots, and red-winged blackbirds (*Agelaius phoeniceus*) were also observed foraging in the lake.

Regulatory Framework

Federal and State Endangered Species Acts

The Federal Endangered Species Act of 1973 (FESA) provides legislation to protect federally listed plant and animal species. The California Endangered Species Act of 1984 (CESA) ensures legal protection for plants and wildlife species listed as endangered or threatened. The California Department of Fish and Wildlife (CFDW) also maintains a list of California Species of Special Concern (SSC). SSC status is assigned to species that have limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the CDFW has the authority to review projects for their potential to impact special-status species and their habitats under CEQA.

Migratory Bird Treaty Act and California Fish and Game Code Section 3503

The Migratory Bird Treaty Act (MBTA) protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to put an end to the commercial trade in bird feathers, popular in the latter part of the 1800s. The MBTA is enforced by the U.S. Fish and Wildlife Service (USFWS), and potential impacts to species protected under the MBTA are evaluated by the USFWS in consultation with other federal agencies and are required to be evaluated under CEQA. California Fish and Game Code (FGC) Section 3503 – Protections of Bird's Nests includes provisions to protect the nests and eggs of birds. FGC Section 3503 states: "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto."

Clean Water Act and State Porter Cologne Water Quality Control Act

The U.S. Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States. These waters include wetland and non-wetland water bodies that meet specific criteria. USACE jurisdiction regulates almost all work in, over, and under waters listed as "navigable waters of the U.S." that results in a discharge of dredged or fill material within USACE regulatory jurisdiction, pursuant to Section 404 of the Clean Water Act (CWA). Under Section 404, USACE regulates traditional navigable waters, wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries that have a continuous flow at least seasonally (typically 3 months), and wetlands that directly abut relatively permanent tributaries.

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) regulate discharges of fill and dredged material in California, under Section 401 of the CWA and the State Porter-Cologne Water Quality Control Act, through the State Water Quality Certification Program. State Water Quality Certification is necessary for all projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State. Based on the U.S. Fish and Wildlife Service National Wetlands Inventory, the project site does not support wetlands, riparian or deep-water habitats (USFWS 2021).

Conservation and Open Space Element

The intent of the goals, policies, and implementation strategies in the Conservation and Open Space Element (COSE) is to identify and protect biological resources that are a critical component of the county's environmental, social, and economic well-being. Biological resources include major ecosystems; threatened, rare, and endangered species and their habitats; native trees and vegetation; creeks and riparian areas; wetlands; fisheries; and marine resources. Individual species, habitat areas, ecosystems and migration patterns must be considered together in order to sustain biological resources.

Nipomo Community Park Master Plan Final Program EIR BR/mm-10(c)-Oak Tree Protection Guidelines (2017)

Nipomo Community Park Master Plan Final Program EIR BR/mm-10(c)-Oak Tree Protection Guidelines (2017) precludes grading (includes cutting and filling of material); compaction (e.g., regular use of vehicles); placement of impermeable surfaces (e.g., pavement); or disturbance of soil that impacts roots (e.g., tilling) within the Critical Root Zone of retained trees, unless previously approved by the County. The project footprint includes installation of force-main pipeline within the County right-of-way along Camino Caballo and Pomeroy Road, areas of which go through the Nipomo Community Park.

Methods

SWCA performed a literature review to assess which special-status species have known occurrences in the project vicinity. The review was initiated with a query of the CDFW California Natural Diversity Database (CNDDB) and the USFWS Information Planning and Consultation (IPaC) tool to identify special-status plant and animal species that have reported occurrences and/or are considered to have potential to occur within the Nipomo and Oceano, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map and the following surrounding quadrangle maps: Arroyo Grande NE, Guadalupe, and Santa Maria. In addition to the CNDDB query, the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants of California (2022) was reviewed to provide additional information on rare plants that are known to occur in the area. SWCA has extensive experience with natural resources in the Nipomo area; the literature review for this Initial Study also included environmental documents and reports previously prepared by SWCA for other projects in the vicinity.

A focused botanical survey was conducted by SWCA Senior Biologist John Moule on May 28, 2021. The focused survey was scheduled to correlate with the blooming period of the Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*). The Pismo Clarkia population off Ormonde Road was checked 4 days prior to the date of the survey as a reference. During the surveys, SWCA inventoried the botanical resources observed on-site using dichotomous keys as necessary (Baldwin et al. 2012). All plant species that were observed on-site are listed in Appendix E.

A habitat assessment for California red-legged frogs was conducted by SWCA Senior Biologist John Moule on March 31, 2021. A non-breeding day survey was conducted by SWCA Senior Biologist Rebecca Doubledee on September 30, 2021, following the methods outlined in the U.S. Fish and Wildlife Service (USFWS) *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005). Wildlife species were documented based on visual observation, auditory cues (*i.e.*, calls and songs), and indirect signs (e.g., tracks, scat, skeletal remains, burrows, etc.).

For the purposes of this section, special-status plant species are defined as the following:

- Plants listed or proposed for listing as threatened or endangered under the FESA (Code of Federal Regulations [CFR] Title 50, Section 17.12 for listed plants and various notices in the *Federal Register* for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the FESA.
- Plants that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines Section 15380).
- Plants considered by CNPS to be "rare, threatened, or endangered" in California (CNPS Ranks 1, 2, and 3).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (CNPS Rank 4).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 CCR Section 670.5).
- Plants listed as rare under the California Native Plant Protection Act (NPPA; FGC Section 1900 et seq.).
- Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies, or jurisdictions.

For the purposes of this section, special-status animal species are defined as the following:

- Animals listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed animals and various notices in the *Federal Register* for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the FESA.
- Animals that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines Section 15380).
- Animals listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR Section 670.5).
- Animal Species of Special Concern (SSC) to CDFW.
- Animal species that are fully protected in California (FGC Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Environmental Evaluation

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

SPECIAL-STATUS PLANT SPECIES

Based on the literature review for this project, a total of 45 special-status plant species have been documented in the queried USGS quadrangles in the vicinity of the project site (Appendix E). The BSA contains marginally suitable habitat conditions for 15 of these special-status plant species (Table 4).

Table 4. Special-status Plant Species with Suitable Habitat Conditions Present in the BSA

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|---|--|------------------|--|---|
| marsh sandwort Arenaria paludicola | Marshes and swamps. Grows through dense mats of <i>Typha</i> , <i>Juncus</i> , <i>Scirpus</i> , etc. in freshwater marsh. Elevation: 10–170 meters. | May– August | FE/SE/1B.1 | Suitable Conditions Present: The man-made effluent storage lake may provide marginally suitable habitat; however, the species has been heavily studied and only two populations are known to remain in California. Species not observed during surveys conducted in the appropriate season. |
| San Luis mariposa-lily Calochortus obispoensis | Perennial bulbiferous herb occurs in chaparral, coastal scrub, valley and foothill grassland. Often in serpentine grassland. Elevation: 75–665 meters. | May–July | //1B.2 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|--|---|--------------------|--|--|
| San Luis Obispo owls clover Castilleja densiflora ssp. obispoensis | Valley and foothill grassland. Elevation: 10– 215 meters. | April | //1B.2 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |
| California jewelflower Caulanthus californicus | Annual herb that occurs in nonnative grassland, upper Sonoran subshrub scrub, and cismontane juniper woodland and scrub communities in subalkaline and sandy loam soils. Elevation: 61–1,000 meters. Current known naturally occurring populations are in: (1) Santa Barbara Canyon, (2) Carrizo Plain, and (3) Kreyenhagen Hills in Fresno County. | February– May | FE/SE/1B.1 | Suitable Conditions Present: BSA contains marginally suitable grassland; however, the project site is out of the known range of this species. Species not expected to occur at the site. Species not observed during survey conducted in the appropriate season. |
| Congdon's tarplant Centromadia parryi ssp. congdonii | Depressional areas within valley and foothill grassland. Elevation: 1–230 meters. | June– November | //1B.1 | Suitable Conditions Present: Species known to occur in rudera areas similar to what is found in the BSA. Species not observed during surveys conducted in the appropriate season. |
| La Graciosa thistle Cirsium scariosum var. Ioncholepsis (Cirsium Ioncholepis) | Cismontane woodland, coastal dunes, coastal scrub, marshes and swamps (brackish), valley and foothill grassland; usually in mesic, sandy soils. Elevation: 4–220 meters. | May– August | FE/ST/1B.1 | Suitable Conditions Present: BSA contains marginally suitable marsh and grassland habitat. Species not observed during surveys conducted in the appropriate season. |
| California saw-grass Cladium californicum | Rhizomatous herb. Occurs in meadows and seeps, and marshes and swamps (alkaline or freshwater). Elevation: 60–600 meters. | June– September | //2B.2 | Suitable Conditions Present: The man-made golf effluent storage lake provides suitable habitat; Species not observed during surveys conducted in the appropriate season. |
| Pismo clarkia Clarkia speciosa ssp. immaculata | Sandy soils, openings in chaparral, cismontane woodland, valley and foothill grassland. On ancient sand dunes not far from the coast. Elevation: 25–185 meters. | May–July | FE/SR/1B.1 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |
| salt marsh bird's-beak Cordylanthus maritimus ssp. maritimus | Annual herb; occurs in marshes and swamps on coastal dunes. Elevation: 0–30 meters. | May– October | FE/SE/1B.2 | Suitable Conditions Present: The man-made effluent storage lake may provide marginally suitable habitat; however, the species is highly unlikely to occur in the BSA. Species not observed during surveys conducted in the appropriate season. |

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|--|--|------------------------|--|---|
| Gaviota tarplant Deinandra increscens ssp. villosa | An annual herb in the Asteraceae family. Occurs in coastal bluff scrub, coastal scrub, and valley and foothill grassland. Typically associated with sandy soils. Elevation: 35–430 meters. | May– October | FE/SE/1B.1 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |
| mesa horkelia Horkelia cuneata ssp. puberula | Perennial herb that occurs in chaparral, cismontane woodlands, coastal scrub; in sandy or gravelly sites. Elevation: 70–810 meters. | February– September | //1B.1 | Suitable Conditions Present: Species known to occur in ruderal areas similar to what is found in the BSA. Species not observed during surveys conducted in the appropriate season. |
| Kellogg's horkelia Horkelia cuneata ssp. sericea | Perennial herb. Occurs in closed-cone coniferous forest, maritime chaparral, and coastal scrub with sandy or gravelly openings. Elevation: 10–200 meters. | April– September | //1B.1 | Suitable Conditions Present: Species known to occur in ruderal areas similar to what is found in the BSA. Species not observed during surveys conducted in the appropriate season. |
| Gambel's watercress Nasturtium gambelii (Rorippa gambelii) | Rhizomatous herb; occurs in marshes and swamps (freshwater or brackish). Elevation: 5–330 meters. | April– October | FE/ST/1B.1 | Suitable Conditions Present: The man-made golf course effluent storage lake may provide marginally suitable habitat. Species not observed during surveys conducted in the appropriate season. |
| spreading navarretia Navarretia fossalis | Annual herb occurs in chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and verbal pools. Elevation: 30–655 meters. | April–June | FT//1B.1 | Suitable Conditions Present: The man-made effluent storage lake may provide marginally suitable habitat; however, the species is highly unlikely to occur there. Species not observed during surveys conducted in the appropriate season. |
| San Bernardino aster Symphyotrichum defoliatum | Rhizomatous herb. Occurs in cismontane woodland, coastal scrub, and foothill grassland near ditches and springs. Elevation: 2–2,040 meters. | July– November | //1B.2 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |

General references: Baldwin et al. 2012; all plant descriptions paraphrased from CNPS 2019.

Status Codes:

--= No status

Federal: FE = Federal Endangered; FT=Federal Threatened State: SE=State Endangered; ST= State Threatened; SR= State Rare

California Native Plant Society (CNPS):

Rank 1B = rare, threatened, or endangered in California and elsewhere.

Rank 2 = rare, threatened, or endangered in California, but more common elsewhere.

Rank 3 = plants that about which more information is needed.

Rank 4 = a watch list plants of limited distribution.

CBR = Considered but Rejected

Threat Code:

- __1 = Seriously endangered I California (over 80% of occurrences threatened / high degree and immediacy of threat)
 __2 = Fairly endangered in California (20-80% occurrences threatened)
 __3 = Not very endangered I California (<20% of occurrences threatened or no current threats known)

The project site occurs on Oceano Sand, which is a key micro-habitat component for several of the special-status plant species; however, the majority of the BSA only encompasses highly disturbed roadside habitat dominated by non-native species. Based on appropriately timed surveys of the BSA, SWCA determined that the project area does not contain populations of special-status plant species. Therefore, the project would not result in a substantial adverse effect to special-status plant species and impacts would be *less than significant*.

SPECIAL-STATUS WILDLIFE SPECIES

Based on a CNDDB query and a review of existing literature, a total of 38 special-status wildlife species have been documented as occurring in the queried USGS quadrangles. Because this list of species is considered regional, an analysis of the range and habitat preferences of those wildlife species was conducted to identify which ones have the potential to occur within the survey area. SWCA determined that suitable habitat is present in the BSA for 11 of these special-status wildlife species (Table 5). Of these species, only five were determined likely to occur, based on an analysis of range and one, the California red-legged frog (CRLF), was observed in the BSA during focused surveys. Potential impacts to CRLF and the other species assumed present are discussed in more detail below.

Table 5. Special-Status Animal Species with Suitable Habitat Present in the BSA

| Species Name | Habitat and Distribution | Legal Status Federal/ State/CDFW | Rationale for Expecting Presence or Absence |
|---|--|--|--|
| Insects | | | |
| Monarch butterfly Danaus plexippus | Occurs along coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind- protected tree groves (eucalyptus, Monterey pine, and cypress), with nectar and water sources nearby. | FC//SA | Suitable Conditions Present, Species Likely To Occur: Eucalyptus trees in the BSA may provide suitable conditions for Monarch butterfly and presence cannot be ruled out. Species not observed during surveys. Species unlikely to be affected by the project as no Eucalyptus trees are to be removed and butterflies can simply fly away if disturbed. |
| Amphibians | | | |
| California red-legged frog Rana draytonii | Occurs in aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Presence of fairly sturdy underwater supports such as cattails. | FT//SSC | Suitable Conditions Present, Species Present: Aquatic and upland habitat in, and within proximity to the BSA provides suitable conditions for California red-legged frog. Species was observed during surveys. |
| Reptiles | | | |
| Northern California legless lizard Anniella pulchra | Occurs from southern edge of San Joaquin River in northern Contra Costa County south to Ventura County. Occurs in scattered locations in San Joaquin Valley, along southern Sierra Nevada mountains, and on desert side of Tehachapi Mountains and part of San Gabriel Mountains. Sandy or loose loamy soils with high moisture content under sparse vegetation. | //SSC | Suitable Conditions Present, Species Likely to Occur: Soil and habitats in the BSA may provide suitable conditions for Northern California legless lizard and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. |

| Species Name | Habitat and Distribution | Legal Status Federal/ State/CDFW | Rationale for Expecting Presence or Absence |
|--|---|--|--|
| western pond turtle Emys marmorata | Occurs in quiet waters of ponds, lakes, streams, and marshes. Typically, in the deepest parts with an abundance of basking sites. | //SSC | Suitable Conditions Present, Species Likely to Occur: The man- made effluent storage lake may provide suitable conditions for western pond turtle and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. |
| Coast horned lizard Phrynosoma coronatum (blainvillii population) | Frequents a wide variety of habitats, commonly occurring in lowlands along sandy washes, coastal sage scrub and chaparral in arid and semi-arid climate conditions. Species prefers friable, rocky or shallow sandy soils. | //SSC | Suitable Conditions Present, Species Unlikely to Occur: Soils and habitats in the BSA may support this species and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. |
| Birds | | | |
| Cooper's hawk Accipiter cooperii | Deciduous riparian woodland habitat throughout California. Nests in deciduous, mixed-deciduous, and evergreen forests, as well as in suburban and urban environments. Tend to nest in more open areas that have older and larger trees. | MBTA//WL | Suitable Conditions Present, Species Likely to Occur: Eucalyptus and other trees in the BSA may provide suitable nest conditions for Cooper's hawk and presence cannot be ruled out. Species not observed during surveys; however, pre- disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| sharp-shinned hawk Accipiter striatus | Short distance migrant that nests in mixed forests and wooded area. Prefers tall trees for nest building. Prey base includes small birds and mammals. | MBTA//WL | Suitable Conditions Present, Species Likely to Occur: Eucalyptus and other trees in the BSA may provide suitable nest conditions for sharp-shinned hawk and presence cannot be ruled out. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| tricolored blackbird Agelaius tricolor | (Nesting colony); requires open water, protected nesting substrate such as cattails or tall rushes, and foraging area with insect prey. | MBTA//SSC | Suitable Conditions Present, Species Unlikely to Occur: Man- made effluent storage lake may provide suitable nesting conditions for tricolored blackbird; however, they have essentially been extirpated as a breeder in coastal locations (Kelsey 2008, Meese 2017). and presence cannot be ruled out. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |

| Species Name | Habitat and Distribution | Legal Status Federal/ State/CDFW | Rationale for Expecting Presence or Absence |
|---|---|--|---|
| burrowing owl Athene cunicularia | Occurs in open, dry grasslands, deserts and scrublands. Subterranean nester, dependent upon burrowing mammals. | MBTA/ /SSC | Suitable Conditions Present, Species Unlikely to Occur: Grassland habitats in the BSA may support this species and presence cannot be ruled out. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| Swainson's hawk Buteo swainsoni | Occurs in open desert, grassland, or cropland containing scattered, large trees or small groves. Roosts in large trees, but will roost on ground if none available. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. | MBTA/ST/ | Suitable Conditions Present, Species Unlikely to Occur: Eucalyptus and other trees in the BSA may provide suitable nest conditions for Swainson's hawk and presence cannot be ruled out. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| Class Aves Other migratory bird species (nesting) | Occurs in annual grasslands, coastal scrub, chaparral, and oak woodlands may provide nesting habitat. | MBTA// | Suitable Conditions Present, Species Likely to Occur: Potential nesting habitat occurs throughout the site. Pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| Mammals | | | |
| American badger <i>Taxidea taxus</i> | Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils. | //SSC | Suitable Conditions Present, Species Unlikely to Occur: Soils and habitats in the BSA may support this species and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. |

General references: Unless otherwise noted all habitat and distribution data provided by California Natural Diversity Database Status Codes:

Federal: FE = Federal Endangered; FT= Federal Threatened; FC= Federal Candidate; CH= Federal Critical Habitat; PCH= Proposed Federal Critical Habitat; MBTA= Protected by Federal Migratory Bird Treaty Act

State: SE= State Endangered; ST= State Threatened; SCT= State Candidate Threatened

California Department of Fish and Game: SSC= CDFW Species of Special Concern; FP= Fully Protected Species; SA= Not formally listed but included in CDFW "Special Animal" List; WL= Watch List

Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is a candidate species for protection under the federal ESA. Monarch butterflies require specific microclimatic conditions to survive the winter and are sensitive to any habitat modifications to their overwintering sites. Monarch butterflies typically cluster in groves of trees including eucalyptus and Monterey pines. Groves of eucalyptus were identified within the BSA, but there are no known overwintering sites along the alignment or adjacent to identified staging areas. Furthermore, the installation of the force main pipeline will not require the removal of eucalyptus trees. Mitigation Measure BIO-10 will prevent impacts to the eucalyptus woodland on the 5-acre NCSD owned parcel that will be used for staging and stockpiling of excavated material. This measure will also enhance

⁻⁻⁼ No status

habitat for monarch butterflies post construction through the reseeding of temporarily disturbed areas with nectar-rich plants species. In addition to Mitigation Measure BIO-10, Mitigation Measures BIO-1, BIO-2, and BIO-3 have been included below to ensure that monarch butterflies will not be impacted during construction activities. With implementation of these mitigation measures, potential impacts to monarch butterflies would be less than significant.

California Red-Legged Frog

CRLF are listed as Threatened under FESA and considered an SSC by CDFW (USFWS 2002). Based on the results of the CNDDB query, there were no known CRLF occurrences within a 1-mile radius of the project footprint, but there are 22 CNDDB occurrences within a 5-mile radius (SWCA 2021, CNDDB 2022). Even though the sewage treatment basins within the Blacklake WRF do not provide ideal habitat for the species, they can still be considered an attractive nuisance. In addition, the adjacent man-made effluent storage lake and other water features on the Blacklake Golf Course, provide suitable aquatic breeding habitat for the species.

SWCA Senior Biologist, Rebecca Doubledee, conducted a non-breeding season daytime survey for California red-legged frogs (*Rana draytonii*, CRLF) at the Blacklake WRF and adjacent lake on September 30, 2021, following the methods outlined in the USFWS *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005). No frogs were observed in any of the sewage treatment basins, however, two adults and 13 subadults were observed in the effluent storage lake. Based on these survey results, it was confirmed that they are present and breeding in the BSA.

Removal of the Blacklake WRF will indirectly affect the population of CRLF in the adjacent lake through the elimination of its primary water source. The man-made effluent storage lake is lined with plastic therefore water levels are not supported by groundwater. Furthermore, the surrounding watershed of the lake is not large enough to sustain a hydroperiod sufficient to support successful CRLF breeding. The removal of the Blacklake WRF will result in the drying of the adjacent effluent storage lake. This impact is considered significant unless mitigation is incorporated. Mitigation Measures BIO-1, BIO-2, BIO-4, BIO-5, BIO-6, BIO-7, and BIO-8 have been included below to ensure that CRLF will not be impacted as a result of implementation of the proposed project. With implementation of these Mitigation Measures, potential impacts to CRLF would be reduced to less than significant.

Western Pond Turtle

The western pond turtle (*Emys marmorata*) is designated as an SSC by CDFW. The closest CNDDB occurrence is approximately 3.5 miles west of the Blacklake WRF, with considerable barriers to dispersal (*e.g.*, State Route 1). Nevertheless, the CNDDB underrepresents the distribution of this species, and they likely occur in the lake adjacent to the Blacklake WRF. Removal of the Blacklake WRF could indirectly affect western pond turtles if they are present through the elimination of the ponds primary water source. This impact is considered significant unless mitigation is incorporated. There is a concrete barrier and chain length fencing around the Blacklake WRF, this would prevent pond turtles from entering the WRF. However, if a turtle does manage to get into the WRF and into one of the sewage treatment basins, Mitigation Measure BIO-8, would ensure that a turtle does not become stranded in the basins while they are being decommissioned. Mitigation Measures BIO-1, BIO-2, BIO-4, BIO-5, BIO-6, BIO-7, and BIO-8 have been included below to ensure that western pond turtles will not be impacted as a result of implementation of the proposed project. With implementation of these Mitigation Measures, potential impacts to western pond turtles would be reduced to less than significant.

Northern California legless lizard

The northern California legless lizard (*Anniella pulchra*) is relatively common in areas of Nipomo that contain sandy soil. They are a fossorial species that spends most of their lives underground, making them difficult to detect without shallow excavation of the soil surface. Although legless lizards were not observed in the BSA during surveys, their presence cannot be ruled out. Disturbance of the roadside vegetation and vegetation in the staging areas could result in the direct take of Northern California legless lizards. Direct take may include being struck by equipment, entrapped in stockpiled materials, or trampled by construction personnel. Mitigation Measure BIO-9 is included to minimize impacts to Northern California legless lizards during project implementation. With implementation of Mitigation Measure BIO-9, potential impacts to silvery legless lizard would be less than significant.

Migratory Birds and Raptors

The vegetation occurring in the BSA provides suitable nesting habitat for a variety of bird species. Common passerines may use the non-native ruderal and landscaping vegetation for nesting and/or foraging. Raptors, including raptors of special concern, such as Cooper's hawk (*Accipiter cooperii*) and sharp-shinned hawk (*Accipiter striatus*), may utilize the eucalyptus woodlands for nesting and adjacent ruderal / disturbed vegetation areas for foraging. The nesting habitat would be impacted by project activities including grading and vegetation removal. If the project activities are conducted between February 15 and September 15, birds may be nesting in affected areas and individuals could be directly or indirectly impacted. Direct impacts could include loss of active nests during vegetation removal. Indirect impacts could include nest abandonment due to excessive disturbance from construction related activities. Mitigation Measure BIO-11 is included to require a nesting bird survey to be conducted by a qualified biologist no more than 2 weeks prior to the start of construction to determine presence/absence of nesting birds. With implementation of Mitigation Measure BIO-11, potential impacts to migratory birds and raptors would be less than significant.

Based on the analysis provided above, potential impacts to special-status species would be *less than significant with mitigation*.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

Less than Significant Impact. The BSA does not contain riparian habitats or other sensitive natural communities. Implementation of the project would not result in the removal or disturbance of any sensitive natural community; therefore, impacts to riparian habitat or sensitive natural communities would be less than significant.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact. Three aquatic features were mapped within the BSA associated with the Blacklake WRF: a stormwater basin, an effluent storage lake, and three sewage treatment basins. The effluent storage lake is an artificial, plastic-lined lake designed to receive the treated water from the WRF. None of these aquatic features are state or federally protected; therefore, potential impacts would be less than significant.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. The project site is located almost entirely on or along existing paved asphalt roads. Except for the conversion of the Blacklake WRF to a lift station, the project related improvements would be underground. Therefore, the project would not create any new barriers to wildlife movements or exacerbate existing wildlife movement barriers. The project would have less than significant impacts related to the movement of native resident migratory species.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project area cuts through the Nipomo Community Park along Camino Caballo and Pomeroy Road. Several oak trees are adjacent to the road in this area with canopies that extend into the NCSD easement area within County roadway right-of-way. Trenching in these areas could have significant impacts to the oak trees if ground disturbance or soil compaction occurred within the dripline or Critical Root Zone (CRZ) of the trees. Mitigation Measure BIO-12 has been included below to avoid trenching through the CRZ in these areas if feasible. If trenching in the CRZ is unavoidable, NCSD will procure a licensed arborist to monitor excavations in these areas to prevent significant damage to the oak trees. With implementation of Mitigation Measure BIO-12, potential impacts to protected trees would be less than significant.

Based on the analysis provided above, potential impacts to oak trees would be *less than significant with mitigation*.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. Based on the records and literature research conducted for the project, the BSA does not overlap with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other conservation plans. Therefore, the project would not conflict with any approved local, regional, or state habitat conservation plans.

Conclusion

The project related disturbances would be located near areas of existing asphalt, highly disturbed ruderal vegetation, actively maintained landscape vegetation and eucalyptus woodland. Within the alignment of the proposed force main pipeline, the proposed project would primarily result in disturbances to existing paved areas, ruderal and/or landscaped vegetation. The BSA was surveyed for sensitive plant species on May 28, 2021, and no sensitive or special-status plant species were observed. Focused surveys for special-status wildlife species were not conducted within the proposed force main pipeline alignment area; however, this area has the potential to support monarch butterflies, silvery legless lizard, and nesting birds and raptors. Mitigation Measure BIO-3 has been included to minimize the potential impact to monarch butterflies, Mitigation Measure BIO-9 has been provided to avoid impacts to silvery legless lizard, and Mitigation Measure BIO-11 has been provided to avoid impacts to nesting birds.

Impacts from the conversion of the Blacklake WRF to a new lift station would primarily occur within the footprint of the existing facility. There would be an indirect impact to the adjacent discharge pond through the loss of its primary water source. Without regular discharge from the Blacklake WRF the freshwater pond would eventually dry up, thus indirectly affecting California red-legged frog and western

pond turtle habitat. Direct impacts during construction could also occur if individuals migrate from the discharge pond into the treatment basins. Mitigation Measures BIO-1, BIO-2, BIO-4, BIO-5, BIO-6, BIO-7, and BIO-8 have been included below to ensure that CRLF and western pond turtles will not be impacted as a result of implementation of the proposed project.

The project area cuts through the Nipomo Community Park along Camino Caballo and Pomeroy Road. Several oak trees are adjacent to the road in this area with canopies that extend into the County right-of-way. Trenching in these areas could have significant impacts to the oak trees if ground disturbance or soil compaction occurred within the dripline or Critical Root Zone (CRZ) of the trees. Mitigation Measure BIO-12 has been included below to avoid significant damage to these oak trees.

Mitigation Measures

- BIO-1 Environmental Monitor. Prior to ground disturbance, the Nipomo Community Services District shall retain a qualified biologist to act as an environmental monitor for all measures requiring environmental mitigation to ensure compliance with the project's required mitigation measures. The monitor shall be responsible for 1) ensuring that procedures for verifying compliance with environmental mitigations are implemented; 2) establishing lines of communication with Nipomo Community Services District staff and their contractors; 3) conducting biological surveys prior to disturbance of vegetation; 4) conducting weekly compliance monitoring; 5) conducting construction crew training regarding environmentally sensitive areas; 6) maintaining authority to stop work if a sensitive resource could be impacted by the work; and 7) outlining actions to be taken in the event of non-compliance.
- BIO-2 Environmental Awareness Training. Prior to ground disturbance, the environmental monitor shall conduct an environmental awareness training for all construction personnel. The environmental awareness training shall include discussions of monarch butterflies, California red-legged frogs, western pond turtles, silvery legless lizard, and nesting birds. Topics of discussion shall include: 1) description of the species' habitats; 2) general provisions and protections afforded by the Federal Endangered Species Act, California Endangered Species Act, and California Environmental Quality Act; 3) measures implemented to protect special-status species; 4) review of the project boundaries and conditions; 5) the monitor's role in project activities; 6) lines of communication; and 7) procedures to be implemented in the event a special-status species is observed in the work area. All construction contracts shall include clauses that require grading and construction personnel to attend environmental awareness training.
- Monarch Butterfly Preconstruction Survey. Tree removal and site disturbance for the installation of the pipeline shall be avoided during the monarch butterflies' fall and winter migration (late October through February) to the greatest extent feasible. If tree or vegetation removal or site disturbance is necessary during the monarch butterflies' fall and winter migration, a qualified biologist shall conduct a preconstruction survey for monarch butterflies that could utilize trees on the site for overwintering. If monarch butterflies are detected, development will be postponed until after the overwintering period or until a qualified biologist determines monarch butterflies are no longer utilizing the trees on site for overwintering.
- BIO-4 Incidental Take Permit. The Nipomo Community Services District shall procure an incidental take permit from the U.S. Fish and Wildlife Service for impacts to California red-legged frog for all work conducted within the Blacklake Water Reclamation Facility.

- BIO-5 Habitat Mitigation. To offset unavoidable impacts to California red-legged frog, the Nipomo Community Services District will provide compensatory mitigation in the form of a one-time payment (currently estimated to be in the amount of \$307,260) to the U.S. Fish and Wildlife Service California Red-Legged Frog Mitigation and Conservation Account, prior to the start of construction activities within the Blacklake Water Reclamation Facility. The California Red-Legged Frog Mitigation and Conservation Account held by the National Fish and Wildlife Foundation (NFWF), is a congressionally chartered foundation, specifically charged with the administration of monies to further the conservation and management of fish, wildlife, plants, and other natural resources of the United States. Conservation account funds will be used for off-site mitigation projects that will benefit California red-legged frogs within recovery unit 24 Santa Maria River Santa Ynez River (i.e., the recovery unit the impacts occur in).
- BIO-6 CRLF Preconstruction Surveys. A biologist approved by the U.S. Fish and Wildlife Service to handle California red-legged frog shall survey the treatment basins at the Blacklake Water Reclamation Facility, no more than 48 hours before the basins are drained, and work activities begin. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the treatment basins to a U.S. Fish and Wildlife Service-approved location, where construction activities will not occur. Nipomo Community Services District will coordinate with the U.S. Fish and Wildlife Service if frogs need to be captured and relocated.
- Wildlife Exclusion Fencing. After the initial preconstruction surveys at the Blacklake Water Reclamation Facility, a wildlife exclusion fence shall be installed around the entirety of the facility to prevent California red-legged frog from reentering the construction area from the adjacent pond. No construction work (including storage of materials) shall occur outside of the specified project limits. The fencing shall remain in place during the entire construction period and be maintained as needed by the contractor. Upon completion of construction activities, all temporary exclusion fencing shall be removed from the project site.
- BIO-8 Construction Monitoring. A U.S. Fish and Wildlife Service-approved biological monitor shall be present during the dewatering and decommissioning of the treatment basins at the Blacklake Water Reclamation Facility. After the basins have been decommissioned and the wildlife exclusion fencing is in place, regular spot checks shall be conducted once a week during construction of the new lift station to assess the effectiveness of the exclusion measures and compliance with any other conditions outlined in the Federal Incidental Take Permit. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the treatment basins to a U.S. Fish and Wildlife Service-designated location, where construction activities will not occur. Nipomo Community Services District will coordinate with the U.S. Fish and Wildlife Service if frogs need to be captured and relocated.
- **BIO-9** Northern California Legless Lizard Preconstruction Surveys. Within 30 days prior to and during disturbance of vegetation, a qualified biologist shall conduct surveys for Northern California legless lizards within suitable habitat areas along the right-of-way and within the staging area. The biologist shall utilize hand search or cover board methods in areas of disturbance where legless lizards are expected to be found (e.g.,

under shrubs, other vegetation, or debris). If cover board methods are used, they shall commence at least 30 days prior to the start of construction. Hand search surveys should be completed immediately prior to and during disturbances to the vegetated areas. During vegetation disturbing activities, the qualified biologist shall walk behind the equipment to capture silvery legless lizards that are unearthed by the equipment. The biologist shall capture and relocate any legless lizards or other reptiles observed during the survey effort. The captured individuals shall be relocated from the construction area and placed in suitable habitat on the site but outside of the work area.

- **BIO-10**Fencing. The construction staging area and the area designated for the stockpiling of excavated materials on the Nipomo Community Services District-owed parcel shall be located outside of the eucalyptus woodland. Prior to the utilization of the staging area and initiation of ground-disturbing activities, a sturdy high-visibility fencing will be installed to clearly delineate the boundaries of any staging or stockpiling areas. This fencing will be placed so that unnecessary adverse impacts to the adjacent habitats are avoided. No construction work (including storage of materials) will occur outside of the specified boundaries. The fencing will remain in place during the entire construction period, be monitored periodically by a qualified biologist, and be maintained as needed by the contractor. After construction, the temporarily disturbed areas shall be hydroseeded with an appropriate native plant mix, preferably with nectar-rich plant species to benefit adult monarch butterflies.
- **BIO-11 Nesting Bird Surveys.** Prior to tree removal or any site preparation, ground disturbance, and related construction activities a qualified biologist shall conduct a nesting bird survey and verify that migratory birds are not nesting in the site. If nesting activity is detected, the following measures shall be implemented:
 - 1. The project shall be modified via the use of protective buffers, delaying construction activities, or other methods designated by the qualified biologist to avoid direct take of identified nests, eggs, and/or young protected under the Migratory Bird Treaty Act and/or California Fish and Game Code;
 - 2. The qualified biologist shall document all active nests and submit a letter report to Nipomo Community Services District documenting project compliance with the Migratory Bird Treaty Act, California Fish and Game Code, and applicable project mitigation measures.
- **BIO-12** Oak Tree Monitoring. Impacts to oak trees shall be avoided where feasible within the Nipomo Community Park Master Plan area. Impacts include any ground disturbance or soil compaction within the dripline or Critical Root Zone of the trees (whichever distance is greater). A qualified arborist shall determine the Critical Root Zone for each oak tree within the project area that passes through the Nipomo Community Park Master Plan area. Ground disturbance within this stretch shall be supervised by a licensed arborist if excavation is proposed within the Critical Root Zone of an oak tree. The arborist shall supervise all trenching within the critical root zone. The arborist shall provide guidance such as temporary damaged root protection, use of air spades, timing between impact and root treatment by arborist, appropriate use of air spade or hand tools to minimize tree damage specific to the action proposed, and to treat root zone and branch damage. During construction and upon completion of construction the licensed arborist shall provide treatment, as the licensed arborist determines is appropriate, to maintain and improve the health of the tree, including pruning of the broken main stem, and soil supplement and watering programs. All root pruning shall be completed with sharpened hand pruners.

Pruned roots shall be immediately covered with soil or moist fabric. Damaged roots shall be treated within 24 hours by a qualified tree specialist to inhibit fungus, insects, or other disease damage.

V. Cultural Resources

| Woo | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-------------|
| (a) | Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? | | | | \boxtimes |
| (b) | Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | | \boxtimes | | |
| (c) | Disturb any human remains, including those interred outside of dedicated cemeteries? | | | \boxtimes | |

Setting

San Luis Obispo County possesses a rich and diverse cultural heritage and has an abundance of historic and prehistoric cultural resources dating as far back as 9,000 B.C. The County protects and manages cultural resources in accordance with the provisions detailed by CEQA and local ordinances. PRC Section 5024.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for California Register of Historical Resources (CRHR) eligibility. The purpose of the CRHR is to maintain listings of the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change.

As defined by CEQA, a historical resource includes:

- 1. A resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR).
- 2. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant. The architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural records of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence.

The County COSE identifies and maps anticipated culturally sensitive areas and historic resources within the county and establishes goals, policies, and implementation strategies to identify and protect areas, sites, and buildings having architectural, historical, Native American, or cultural significance. The project site does not contain a site under the Historic Site (H) combining designation.

The following analysis is primarily based on the *Phase I Archaeological Survey Report for the Blacklake Sewer System Consolidation Project* (SWCA Environmental Consultants [SWCA] 2021; Appendix F).

Environmental Evaluation

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

An archaeological resources study and survey was conducted for the project area including a records search at the Central Coast Information Center (CCIC) at the University of California, Santa Barbara, a Native American Heritage Commission (NAHC) Sacred Lands File search, and a pedestrian survey of the project site. The records search was conducted to identify whether there have been previous archaeological surveys and if there are known cultural resources located within or near the project area. This included a query of the California Historical Resources Information System (CHRIS) for resources listed on or determined eligible for listing on the National Register of Historical Place (NRHP), the California Register of Historical Resources (CRHR), California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys within or near the project area. The CCIC records search data concluded that while 28 cultural resources studies have been conducted within 0.25 mile of the project site, no previously identified cultural resources have been identified within the project area. A pedestrian survey was conducted by SWCA on July 1, 2021, and no archaeological resources were identified within the project area during the field survey.

The project would occur within the existing Blacklake WRF and within County right-of-way along and within existing roadways. The project site does not propose removal or alteration of structures with potential for historic designation. The project site does not contain, nor is it located near, any historic resources identified in the National Register of Historic Places (NRHP) or CRHR (SWCA 2021; Appendix F). The project site does not contain a site under the Historic Site (H) combining designation. Therefore, the project would not result in an adverse change in the significance of a historical resource and *no impacts* would occur.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Based on the CCIC records search results and a pedestrian field survey, there are no known archaeological resources within or near the project site and the project site has low potential for containing archaeological or cultural resources (SWCA 2021). However, based on the extent of proposed excavation activities, there is a potential to encounter previously unknown buried and/or obscured archaeological resources during construction.

In the event that resources are uncovered during grading activities, Mitigation Measure CR-1 has been identified to require cultural resource awareness training for all construction personnel. If previously unidentified cultural materials are unearthed during proposed ground-disturbing activities, Mitigation Measure CR-2 has been identified to require work be halted in the area until a qualified archaeologist can assess the significance of the find. With implementation of identified measures, impacts related to a substantial adverse change in the significance of archaeological resources would be *less than significant with mitigation*.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Based on existing conditions and results of the archaeological surface survey conducted on-site, buried human remains are not expected to be present in the site area. In the event of an accidental discovery or recognition of any human remains, Health and Safety Code Section 7050.5 require that no further disturbances shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. With adherence to Health and Safety Code Section 7050.5,

impacts related to the unanticipated disturbance of archaeological resources and human remains would be reduced to less than significant; therefore, potential impacts would be *less than significant*.

Conclusion

Mitigation has been identified to reduce potentially significant impacts associated with impacts to previously unknown archaeological and cultural resources during construction activities. With implementation of mitigation identified below, impacts associated with cultural resources would be reduced to less than significant.

Mitigation Measures

- **CR-1** Prior to construction activities, a qualified archaeologist shall conduct cultural resource awareness training for all construction personnel, which will include the following:
 - 1. Review the types of archaeological artifacts that may be uncovered;
 - 2. Provide examples of common archaeological artifacts to examine;
 - 3. Review what makes an archaeological resource significant to archaeologists and local native Americans;
 - 4. Describe procedures for notifying involved or interested parties in case of a new discovery;
 - 5. Describe reporting requirements and responsibilities of construction personnel;
 - 6. Review procedures that shall be used to record, evaluate, and mitigate new discoveries; and
 - 7. Describe procedures that must be followed in the case of discovery of disturbed as well as intact human burials and burial-associated artifacts.

All construction contracts shall include clauses that require all grading and construction personnel to attend cultural resource awareness training.

CR-2 If cultural resources are encountered during subsurface earthwork activities, all ground-disturbing activities within a 25-foot radius of the find shall cease immediately upon such discovery and the Nipomo Community Services District shall be notified immediately. Work shall not continue until a qualified archaeologist assesses the find and determines the need for further study. If the find includes Native American affiliated materials, a local Native American tribal representative will be contacted to work in conjunction with the archaeologist to determine the need for further study. A standard inadvertent discovery clause shall be included in every grading and construction contract to inform contractors of this requirement. Any previously unidentified resources found during construction shall be recorded on appropriate California Department of Parks and Recreation forms and evaluated for significance in terms of the California Environmental Quality Act criteria by a qualified archaeologist.

If the resource is determined significant under California Environmental Quality Act, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan, in conjunction with locally affiliated Native American representative(s) as necessary, that will capture those categories of data for which the site is significant. The archaeologist shall also perform appropriate technical analysis, prepare a comprehensive report, and file it with the Central Coast Information Center, located at

the Santa Barbara Museum of Natural History, and provide for the permanent curation of the recovered materials.

VI. Energy

| Wo | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|--|--------------------------------------|--|------------------------------------|-----------|
| (a) | Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | \boxtimes | | |
| (b) | Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | \boxtimes | |

Setting

PG&E is the primary electricity provider for urban and rural communities within San Luis Obispo County. In 2019, approximately 25% of electricity provided by PG&E was sourced from renewable resources, 45% was sourced from nuclear energy, 28% was sourced from large hydrological energy, and 2% was sourced from nuclear gas (Pacific Gas and Electric [PG&E] 2020).

The Southern California Gas Company (SoCalGas) is the primary provider of natural gas for urban and rural communities within San Luis Obispo County. SoCalGas has committed to replacing 20% of its traditional natural gas supply with renewable natural gas by 2030 (Sempra 2019).

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC includes mandatory green building standards for residential and nonresidential structures, the most recent version of which are referred to as the 2019 Building Energy Efficiency Standards. These standards focus on four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and non-residential lighting requirements.

Environmental Evaluation

a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

CONSTRUCTION ENERGY USE

During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. Exporting materials off-site would require use of haul trucks that would result in the consumption of fuel. The destination location for project exportation of materials is not known at this time. The energy consumed during site preparation and construction would be temporary in nature and would utilize equipment similar to other construction projects in the county. Federal and state regulations in place require fuel-efficient equipment and vehicles and prohibit wasteful activities, such as diesel

idling. Energy use associated with site grading, construction, importing, and exporting materials for the implementation of any of the three project alternatives would be temporary and would not be anticipated to result in the need for additional energy capacity, nor would construction be anticipated to result in increased peak-period demands for electricity.

To ensure maximum energy efficiency over the course of the construction period, Mitigation Measure AQ-1 would require use of equipment that meets CARB's Tier 3 and Tier 4 emissions standards to the extent locally available, electrification of equipment when feasible, and use of gasoline-powered equipment in place of diesel-fueled equipment where feasible (see Section III, *Air Quality*). In addition, with implementation of Mitigation Measure AQ-1, potential impacts associated with wasteful, inefficient, or unnecessary energy use during construction would be *less than significant with mitigation*.

OPERATIONAL ENERGY USE

Wastewater collection and treatment involves the use of energy-intensive technologies such as mechanical aerators, blowers, and diffusers to keep solids suspended and to provide oxygen for biological decomposition, and is often the most energy intensive phase of the water use cycle (U.S. Environmental Protection Agency 2013). Based on data collected between July 2018 through June 2020, the Southland WWTF currently has an Average Daily Flow (ADF) of 0.50 million gallons per day, which reflects the total wastewater flow received at the wastewater treatment facility averaged over the number of days per year. Based on data collected within the same timeframe, the Blacklake WRF has an ADF of 0.055 million gallons per day, which is approximately 11% of the ADF of the Southland WWTF (MKN Associates 2021). According to the 2020 PG&E energy usage reports for each facility, the average Blacklake WRF energy uses an average of 19,973.96 kWh per month, which is approximately 32% of the Southland WWTF average monthly energy use of 62,041 kWh (PG&E 2021). Therefore, the Southland WWTF has a significantly more energy efficient treatment process than the Blacklake WRF when evaluated on an electricity used per gallon of wastewater treated basis. This can be largely attributed to the use of updated wastewater treatment technologies at the Southland WWTF, which was recently upgraded in 2014, whereas the Blacklake WRF has not been upgraded since 1996.

Based on the increased energy efficiency of wastewater treatment processes at the Southland WWTF in comparison to the existing energy efficiency of wastewater treatment at the Blacklake WRF, the project would result in net energy savings. On-site equipment associated with the proposed lift station, such as the pump and back-up generator, would result in minimal energy use in comparison to the energy demand of the existing Blacklake WRF equipment and processes. Therefore, potential impacts associated with wasteful, inefficient, or unnecessary energy use during operation would be *less than significant*.

Based on the analysis provided above, potential impacts would be less than significant with mitigation.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

As described above, federal and state regulations in place require fuel-efficient equipment and vehicles and prohibit wasteful activities, such as diesel idling. Construction contractors, in an effort to ensure cost efficiency, would not be expected to engage in wasteful or unnecessary energy and fuel practices. Mitigation Measure AQ-1 has also been identified to reduce construction energy use where feasible. Compliance with this mitigation measure would ensure the conservation and preservation of energy resources through use of equipment that meets CARB's Tier 3 and Tier 4 emissions standards, electrification of equipment where feasible, and use of gasoline-powered equipment in place of diesel-fueled equipment where feasible. Therefore, potential impacts associated with conflict with a state or local plan for renewable energy or energy efficiency would be *less than significant with mitigation*.

Conclusion

Mitigation has been identified to reduce potentially significant impacts associated with construction equipment energy efficiency. With implementation of mitigation identified below, impacts associated with energy would be reduced to less than significant.

Mitigation Measures

Implement Mitigation Measure AQ-1.

VII. Geology and Soils

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-------------|
| Wo | uld the project: | | | | |
| (a) | Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| | (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | |
| | (ii) Strong seismic ground shaking? | | | \boxtimes | |
| | (iii) Seismic-related ground failure, including liquefaction? | | | \boxtimes | |
| | (iv) Landslides? | | | \boxtimes | |
| (b) | Result in substantial soil erosion or the loss of topsoil? | | | \boxtimes | |
| (c) | Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | | |
| (d) | Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | | | \boxtimes | |
| (e) | Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | \boxtimes |
| (f) | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | \boxtimes | | |

Setting

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) is a California state law that was developed to regulate development near active faults and mitigate the surface fault rupture potential and

other hazards. The Alquist-Priolo Act identifies active earthquake fault zones and restricts the construction of habitable structures over known active or potentially active faults.

The faults in the Nipomo area include the Santa Maria River, Wilmar Avenue, Oceano, and West Huasna faults. The buried trace of the Santa Maria River/Wilmar Avenue fault is inferred to parallel U.S. Highway 101 in the vicinity of Nipomo. The Oceano fault generally is trending northwest across the Nipomo Mesa and into the town of Oceano. The West Huasna fault is mapped along the eastern side of the valley. As discussed in the fault descriptions portion of the text, those faults generally have a subdued topographic expression and are considered to be potentially active by CDMG. Review of the Oceano fault by Asquith (1997) suggests that the fault is inactive. On the basis of that information, potentially active faults present moderate fault rupture hazard in the Nipomo area. The inactive Oceano fault presents a very low potential as a fault rupture hazard. Although the Oceano fault is inactive, it is often undesirable to site structures over any fault as a result of nonuniform foundation support conditions and the potential for co-seismic movement that could result from earthquakes on other nearby faults. Further studies to evaluate the activity of the Wilmar Avenue and West Huasna faults are warranted, prior to placing structures near the mapped fault traces.

Groundshaking refers to the motion that occurs in response to local and regional earthquakes. Seismic groundshaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. Groundshaking can endanger life and safety due to damage or collapse of structures or lifeline facilities. The CBC includes requirements that structures be designed to resist a certain minimum seismic force resulting from ground motion.

Liquefaction is the sudden loss of soil strength due to a rapid increase in soil pore water pressures resulting from groundshaking during an earthquake. Liquefaction potential increases with earthquake magnitude and groundshaking duration. Low-lying areas adjacent to creeks, rivers, beaches, and estuaries underlain by unconsolidated alluvial soil are most likely to be vulnerable to liquefaction. The CBC requires the assessment of liquefaction in the design of all structures.

Landslides and slope instability can occur as a result of wet weather, weak soils, improper grading, improper drainage, steep slopes, adverse geologic structure, earthquakes, or a combination of these factors. The County Safety Element identifies several policies to reduce risk from landslides and slope instability. These policies include the requirement for slope stability evaluations for development in areas of moderate or high landslide risk, and restrictions on new development in areas of known landslide activity unless development plans indicate that the hazard can be reduced to a less than significant level prior to beginning development.

Soil expansivity, also called shrink swell potential, refers to the extent to which the soil shrinks as it dries out or swells when it gets wet. Extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Shrinking and swelling of soils can cause damage to building foundations, roads and other structures. A high shrink/swell potential indicates a hazard to maintenance of structures built in, on, or with material having this rating. Moderate and low ratings lessen the hazard accordingly.

Paleontological resources are fossilized remains of ancient environments, including fossilized bone, shell, and plant parts; impressions of plant, insect, or animal parts preserved in stone; and preserved tracks of insects and animals. Paleontological resources are considered nonrenewable resources under state and federal law. Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils, as determined by rock type, past history of the rock unit in producing fossil materials, and fossil sites that have been recorded in the unit.

Environmental Evaluation

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
- a-i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The Oceano Fault zone partially transverses the proposed pipeline alignment (CDOC 2015a). However, as described in the County Safety Element, the Oceano Fault is inactive and presents a very low potential as a fault rupture hazard. Based on the County Land Use View web tool, several other inactive fault lines traverse the pipeline alignment as well. In addition, the project does not include any proposed structures for human occupancy or other structural components such as bridges that may result in substantial adverse effects if affected by a fault rupture. Based on the inactive nature of these fault lines, potential hazards resulting from rupture of a known earthquake fault would be *less than significant*.

a-ii) Strong seismic ground shaking?

While the project site is not located within the immediate vicinity of any mapped active fault lines, the project is located within a seismically active region due to the proximity of the Santa Maria River Fault, the West Huasna Fault, and the East Huasna Fault zones. The proposed lift station and force main pipeline facilities would primarily consist of underground infrastructure and would therefore not be particularly susceptible to substantial hazards associated with strong seismic ground shaking. All facilities would be designed and constructed in compliance with applicable CBC standards. The project would not cause substantial adverse effects through risk of loss, injury, or death in the event of seismic-related ground failure; therefore, impacts would be *less than significant*.

a-iii) Seismic-related ground failure, including liquefaction?

As described above, the project is located in a seismically active region but is not traversed or located adjacent to any known fault lines. The project is located in an area with low liquefaction potential (County of San Luis Obispo 2021b) and all proposed facilities would be designed and constructed in compliance with applicable CBC standards. The project would not cause substantial adverse effects through risk of loss, injury, or death in the event of seismic-related ground failure; therefore, impacts would be *less than significant*.

a-iv) Landslides?

According to the County Safety Element, the project site is located in a region with low to moderate potential for landslides. Landslides typically occur in areas with steep slopes. The topography of the existing Blacklake WRF and pipeline alignment is generally flat to gently sloping. The project would not result in substantial changes to the existing topography of the project site or otherwise exacerbate the potential for landslides to occur on- or off-site. All site construction and excavation activities would be conducted in compliance with applicable CBC standards, which include measures to safeguard against slope instability and on-site landsliding. In addition, the project does not propose habitable structures that would put people at risk in the event of a landslide. Therefore, potential impacts associated with landslides would be *less than significant*.

b) Result in substantial soil erosion or the loss of topsoil?

The project would result in approximately 32.5 acres of ground disturbance, including approximately 4,600 cubic yards of earthwork. Earthwork activities would include, but would not be limited to, excavation required for the construction and installation of the lift station consisting of an 8-foot diameter, 15-foot deep wet-well (a chamber for receiving and storing sewage until it can be pumped out), excavation and trenching for the installation of the force main pipeline alignment, and filling existing treatment ponds and existing depressions with engineered fill and grading the area to a smooth finish matching adjacent surfaces. Based on the extent of proposed ground disturbance and excavation activities, there is potential for project construction activities to temporarily increase erosion and sedimentation onsite.

The project would be subject to Regional Water Quality Control Board (RWQCB) requirements for preparation of a Storm Water Pollution Prevention Plan (SWPPP), which would include the preparation of a Storm Water Control Plan to further minimize on-site sedimentation and erosion during and following construction activities. In addition, the majority of the excavation required for the lift station and force main pipeline installation would occur within previously disturbed and paved areas. All previously undisturbed areas within the project development site would be reseeded with native grasses following construction work in accordance with standard SWPPP requirements. Therefore, project impacts related to soil erosion and loss of topsoil would be *less than significant*.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The project site is not located within or adjacent to a known fault zone. According to the County Safety Element, the project site is located in a region with low potential for liquefaction and, according to the USGS Areas of Land Subsidence in California map, the project site is not located in an area of known subsidence (USGS 2019). All site grading would be constructed in compliance with applicable CBC standards, which include measures to safeguard against slope instability and on-site landsliding. The project would not result in substantial changes to the existing topography of the project site or otherwise exacerbate the potential for landslides, lateral spreading, subsidence, liquefaction, collapse, or other geologic hazards to occur on- or off-site. Therefore, impacts would be *less than significant*.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Soil expansivity, also called shrink swell potential, refers to the extent to which the soil shrinks as it dries out or swells when it gets wet. The volume changes that soils undergo in this cyclical pattern can stress and damage slabs and foundations. The proposed lift station and force main pipeline would be subject to applicable CBC and other engineering standards for development on/within expansive soils. Compliance with existing standards and regulations would ensure the project would not result in substantial risk to life or property due to its location on expansive soils; therefore, impacts would be *less than significant*.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The project would not include the construction of a new restroom or other need for a wastewater disposal system on-site. Therefore, *no impacts would occur*.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is underlain by late to middle Pleistocene-aged older surficial deposits (Qos; Dibblee and Minch 2006). This unit represents the most recent episode of coastal dune deposition in and near the Santa Maria Valley and has a high paleontological sensitivity rating (County of Santa Barbara 2018). Sub-surface project activities, such as construction of the lift station and installation of the force-main pipeline, would occur in areas subject to previous disturbance; however, the extent and depth of grading would primarily occur within non-native fill material. However, based on the paleontological sensitivity of the underlying geologic unit and the excavation parameters of the project, there is potential for the project to impact scientifically significant paleontological resources. Mitigation measures GS-1 and GS-2 have been identified to require monitoring of excavation activities in previously undisturbed areas with high paleontological sensitivity and protocol to follow in the event paleontological resources are discovered. With implementation of mitigation measures GS-1 and GS-2, potential impacts would be reduced to less than significant. Therefore, potential impacts associated with directly or indirectly destroying a unique paleontological resources or site or unique geologic feature would be *less than significant with mitigation*.

Conclusion

GS-1

Mitigation measures have been identified below to reduce potential impacts associated with paleontological resources to less than significant. Therefore, project impacts associated with geology and soils would be less than significant with mitigation.

Mitigation Measures

3

Prior to any ground-disturbing activities of native material, the Nipomo Community Services District shall retain a qualified paleontologist to conduct a paleontological awareness training for all construction personnel conducting earthwork activities. Training shall inform all applicable personnel on recognition of possible subsurface paleontological resources and the procedures to be followed upon the discovery of paleontological materials.

All personnel shall be instructed that unauthorized collection, theft, or disturbance of protected fossils on- or off-site by the applicant, its representatives, or employees is prohibited. Violators shall be subject to prosecution under the appropriate federal, state, and local laws. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. The following issues shall also be addressed in training or in preparation for construction:

- All construction contracts shall include clauses that require grading personnel to attend training so that they are aware of the potential for inadvertently exposing subsurface paleontological resources, their responsibility to avoid and protect all such resources, and the penalties for collection, vandalism, or inadvertent destruction of paleontological resources.
- 2. The Nipomo Community Services District-retained paleontologist shall provide a background briefing for supervisory personnel describing the potential for exposing paleontological resources and procedures and notifications required in the event of discoveries by project personnel or paleontological monitors. Supervisory personnel shall enforce restrictions on collection or disturbance of fossils.

GS-2

During ground-disturbing activities of native material, if any paleontological resources are encountered, activities in the immediate area of the find shall be halted and the Nipomo Community Services District shall be notified immediately. A qualified paleontologist shall be retained to evaluate the discovery and recommend appropriate treatment options pursuant to guidelines developed by the Society of Vertebrate Paleontology. A paleontological resource impact mitigation program for treatment of the resources shall be developed and implemented if paleontological resources are encountered. If deemed significant, the paleontological resource(s) shall be salvaged and deposited in an accredited and permanent scientific institution where they will be properly curated and preserved. Prior to final inspection/occupancy of construction permit, the paleontologist shall submit to the Nipomo Community Services District a final post-construction report from the paleontologist summarizing construction compliance and protection.

VIII. Greenhouse Gas Emissions

| Wo | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-----------|
| (a) | Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | \boxtimes | | |
| (b) | Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | \boxtimes | |

Setting

GHGs are any gases that absorb infrared radiation in the atmosphere, and are different from the criteria pollutants discussed in Section III, *Air Quality*, above. The primary GHGs that are emitted into the atmosphere as a result of human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. These are most commonly emitted through the burning of fossil fuels (oil, natural gas, and coal), agricultural practices, decay of organic waste in landfills, and a variety of other chemical reactions and industrial processes (e.g., the manufacturing of cement). CO₂ is the most abundant GHG and is estimated to represent approximately 80 to 90% of the principal GHGs that are currently affecting the earth's climate. According to the CARB, transportation (vehicle exhaust) and electricity generation are the main sources of GHGs in the state.

When assessing the significance of potential impacts for CEQA compliance, an individual project's GHG emissions will generally not result in direct significant impacts because the climate change issue is global in nature. However, an individual project could be found to contribute to a potentially significant cumulative impact. Projects that have GHG emissions above the noted thresholds may be considered cumulatively considerable and require mitigation. Accordingly, in March 2012, the SLOAPCD approved thresholds for GHG impacts which were incorporated into their 2012 CEQA Air Quality Handbook.

The CEQA Air Quality Handbook recommended applying a 1,150 metric tons of CO₂ equivalent (MTCO₂e) per year Bright Line Threshold for commercial and residential projects and included a list of general land uses and estimated sizes or capacities of uses expected to exceed this threshold. According to the SLOAPCD, this threshold was based on a "gap analysis" and was used for CEQA compliance

evaluations to demonstrate consistency with the state's GHG emission reduction goals associated with Assembly Bill (AB 32) and the 2008 Scoping Plan, which have a target year of 2020. However, in 2015, the California Supreme Court issued an opinion in the case of Center for Biological Diversity vs California Department of Fish and Wildlife ("Newhall Ranch") that determined that AB 32-based thresholds derived from a gap analysis are invalid for projects with a planning horizon beyond 2020. Since the bright-line and service population GHG thresholds in the CEQA Air Quality Handbook are AB 32-based, and project horizons are now beyond 2020, the SLOAPCD no longer recommends the use of these thresholds in CEQA evaluations. Instead, the following threshold options are recommended for consideration by the lead agency (SLOAPCD 2021):

- Consistency with a Qualified Climate Action Plan: Climate Action Plans conforming to State CEQA Guidelines Sections 15183 and 15183.5 would be qualified and eligible for project streamlining under CEQA. The EWP, adopted in 2011, serves as the County's GHG reduction strategy. The GHG-reducing policy provisions contained in the EWP were prepared for the purpose of complying with the requirements of AB 32 and achieving the goals of the AB 32 Scoping Plan, which have a horizon year of 2020. Therefore, the EWP is not considered a qualified GHG reduction strategy for assessing the significance of GHG emissions generated by projects with a horizon year beyond 2020.
- No-Net Increase: The 2017 Scoping Plan states that no-net increase in GHG emissions relative to baseline conditions "is an appropriate overall objective for new development" consistent with the Court's direction provided by the Newhall Ranch case. Although a desirable goal, the application of this threshold may not be appropriate for a small project where it can be clearly shown that it will not generate significant GHG emissions (i.e., *de minimis*: too trivial or minor to merit consideration).
- Lead Agency Adopted Defensible GHG CEQA Thresholds: Under this approach, a lead agency may establish Senate Bill (SB) 32-based local operational thresholds. As discussed above, SB 32 requires the state to reduce GHG levels by 40% below 1990 levels by the year 2030. According to the California GHG Emissions for 2000 to 2017, Trends of Emissions and Other Indicators published by the CARB, emissions of GHG statewide in 2017 were 424 million MTCO₂e, which was 7 million MTCO2e below the 2020 GHG target of 431 million MTCO2e established by AB 32. At the local level, an update of the EWP prepared in 2016 revealed that overall GHG emissions in San Luis Obispo County decreased by approximately 7% between 2006 and 2013, or about one-half of the year 2020 target of reducing GHG emissions by 15% relative to the 2006 baseline. Therefore, application of the 1,150 MTCO₂e Bright Line Threshold in San Luis Obispo County, together with other statewide and local efforts to reduce GHG emissions, proved to be an effective approach for achieving the reduction targets set forth by AB 32 for the year 2020. It should be noted that the 1,150 MTCO₂e per year Bright Line Threshold was based on the assumption that a project with the potential to emit less than 1,150 MTCO₂e per year would result in impacts that are less than significant and less than cumulatively considerable and would be consistent with state and local GHG reduction goals.

Because SB 32 requires the state to reduce GHG levels by 40% below 1990 levels by the year 2030, the application of an interim "bright line" SB 32-based working threshold that is 40% below the 1,150 MTCO₂e Bright Line threshold $(1,150 \times 0.6 = 690 \text{ MTCO}_2\text{e})$ would be expected to produce comparable GHG reductions "in the spirit of" the targets established by SB 32. Therefore, for the purpose of evaluating the significance of GHG emissions for a project after 2020, emissions estimated to be less than 690 MTCO₂e per year GHG are considered *de minimis* (too trivial or minor to merit consideration) and would have a less-than-significant impact that is less than cumulatively considerable and consistent with state and local GHG reduction goals.

The San Luis Obispo County 2019 Regional Transportation Plan (RTP), which was adopted by the San Luis Obispo Council of Governments (SLOCOG) Board in June 2019, includes the region's Sustainable Communities Strategy (SCS) and outlines how the region will meet or exceed its GHG-reduction targets by creating more compact, walkable, bike-friendly, transit-oriented communities, preserving important habitat and agricultural areas and promoting a variety of transportation demand management and system management tools and techniques to maximize the efficiency of the transportation network (SLOCOG 2015, 2019). The RTP/SCS provides guidance for the development and management of transportation systems county-wide to help achieve, among other objectives, GHG-reduction goals. The RTP/SCS recommends strategies for community planning, such as encouraging mixed-use infill development that facilitates the use of modes of travel other than motor vehicles.

Environmental Evaluation

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

CONSTRUCTION

The SLOAPCD has not identified a significance threshold for GHG emissions generated during construction activities. During construction, fossil fuels and natural gas would be used by construction vehicles and equipment. Each of the project alternatives would result in site grading and excavation, construction of proposed facilities, and importing and exporting fill and construction materials. GHG emissions associated with site preparation and construction would be temporary in nature and limited to the 24-month anticipated construction phase. Estimated emissions of carbon dioxide equivalent emissions (CO₂e) associated with the construction of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod; see Appendix D) and are shown in Table 6.

Table 6. Estimated Project Construction GHG Emissions

| | Metric Tons Carbon Dioxide Equivalent (MTCO₂e) |
|---|--|
| On-Site | 123.7 |
| Off-Site | 64.6 |
| Total | 188.3 |
| Amortized over assumed 25-year project life | 7.5 |

Source: See Appendix D.

Current federal and state regulations require use of fuel-efficient equipment and vehicles and prohibit wasteful activities, such as diesel idling. In addition, Mitigation Measure AQ-1 would minimize GHG emissions from construction equipment and haul trucks through use of equipment that meets CARB Tier 3 and/or Tier 4 emissions standards where possible, electrification of equipment where feasible, and use of alternative fuels when available. Based on the limited scope and duration of proposed site preparation and construction activities and implementation of identified mitigation measures, the project would not result in the significant generation of GHG emissions during construction. Therefore, impacts would be *less than significant with mitigation*.

OPERATION

During operation, the project would result in a new lift station at the location of the existing Blacklake WRF and a force-main pipeline conveying wastewater flows from the Blacklake service area to the Southland WWTF. Consolidation of the wastewater treatment facilities would not directly result in the

increase of wastewater flows and the overall energy efficiency of the wastewater treatment technology at the Southland WWTF significantly exceeds the energy efficiency of the existing Blacklake WRF, as discussed in Section VI, *Energy*. Therefore, GHG emissions generated during the treatment of wastewater flows pumped from the proposed lift station to the Southland WWTF would not result in a significant increase over existing conditions.

Operation of the proposed lift station and associated equipment would require regular maintenance checks to be performed by NCSD staff, which would be expected to be similar to or less than the existing frequency of maintenance trips conducted for the existing WRF on-site. Due to the location of the lift station on an existing NCSD WRF site, future operational vehicle trips generated by the project would result in a negligible increase in annual vehicle trips to and from the project site. Therefore, impacts would be *less than significant*.

Based on the analysis provided above, impacts associated with generation of GHG emissions that may have a significant impact on the environment would be *less than significant with mitigation*.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The SLOAPCD has not identified a significance threshold for GHG emissions generated during construction activities. Based on the analysis provided under threshold *a)* above, the project would not result in a significant increase of GHG emissions over existing conditions during operation and emissions generated by the project would fall below the 690 MTCO₂e *de minimis* threshold. Therefore, the project would not conflict with current SLOAPCD GHG emissions guidelines or the 2001 CAP. The project would not result in increased vehicle trips or VMT during operation over existing conditions and would therefore not conflict with the RTP/SCS. The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions; therefore, impacts would be *less than significant*.

Conclusion

Mitigation has been identified to reduce potentially significant impacts associated with construction-related GHG emissions. With implementation of mitigation identified below, impacts associated with GHG emissions would be reduced to less than significant.

Mitigation Measures

Implement Mitigation Measure AQ-1.

IX. Hazards and Hazardous Materials

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|--|--------------------------------------|--|------------------------------------|-----------|
| Wo | uld the project: | | | | |
| (a) | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | \boxtimes | |

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|--|--------------------------------------|--|------------------------------------|-----------|
| (b) | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | | |
| (c) | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | |
| (d) | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | |
| (e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | | | | |
| (f) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | \boxtimes | | |
| (g) | Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | | | \boxtimes | |

Setting

The Hazardous Waste and Substances Site List (Cortese List), which is a list of hazardous materials sites compiled pursuant to California Government Code (CGC) Section 65962.5, is a planning document used by the state, local agencies, and developers to comply with CEQA requirements related to the disclosure of information about the location of hazardous materials release sites. The project would not be in an area of known hazardous material contamination and is not on a site listed on the Cortese List (SWRCB 2015; California Department of Toxic Substance Control [DTSC] 2021).

The County has adopted general emergency plans for multiple potential natural disasters, including the Local Hazard Mitigation Plan, County Emergency Operations Plan, Earthquake Plan, Dam and Levee Failure Plan, Hazardous Materials Response Plan, County Recovery Plan, and Tsunami Response Plan.

The California Health and Safety Code provides regulations pertaining to the abatement of fire-related hazards and requires that local jurisdictions enforce the CBC, which provides standards for fire-resistant building and roofing materials and other fire-related construction methods. The County Safety Element includes a Fire Hazard Zones Map that indicates unincorporated areas in the county that are within Moderate, High, and Very High Fire Hazard Severity Zones (FHSZs). Portions of the project would be located within a State Responsibility Area (SRA) in a Moderate FHSZ, while other portions of the project site would be located within a Local Responsibility Area where fire hazard severity zones are not mapped. Based on the County Land Use View web tool, it would take approximately 0 to 10 minutes for local authorities to respond to a call regarding fire or life safety within the project footprint. For more information about fire-related hazards and risk assessment, see Section XX, Wildfire.

Environmental Evaluation

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction and installation of the lift station, installation of the force main pipeline, and demolition and decommissioning of the Blacklake WRF would require the use of limited quantities of hazardous substances (e.g., gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc.). Construction contractors would be required to comply with applicable federal and state environmental and workplace safety laws for the handling of hazardous materials, including response and clean-up requirements for any minor spills. Therefore, proposed construction activity is not anticipated to result in hazards to the public due to routine transport, use, or disposal of hazardous materials.

During operation, the new lift station would pump wastewater flows from the previous Blacklake WRF site through the 4.15-mile force main pipeline to a connection to existing pipelines to the Southland WWTF. The lift station pump, lighting, and other equipment would run on electricity, with a diesel fuel backup generator to be used in the event of a power outage. Diesel fuel would be stored and used in accordance with manufacturer's recommendations, applicable state regulations including the California Code of Regulations, and existing procedures for handling hazardous materials on-site. Therefore, potential impacts associated with the routine transport, use, or disposal of hazardous materials would be *less than significant*.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction of the proposed project is anticipated to require use of limited quantities of hazardous substances, including gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc. Construction contractors would be required to comply with applicable federal and state environmental and workplace safety laws for the handling of hazardous materials, including response and clean-up requirements for any minor spills. Therefore, potential impacts would be *less than significant*.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The nearest school to the project site is the Dana Elementary School, located approximately 0.3 mile south of the force main pipeline alignment that would be located within the intersection of Pomeroy Road and Juniper Street. Pipeline installation activities would be consistent with other general construction activities and as discussed in Section III, *Air Quality*, mitigation measures have been identified to reduce air pollutant emissions from construction equipment and ground disturbance. Pipeline construction activities would be temporary in nature and would occur at a distance of 0.3 mile from the nearest school facility. Therefore, potential impacts would be *less than significant*.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Based on a search of the DTSC EnviroStor database, the SWRCB GeoTracker database, and the California Environmental Protection Agency (CalEPA) Cortese List website, there are no hazardous waste cleanup sites within the project site or within 300 feet of the project site (SWRCB 2022; DTSC 2022) and there are no mapped oil or gas wells within 300 feet of proposed disturbance areas (CDOC

Geologic Energy Management Division [CalGEM] 2019). The proposed project site is not listed on or located near a site listed on the Cortese List; therefore, *no impacts would occur*.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The nearest airport and/or airstrip to the project site is the Oceano County Airport, which is located approximately 5.4 miles northeast of the project site. The project site is located well outside of the 65-decibel (dB) community noise equivalent level (CNEL) noise contours for the Oceano County Airport. The project site is not located within an airport land use plan or within 2 miles of a public airport or private airstrip; therefore, *no impacts would occur*.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

It is anticipated that proposed force main pipeline installation and construction activities would require temporary vehicle lane closures along Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street, which may affect local emergency vehicle access routes and/or emergency evacuation routes in the event of an emergency. Appropriate lane closure traffic management signage and traffic controls would be identified and required to be implemented in accordance with an encroachment permit issued by the County Public Works Department. In addition, Mitigation Measure HAZ-1 has been identified to require advanced notice be given to surrounding land use occupants and local emergency providers with information on the associated lane closures and available detour routes. With implementation of Mitigation Measure HAZ-1, the project would not impair implementation or physically interfere with local hazard mitigation or emergency plans; therefore, impacts would be *less than significant with mitigation*.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The project does not propose the construction of any new residences or other habitable structures. Based on the County Safety Element, the project is not located within a high or very high FHSZ. The project would be required to comply with all applicable fire safety rules and regulations including the California Fire Code and PRC; therefore, potential impacts would be *less than significant*.

Conclusion

Mitigation has been identified to reduce potentially significant impacts associated with impairment of local emergency response/emergency evacuation plans. With implementation of mitigation identified below, impacts associated with hazards and hazardous materials would be reduced to less than significant.

Mitigation Measures

HAZ-1 At least 2 weeks prior to any planned road closure, the Nipomo Community Services District shall provide notice to all residents, business owners, public facilities located within 500 feet of proposed road/lane closures and emergency response providers likely to be affected by the closure and detours, including, but not limited to, the California Department of Forestry and Fire Protection, County of San Luis Obispo Public Works Department, and San Luis Obispo County Sheriff's Office. The notice shall include the following information: dates of construction, temporary lane/road closures and detours,

and contact information, including the phone number and email address of the Nipomo Community Services District staff person responsible for responding to and addressing public complaints regarding access.

X. Hydrology and Water Quality

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-------------|
| Woo | uld the project: | | | | |
| (a) | Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | | | |
| (b) | Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | | | | |
| (c) | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| | (i) Result in substantial erosion or siltation on- or off-site; | | | \boxtimes | |
| | (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; | | | \boxtimes | |
| | (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | | | | |
| | (iv) Impede or redirect flood flows? | | | \boxtimes | |
| (d) | In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | | \boxtimes |
| (e) | Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | \boxtimes | |

Setting

The project is located in the Nipomo-Suey Creeks Watershed, which includes two tributary basins to the Santa Maria River with their headwaters in the foothills of the Coast Range: Nipomo Creek and Suey Creek. The watershed is dominated by agricultural land uses including ranches, row crops, greenhouses, and orchards. Other land uses include residential land uses (Land Conservancy of San Luis Obispo and Central Coast Salmon Enhancement 2005). The project is located within the Santa Maria River Valley groundwater basin (Santa Maria Basin; County of San Luis Obispo 2021c). The Santa Maria Basin encompasses approximately 184,000 acres (288 square miles), of which approximately 61,220 acres (95.7 square miles) are within San Luis Obispo county (County of San Luis Obispo 2022).

In 2015, the State legislature approved an important new groundwater management law known as the Sustainable Groundwater Management Act (SGMA). The California Department of Water Resources

(DWR) designated Santa Maria Basin as a high priority basin. SGMA requires that high and medium priority basins comply with the new law, with certain exceptions for certain adjudicated basins such as the Santa Maria Basin. SGMA does not apply to the portion of the Santa Maria Basin that is at issue in the litigation ("adjudicated area") provided that certain requirements are met. The adjudicated areas cover a majority of the basin, and are managed by the Northern Cities Management Area, Nipomo Mesa Management Area, and the Santa Maria Valley Management Area (County of San Luis Obispo 2022).

Construction sites that disturb 1 acre or more must obtain coverage under the SWRCB Construction General Permit. The Construction General Permit requires the preparation of a SWPPP prepared by a certified Qualified SWPPP Developer (QSD) to minimize on-site sedimentation and erosion prior to, during, and after construction activities. The Construction General Permit also requires implementation of a minimum number of Best Management Practices (BMPs), preparation of a rain event action plan (REAP) to protect all exposed portions of the site within 48 hours of any likely precipitation event, water quality standards for stormwater effluent, and prohibition of non-stormwater discharges.

For planning purposes, the flood event most often used to delineate areas subject to flooding is the 100-year flood. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) indicate there are no floodplains present within the project site and the site is mapped entirely within an area of minimal flood hazard (Flood Zone X, effective date August 2008 and November 2012; FEMA 2012).

Environmental Evaluation

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The project would disturb more than 1 acre of land and would be required to prepare a SWPPP in accordance with the SWRCB Construction General Permit Order 2009-0009-DWQ. The SWPPP would be prepared by a certified QSD to ensure effective erosion and sedimentation control measures are implemented prior to, during, and following project construction. In addition, the SWPPP would identify appropriate Best Management Practices (BMPs) to be implemented during project construction to reduce erosion and runoff. Project construction activities would also include draining and removing sludge from each of the remaining effluent treatment ponds. Treated wastewater would be drained into the existing pond located north of the Blacklake WRF in accordance with current SWRCB discharge permits.

During operation, the project would result in a new lift station at the location of the existing Blacklake WRF and a force-main pipeline conveying wastewater flows from the Blacklake service area to the Southland WWTF. Diesel fuel, and any other potentially hazardous materials stored at the lift station site, would be stored and used according to manufacturer's recommendations, applicable regulatory requirements including the CCR, and existing on-site procedures for the handling of hazardous materials. Therefore, the project would not result in the violation of any water quality standards, waste discharge requirements, or substantial degradation of surface or ground water quality, and potential impacts would be *less than significant*.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

During operation, the project would result in a new lift station at the location of the existing Blacklake WRF and a force-main pipeline conveying wastewater flows from the Blacklake service area to the Southland WWTF. The project would not substantially increase water demand, deplete groundwater

supplies, or interfere substantially with groundwater recharge. Therefore, potential impacts would be *less than significant*.

- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
- c-i) Result in substantial erosion or siltation on- or off-site?
- c-ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- c-iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project would disturb more than 1 acre of area and would be required to prepare and implement a SWPPP in accordance with the SWRCB Construction General Permit Order 2009-0009-DWQ. The SWPPP would be prepared by a certified QSD and would ensure effective erosion and sedimentation control measures are implemented prior to, during, and following project construction. In addition, the SWPPP would identify appropriate BMPs to be implemented prior to, during, and after project construction to reduce erosion and runoff.

The project would not substantially increase the amount of impervious surfaces on-site. The project would not otherwise substantially alter the rate or amount of surface runoff or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, impacts would be *less than significant*.

c-iv) Impede or redirect flood flows?

The FEMA FIRM maps indicate there are no floodplains present within the project site and the site is entirely within an area of minimal flood hazard (Flood Zone X, effective date November 16, 2012; FEMA 2012). Therefore, the project would not result in the impediment or redirection of flood flows and potential impacts would be *less than significant*.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The FEMA FIRM maps indicate there are no floodplains present within the project site and the site is mapped entirely within an area of minimal flood hazard (Flood Zone X, effective date November 16, 2012; FEMA 2012). The project site is not located within a tsunami hazard area (CDOC 2021). The project is not located within an area that could become inundated due to a dam or levee failure (County of San Luis Obispo 2021b). The project site is not located adjacent to a body of standing water that could result in a seiche if the appropriate weather conditions were met. Therefore, *no impacts* would occur.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed under the thresholds above, the project would be required to prepare a SWPPP and implement stormwater BMPs in accordance with the SWRCB Construction General Permit Order 2009-0009-DWQ. The SWPPP would be prepared by a qualified engineer to ensure effective erosion and sedimentation control measures are implemented prior to, during, and following project construction. The

project would not result in depletion of a groundwater basin designated as Level of Severity III per the County's Resource Management System or designated as being in severe decline by the Sustainable Groundwater Management Act (SGMA). The project would not result in a significant new source of polluted runoff, substantially deplete groundwater resources, or otherwise conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan; therefore, potential impacts would be *less than significant*.

Conclusion

Potential impacts related to hydrology and water quality would be less than significant and no mitigation measures are necessary.

Mitigation Measures

No mitigation measures are necessary.

XI. Land Use and Planning

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-------------|
| Wo | uld the project: | | | | |
| (a) | Physically divide an established community? | | | | \boxtimes |
| (b) | Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | | |

Setting

The project would be located within the Nipomo Urban Reserve Line within the South County Inland Sub Area of the South County Planning Area. The existing Blacklake WRF site is located within the Recreation land use designation and is surrounded by the Blacklake Golf Course and a residential subdivision to the north, east, and west, and Willow Road, agricultural uses, and rural residential uses to the south. The proposed force main pipeline alignment would be located within the NCSD easement under County right-of-way of Willow Road, Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street. Surrounding uses located adjacent to the pipeline alignment include rural residential uses, undeveloped woodlands, and a public service well site at the northeast corner of the intersection of Sundale Way and Camino Caballo, single-family residential neighborhoods, agricultural uses, rural residential uses, open space uses along Camino Caballo, and single-family residential uses along Pomeroy Road and Juniper Street.

Environmental Evaluation

a) Would the project physically divide an established community?

The project does not propose project elements or components that would physically divide the site from surrounding areas and uses. The project would be consistent with the level of development in the project vicinity and would not create, close, or impede any existing public or private roads, or create any other

barriers to movement or accessibility within the community. Therefore, the proposed project would not physically divide an established community and *no impacts* would occur.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project would be carried out and overseen by the NCSD, which is a California Community Public Services District organized pursuant to Government Code Sections 61000 et seq. The powers of special districts such as the NCSD are limited solely to those conferred by the Legislature. The NCSD's powers do not include legislative and executive powers over zoning and land use. However, use and/or expansion of existing NCSD service infrastructure (excluding changes in land use, etc.) falls within the NCSD's expressed and implied powers. Therefore, NCSD projects would not be subject to County regulations, such as the County LUO or County COSE.

As detailed in Section III, *Air Quality*, the project would not conflict with the 2001 CAP, but would have the potential to exceed local emissions thresholds set forth by SLOAPCD during construction period. Mitigation measures AQ-1 through AQ-3 have been identified to reduce project construction emissions to ensure consistency with SLOAPCD and state air quality plans and policies pertaining to air pollutant emissions and attainment status.

The project would have potential to adversely affect biological resources within the project site (see Section IV, *Biological Resources*). Mitigation measures BIO-1 through BIO-12 have been identified to ensure project construction activities are consistent with state, regional, and local policies regarding preservation of sensitive species, sensitive habitat features, and other biological resources, such as native oak trees.

In addition, measure HAZ-1 has been identified to reduce potential impacts associated with local road lane closures and potential impacts to local emergency services, which would mitigate potential conflicts with local emergency response and evacuation plans. Measures N-1 and N-2 have been identified to reduce potential impacts associated with construction noise levels, which would ensure consistency with applicable local planning standards.

Based on the analysis provided above, with incorporation of identified mitigation measures, potential impacts associated with conflicts with a land use plan, policy, or regulation adopted for the purpose of mitigating an environmental effect would be *less than significant with mitigation*.

Conclusion

Mitigation measures have been identified to address potential conflicts with land use plans, policies, or regulations. Upon implementation of these measures, potential impacts associated with land use and planning would be reduced to less than significant.

Mitigation Measures

Implement Mitigation Measures AQ-1 through AQ-3, BIO-1 through BIO-12, HAZ-1, N-1, and N-2.

XII. Mineral Resources

| Wo | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-------------|
| (a) | Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | | \boxtimes |
| (b) | Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | | | | \boxtimes |

Setting

The California Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Geologist classify land into mineral resource zones (MRZ) according to the known or inferred mineral potential of the land (Public Resources Code Sections 2710–2796).

The three MRZs used in the SMARA classification-designation process in the San Luis Obispo-Santa Barbara Production-Consumption Region are defined below (California Geological Survey 2011a):

- MRZ-1: Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or where well-developed lines of reasoning, based upon economic-geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.
- MRZ-3: Areas containing known or inferred aggregate resources of undetermined significance.

Based on the Mineral Land Classification Map prepared for the project area, the project site is located within the MRZ-3 designation (Miller 1989; CDOC 2015b).

Environmental Evaluation

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Based on the Mineral Land Classification Map prepared for the project area, the project site is located within an area within the MRZ-3 designation (Miller 1989; CDOC 2015b), indicating that minerals within the project area have an undetermined significance. The project site is located within an urban community that would not likely be designated or developed for mineral extraction. There are no known valuable mineral resources in the project area; therefore, *no impacts* would occur.

b) Would the project result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

There are no known or mapped mineral resources in the project area and the likelihood of future mining of important resources within the project area is very low; therefore, *no impacts* would occur.

Conclusion

No impacts to mineral resources would occur and no mitigation measures are necessary.

Mitigation Measures

No mitigation measures are necessary.

XIII. Noise

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|--|--------------------------------------|--|------------------------------------|-----------|
| Wo | uld the project result in: | | | | |
| (a) | Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | | |
| (b) | Generation of excessive groundborne vibration or groundborne noise levels? | | | \boxtimes | |
| (c) | For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | |

Setting

The County Noise Element provides a policy framework for addressing potential noise impacts in the planning process. The purpose of the Noise Element is to minimize future noise conflicts. The Noise Element identifies the major noise sources in the county (highways and freeways, primary arterial roadways and major local streets, railroad operations, aircraft and airport operations, local industrial facilities, and other stationary sources) and includes goals, policies, and implementation programs to reduce future noise impacts. Among the most significant polices of the Noise Element are numerical noise standards that limit noise exposure within noise-sensitive land uses, and performance standards for new commercial and industrial uses that might adversely impact noise-sensitive land uses.

Noise sensitive uses that have been identified by the County include the following:

- Residential development, except temporary dwellings
- Schools preschool to secondary, college and university, specialized education and training
- Health care services (e.g., hospitals, clinics, etc.)

- Nursing and personal care
- Churches
- Public assembly and entertainment
- Libraries and museums
- Hotels and motels
- Bed and breakfast facilities
- Outdoor sports and recreation
- Offices

All sound levels referred to in the Noise Element are expressed in A-weighted decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear.

While all NCSD facilities are exempt from the County LUO, noise standards set forth in the LUO are provided here to provide context for evaluating potential noise impacts (Table 7). The County LUO establishes acceptable standards for exterior and interior noise levels and describe how noise shall be measured. Exterior noise level standards are applicable when a land use affected by noise is one of the sensitive uses listed in the County Noise Element. Exterior noise levels are measured from the property line of the affected noise-sensitive land use.

Table 7. Maximum Allowable Exterior Noise Level Standards¹

| Sound Levels | Daytime 7 a.m. to 10 p.m. | Nighttime ² |
|--|------------------------------|------------------------|
| Hourly Equivalent Sound Level (L _{eq} , dB) | 50 | 45 |
| Maximum level (dB) | 70 | 65 |

Note: Leq = equivalent continuous sound level

Some types of noise are exempt from the above County LUO noise standards, including noise sources associated with construction, provided such activities do not take place before 7:00 a.m. or after 9:00 p.m. on weekdays, or before 8:00 a.m. or after 5:00 p.m. on Saturday or Sunday. Noise associated with agricultural land uses, traffic on public roadways, railroad line operations, and aircraft in flight are also exempt.

Environmental Evaluation

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The project would result in construction activities within 1,000 feet of numerous sensitive receptor locations (see Figures 7 and 8). The majority of these sensitive receptor locations consist of residential land uses. Construction noise would be variable, temporary, and limited in nature and duration. While the majority of construction activities would occur during daytime hours, some work associated with connections to existing wastewater infrastructure in service would likely need to be completed during

¹ When the receiving noise-sensitive land use is outdoor sports and recreation, the noise level standards are increased by 10 dB.

² Applies only to uses that operate or are occupied during nighttime hours.

nighttime hours when wastewater flows are low. While specific equipment to be used during construction is not known at this time, it is assumed that the project would require use of equipment that would generate noise levels between 80 and 85 dBA at 50 feet regardless of which construction alternative is approved, as detailed in Table 8.

Table 8. Construction Equipment Noise Emission Levels

| Equipment Type | Typical Noise Level (dBA) 50 Feet From Source |
|----------------|--|
| Backhoe | 80 |
| Compactor | 80 |
| Concrete Mixer | 85 |
| Concrete Pump | 82 |
| Dozer | 85 |
| Excavator | 85 |
| Heavy Truck | 84 |
| Paver | 85 |
| Scraper | 85 |

Source: Federal Highway Administration (FHWA) 2017

The County LUO requires that construction activities be conducted during daytime hours to be able to utilize County construction noise exception standards and that construction equipment be equipped with appropriate mufflers recommended by the manufacturer. While the project is not directly subject to the County LUO standards, exceedance of these standards indicates a potentially significant increase in ambient noise levels and a potentially significant impact. Mitigation Measures N-1 and N-2 have been identified to reduce short-term construction noise impacts on surrounding sensitive receptor locations. With implementation of these measures, potential short-term construction noise impacts would be *less than significant with mitigation*.

During operation, the new lift station would utilize a pump to convey wastewater from the Blacklake WRF to the Southland WWTF. In the event of a power outage, the lift station would be powered by a back-up diesel generator. These uses would be located a minimum of 800 feet from the nearest sensitive receptor location, which would include residential land uses located north of the Blacklake Golf Course. Testing of the diesel generator would occur on a monthly basis (or as allowed by the applicable SLOAPCD permit). Prolonged use of the diesel generator would be very infrequent and temporary. Noise associated with the proposed lift station pump would be equivalent to the existing noise levels generated on-site by wastewater collection and treatment processes. Based on existing noise levels on-site, proposed equipment, and distance to the nearest sensitive receptor locations, operational noise levels would not result in a conflict with applicable noise standards and impacts would be *less than significant*.

Based on the analysis provided above, impacts would be less than significant with mitigation.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

The project does not propose blasting, pile driving, or other high-impact activities that would generate substantial groundborne noise or groundborne vibration during construction. Construction equipment has the potential to generate minor groundborne noise and/or vibration, but these activities would be limited in duration and are not likely to be perceptible from adjacent areas. The project would require the use of

haul trucks to transport construction material on- and off-site. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Any groundborne vibrations from project-related haul truck trips would be temporary and short-term in nature, and likely imperceptible.

The project does not propose a use that would generate long-term operational groundborne noise or vibration. Therefore, potential impacts would be *less than significant*.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project site is not located within or adjacent to an airport land use plan or within 2 miles of a public airport or private airstrip; therefore, *no impacts* would occur.

Conclusion

Mitigation has been identified to reduce potential impacts associated with construction noise levels. Upon implementation of mitigation identified below, potential impacts associated with noise would be reduced to less than significant.

Mitigation Measures

- N-1 Construction activities shall be limited to the daytime hours of 7:00 a.m. to 9:00 p.m. Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturday or Sunday when possible. Some nighttime work may be required but shall be minimized.
- **N-2** Internal combustion engines shall be equipped with the muffler recommended by the manufacturer. Internal combustion engines shall not be operated on the job site without the appropriate muffler.

XIV. Population and Housing

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|--|--------------------------------------|--|------------------------------------|-------------|
| Wo | uld the project: | | | | |
| (a) | Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | |
| (b) | Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | \boxtimes |

Setting

In 2020, the U.S. Census Bureau estimated San Luis Obispo County's population at 282,424. While a large portion of the county's population lives in and around seven incorporated cities, growth in the

unincorporated areas, including Nipomo and the Nipomo Mesa, have continued to outpace other areas in the county. Between 2010 and 2020, the population of Nipomo grew by 8.7%, compared to 4.7% in San Luis Obispo County (U.S. Census Bureau 2021). While this area remains rural relative to other urbanized locations in the county, ongoing pressure for affordable housing has increased development throughout the region.

Environmental Evaluation

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

During operation, the project would result in a new lift station at the location of the existing Blacklake WRF and a force-main pipeline conveying wastewater flows from the Blacklake service area to the Southland WWTF. The project would consolidate existing sewer system facilities to serve existing and future service area customers wastewater flows and would not directly or indirectly result in a substantial increase in population or long-term employment opportunities. Therefore, potential impacts would be *less than significant*.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No existing residential uses are located within the project site and the project would not result in a substantial new source of long-term employment. The project would not displace existing housing or necessitate the construction of replacement housing elsewhere; therefore, *no impacts* would occur.

Conclusion

No potentially significant impacts related to population and housing would occur and mitigation measures are not necessary.

Mitigation Measures

No mitigation measures are necessary.

XV. Public Services

| Wo | Environmental Issues uld the project: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|--|--------------------------------------|--|------------------------------------|-----------|
| (a) | Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| | Fire protection? | | | \boxtimes | |

| Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--------------------------|--------------------------------------|--|------------------------------------|-----------|
| Police protection? | | | \boxtimes | |
| Schools? | | | \boxtimes | |
| Parks? | | | \boxtimes | |
| Other public facilities? | | | \boxtimes | |

Setting

Fire protection services in unincorporated San Luis Obispo County are provided by the California Department of Forestry and Fire Protection (CAL FIRE), which has been under contract with the County to provide full-service fire protection since 1930. Approximately 180 full-time state employees operate the County Fire Department, supplemented by as many as 100 state seasonal fire fighters, 300 County paid on-call and reserve fire fighters, and 120 state inmate fire fighters. CAL FIRE responds to emergencies and other requests for assistance, plans for and takes action to prevent emergencies and to reduce their impact, coordinates regional emergency response efforts, and provides public education and training in local communities. CAL FIRE has 24 fire stations located throughout the county. The project site is located within close proximity to two CAL FIRE stations, Nipomo Station 20, located at 450 Pioneer Street, Nipomo approximately 1.3 miles east of the easternmost portion of the project site, and Mesa Station 22, located at 2391 Willow Road, Nipomo approximately 2.5 miles west of the Blacklake WRF.

Police protection and emergency services in the unincorporated portions of the county are provided by the San Luis Obispo County Sheriff's Office. The Sheriff's Office Patrol Division responds to calls for service, conducts proactive law enforcement activities, and performs initial investigations of crimes. Patrol personnel are deployed from three stations throughout the county, the Coast Station in Los Osos, the North Station in Templeton, and the South Station in Oceano. The nearest law enforcement station to the project site is located at 1681 Front Street, Oceano approximately 8.6 miles to the northwest of the project site.

San Luis Obispo County has a total of 12 school districts that currently enroll approximately 34,000 students in over 75 schools (County of San Luis Obispo Office of Education 2022). The project site is located within the Lucia Mar School District.

Environmental Evaluation

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

During operation, the project would result in a new lift station at the location of the existing Blacklake WRF and a force-main pipeline conveying wastewater flows from the Blacklake service area to the Southland WWTF. The project would not generate long-term increases in demand for fire protection or

other emergency services. The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities; therefore, potential impacts would be *less than significant*.

Police protection?

The project would not generate long-term increases in demand for police protection or other emergency services. The project would include installation of new fencing and locked gates at the location of the new lift station to dissuade trespassers. The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities; therefore, potential impacts would be *less than significant*.

Schools?

As described in Section XIV, *Population and Housing*, the project would not result in substantial population growth or remove a barrier to growth in the area. The project would consolidate existing sewer system facilities to serve existing and future service area customers wastewater flows and would not directly result in a substantial increase in population or long-term employment opportunities. Therefore, the project would not result in a significant new source of employment or otherwise trigger an increase in school-age children within the project vicinity. The project would not directly impact nearby schools and would not result in the generation of additional school children or create an increase in demand for additional school capacity; therefore, potential impacts would be *less than significant*.

Parks?

The project does not extend through any public parks or recreational areas and would not directly impact recreational resources. As described in Section XIV, *Population and Housing*, the project would not result in substantial population growth or remove a barrier to growth in the area. The project would not result in an increase in population and would not place any new or increased demand on existing local or regional park or other recreational facilities. Construction of the project would not displace any existing or known proposed recreational facilities. Therefore, potential impacts related to public park and recreational facilities would be *less than significant*.

Other public facilities?

The project would not directly or indirectly affect other public facilities in the project vicinity such as libraries or post offices. The proposed project would not directly or indirectly induce population growth in the area and would not increase demand on public facilities as a result of the project. No expansion of public facilities or emergency services would be required. Therefore, potential impacts would be *less than significant*.

Conclusion

The proposed project would not result in significant adverse impacts related to public services and no mitigation measures are necessary.

Mitigation Measures

No mitigation measures are necessary.

XVI. Recreation

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-----------|
| (a) | Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | \boxtimes | |
| (b) | Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | |

Setting

A portion of the proposed force main pipeline would be located within the right-of-way of Camino Caballo adjacent to the Nipomo Regional Park (i.e., Nipomo Community Park). The Nipomo Regional Park is one of the County's most popular and prolific parks, averaging 27,000 visitors per month during the summer. Its wide grassy fields, excellent shading, and numerous picnic areas make it an attractive location for gatherings large and small. Park features include three group day-use areas, four softball diamonds, a football and soccer field, four reservable tennis courts, horseshoes, sand volleyball, an off-leash dog area, children's play area, and acres of groomed turf (County of San Luis Obispo 2021).

Environmental Evaluation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

As discussed in Section XIV, *Population and Housing*, the project would not result in substantial population growth or remove a barrier to growth in the area. The project would not result in an increase in population and would not place any new or increased demand on existing local or regional park and recreational facilities. Therefore, potential impacts would be *less than significant*.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project does not include recreational facilities or expansion of recreational facilities; therefore, *no impacts* would occur.

Conclusion

Potential impacts related to recreation would be less than significant and mitigation measures are not necessary.

Mitigation Measures

No mitigation measures are necessary.

XVII. Transportation

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-------------|
| Wol | uld the project: | | | | |
| (a) | Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | | | | |
| (b) | Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | | | \boxtimes | |
| (c) | Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | \boxtimes |
| (d) | Result in inadequate emergency access? | | \boxtimes | | |

Setting

SLOCOG holds several key roles in transportation planning within the county. As the Regional Transportation Planning Agency (RTPA), SLOCOG is responsible for conducting a comprehensive, coordinated transportation program; preparing an RTP; programming state funds for transportation projects; and administering and allocating transportation development act funds required by state statutes. The RTP, adopted June 5, 2019, is a long-term blueprint of San Luis Obispo County's transportation system. The RTP identifies and analyzes transportation needs of the region and creates a framework for project priorities. SLOCOG represents and works with the County, as well as the cities within the county, in facilitating the development of the RTP.

In 2013 SB 743 was signed into law with the intent to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions" and required the California Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. As a result, in December 2018, the California Natural Resources Agency certified and adopted updates to the State CEQA Guidelines (OPR 2018). The revisions included new requirements related to the implementation of SB 743 and identified VMT per capita, VMT per employee, and net VMT as new metrics for transportation analysis under CEQA (as detailed in Section 15064.3[b]). Beginning July 1, 2020, the newly adopted VMT criteria for determining significance of transportation impacts was implemented statewide.

Environmental Evaluation

a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The project does not propose any long-term alteration of any proximate transportation facilities. Proposed installation of the force-main pipeline within existing County roadway right-of-way would not result in any long-term changes in lane configuration or circulation patterns. Temporary vehicle lane closures would be conducted in accordance with local transportation standards per the County Encroachment Permit requirements. The project would result in a temporary increase in vehicle and haul truck trips along nearby roadways during the construction period; however, these impacts would be limited to the

approximate 12-month construction period. This temporary increase in traffic would be accommodated by existing local streets. Operational traffic trips would be limited to as-needed maintenance trips and would be negligible compared to existing operations; therefore, the project would not result in any long-term changes in traffic or circulation. The project does not propose uses that would interfere or conflict with applicable policies related to circulation, transit, roadway, bicycle, or pedestrian systems or facilities. Therefore, potential impacts would be *less than significant*.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Vehicle and haul truck traffic trips associated with construction of any of the three project alternatives would be temporary. Based on the Technical Advisory on Evaluating Transportation Impacts in CEQA prepared by the OPR, there is no current guidance from the state regarding the significance of VMT generated during construction activities or VMT generated by heavy-duty trucks, such as haul trucks (OPR 2018). Therefore, due to the temporary nature of proposed construction and haul truck trips, VMT generated by the project during construction would be less than significant.

Operational traffic trips would be limited to as-needed maintenance trips and would be negligible compared to existing operations. Based on the nature and location of the project, the project would not generate a significant increase in operational traffic trips or VMT. The project would not substantially change existing land uses and would not result in the need for additional new or expanded transportation facilities. Therefore, potential impacts would be *less than significant*.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project would not change roadway design and does not include geometric design features that would create new hazards or an incompatible use; therefore, *no impacts* would occur.

d) Would the project result in inadequate emergency access?

During operation, project implementation would not affect long-term access through the project area and sufficient alternative access exists to accommodate regional trips. The project would be designed to accommodate emergency service vehicles in accordance with the California Fire Code and the CBC.

It is anticipated that proposed force main pipeline installation and construction activities would require temporary vehicle lane closures along Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street, which may affect local emergency vehicle access routes and/or emergency evacuation routes in the event of an emergency. Appropriate lane closure traffic management signage and traffic controls would be identified and required to be implemented in accordance with an encroachment permit issued by the County Public Works Department. In addition, Mitigation Measure HAZ-1 has been identified to require advanced notice be given to surrounding land use occupants and local emergency providers with information on the associated lane closures and available detour routes. With implementation of Mitigation Measure HAZ-1, potential impacts associated with inadequate emergency access would be *less than significant with mitigation*.

Conclusion

Mitigation has been identified to reduce impacts associated with inadequate emergency access during pipeline construction activities. Upon implementation of mitigation identified below, potential impacts associated with transportation would be less than significant with mitigation.

Mitigation Measures

Implement Mitigation Measure HAZ-1.

XVIII. Tribal Cultural Resources

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-----------|
| (a) | Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| | (i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | | | | |
| | (ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | | | |

Setting

Approved in 2014, AB 52 added tribal cultural resources to the categories of resources that must be evaluated under CEQA. Tribal cultural resources are defined as either of the following:

- 1. Sites, features, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the CRHR; or
 - b. Included in a local register of historical resources as defined in PRC Section 5020.1(k).
- 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying these criteria for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Recognizing that tribes have expertise with regard to their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe regarding the potential for adverse impacts on tribal cultural resources as a result of a project. Consultation may include discussing the type of environmental review necessary, the presence and/or significance of tribal cultural resources, the level of significance of a project's impacts on the tribal

cultural resources, and available project alternatives and mitigation measures recommended by the tribe to avoid or lessen potential impacts on tribal cultural resources.

Environmental Evaluation

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
- a-i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?
- a-ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The NCSD provided notice of the opportunity to consult with appropriate tribes per the requirements of AB 52 (April 26, 2021). A request to review the Phase I Archaeological Survey Report was received by the yak tit^yu tit^yu - Northern Chumash Tribe. The Phase 1 Archaeological Survey Report was forwarded on March 15, 2022, to the yak tit^yu tit^yu - Northern Chumash Tribe and no subsequent comments were received. Based on the results of the Phase 1 archaeological resources survey and records search, the project site does not contain any known cultural resources that have been listed or found eligible for listing in the CRHR or in a local register of historical resources as defined in PRC Section 5020.1 (SWCA 2021).

The project site does not contain any resources determined by the County to be potentially significant tribal cultural resources. Impacts associated with potential inadvertent discovery would be minimized through compliance with existing standards and regulations (County LUO 22.10.040) and implementation of mitigation measures CR-1 and CR-2. Therefore, potential impacts would be *less than significant with mitigation*.

Conclusion

Mitigation has been identified to reduce potential impacts associated with disturbance of previously unknown cultural resources. Upon implementation of identified mitigation, potential impacts to tribal cultural resources would be less than significant.

Mitigation Measures

Implement Mitigation Measures CR-1 and CR-2.

XIX. Utilities and Service Systems

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-----------|
| Wo | uld the project: | | | | |
| (a) | Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | | | | |
| (b) | Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | | |
| (c) | Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | |
| (d) | Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | | |
| (e) | Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | \boxtimes | |

Setting

The NCSD has a service area of approximately 7 square miles in southern San Luis Obispo County and relies on groundwater and imported water from the City of Santa Maria to serve its customers. Golden State Water Company (GSWC) and Woodlands Mutual Water Company (WMWC) are partner purveyors and provide water to customers in the Nipomo Mesa outside the NCSD service areas.

The NCSD currently operates two wastewater treatment facilities to serve its service area—the Southland Wastewater Treatment Facility (WWTF) and the Blacklake Water Reclamation Facility (WRF). The Southland WWTF currently serves approximately 2,500 connections within the community of Nipomo and other proximate unincorporated county areas. The Blacklake WRF was built in 1984, annexed into NCSD service area in 1993, and expanded between 1995 and 1996. The Blacklake WRF currently serves 550 residences.

There are three landfills in San Luis Obispo County: Cold Canyon Landfill, located southeast of the city of San Luis Obispo; Chicago Grade Landfill, located near the community of Templeton; and Paso Robles Landfill, located east of the city of Paso Robles. The community of Nipomo is served by South County Sanitary for trash and recycling pick up and disposal services.

Environmental Evaluation

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

During operation, the project would result in a new lift station at the location of the existing Blacklake WRF and a force-main pipeline conveying wastewater flows from the Blacklake service area to the Southland WWTF. As discussed in the sections above, the project would result in potentially significant impacts associated with air quality, biological resources, cultural resources, energy, GHG emissions, paleontological resources, hazards and hazardous materials, noise, and tribal cultural resources. Mitigation measures have been identified in this document that would reduce potential impacts associated with the project to less than significant. Therefore, impacts would be *less than significant with mitigation*.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

During operation, the project would result in a new lift station at the location of the existing Blacklake WRF and a force-main pipeline conveying wastewater flows from the Blacklake service area to the Southland WWTF. The proposed wastewater treatment consolidation facilities would not directly generate the demand for water. Therefore, *no impacts would occur*.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

During operation, the project would result in a new lift station at the location of the existing Blacklake WRF and a force-main pipeline conveying wastewater flows from the Blacklake service area to the Southland WWTF. The proposed wastewater treatment consolidation facilities would not directly generate the demand for wastewater service. Therefore, *no impacts would occur*.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction activities would result in the generation of limited solid waste materials; no significant long-term increase in solid waste would occur. Local landfills have adequate permitted capacity to serve the project and the project does not propose to generate solid waste in excess of state or local standards or otherwise impair the attainment of solid waste reduction goals. Therefore, potential impacts would be *less than significant*.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The project would not result in a substantial increase in waste generation during project construction or operation. Construction waste disposal would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, potential impacts would be *less than significant*.

Conclusion

Mitigation measures have been identified to reduce potential environmental impacts associated with the proposed construction of wastewater collection and conveyance facilities. Upon implementation of mitigation measures identified below, potential impacts associated with utilities and service systems would be reduced to less than significant.

Mitigation Measures

Implement Mitigation Measures AQ-1 through AQ-3, BIO-1 through BIO-12, HAZ-1, N-1, and N-2.

XX. Wildfire

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-------|---|--------------------------------------|--|------------------------------------|-----------|
| If Io | cated in or near state responsibility areas or lands classifi | ied as very high f | ire hazard severity | zones, would the | project: |
| (a) | Substantially impair an adopted emergency response plan or emergency evacuation plan? | | \boxtimes | | |
| (b) | Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | | | |
| (c) | Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | | | \boxtimes | |
| (d) | Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | | | | |

Setting

In central California, the fire season usually extends from roughly May through October; however, recent events indicate that wildfire behavior, frequency, and duration of the fire season are changing in California. FHSZs are defined by CAL FIRE based on the presence of fire-prone vegetation, climate, topography, assets at risk (e.g., high population centers), and a fire protection agency's ability to provide service to the area (CAL FIRE 2007). FHSZs throughout the county have been designated as "Very High," "High," or "Moderate." In San Luis Obispo County, most of the area that has been designated as a Very High FHSZ is located in the Santa Lucia Mountains, which extend parallel to the coast along the entire length of San Luis Obispo County. Portions of the project would be located within a State Responsibility Area (SRA) in a Moderate FHSZ, while other portions of the project site would be located within a Local Responsibility Area where fire hazard severity zones are not mapped. Based on the County Land Use View web tool, it would take approximately 0 to 10 minutes for local authorities to respond to a call regarding fire or life safety within the project footprint.

The California Fire Code provides minimum standards for many aspects of fire prevention and suppression activities. These standards include, but are not limited to, provisions for emergency vehicle

access, water supply for fire suppression, fire protection systems, and the use of fire-resistant building materials.

Environmental Evaluation

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The project site is not located within a designated high or very high FHSZ. It is anticipated that proposed force main pipeline installation and construction activities would require temporary vehicle lane closures along Sundale Way, Camino Caballo, Pomeroy Road, and Juniper Street, which may affect local emergency vehicle access routes and/or emergency evacuation routes in the event of an emergency. Appropriate lane closure traffic management signage and traffic controls would be identified and required to be implemented in accordance with an encroachment permit issued by the County Public Works Department. In addition, Mitigation Measure HAZ-1 has been identified to require advanced notice be given to surrounding land use occupants and local emergency providers with information on the associated lane closures and available detour routes. With implementation of Mitigation Measure HAZ-1, the project would not impair implementation with an adopted emergency response plan or evacuation plans; therefore, impacts would be *less than significant with mitigation*.

b) Due to slope, prevailing winds, and other factors, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The project does not propose the construction of any new residences or other habitable structures. The project site is not located within a designated high or very high FHSZ. The lift station pump, lighting, and other equipment would run on electricity, with a diesel fuel backup generator to be used in the event of a power outage. Diesel fuel would be stored and used in accordance with manufacturer's recommendations, applicable state regulations including the California Code of Regulations, and existing procedures for handling hazardous materials on-site. The project would be required to comply with all applicable fire safety rules and regulations including the California Fire Code and PRC; therefore, potential impacts would be *less than significant*.

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The project site is not located within a designated high or very high FHSZ. The project would not result in or necessitate the construction of any new roads, fuel breaks, emergency water sources, or power lines. The project would include construction of a new lift station at the Blacklake WRF site, construction and installation of the force-main pipeline to convey wastewater flows to the Southland WWTF, and decommissioning of the existing Blacklake WRF infrastructure. The project construction activities would be required to comply with all applicable fire safety rules and regulations including the California Fire Code and PRC. Therefore, potential impacts associated with exacerbation of fire risk via installation or maintenance of infrastructure would be *less than significant*.

d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The project would not result in substantial changes to the existing topography of the project site or otherwise exacerbate the potential for landslides. The project would not significantly alter on-site hydrology and would not otherwise exacerbate the risk for post-fire slope instability or drainage changes. Therefore, potential impacts would be *less than significant*.

Conclusion

Mitigation has been identified to reduce potential impacts associated with impairing local emergency response plans due to vehicle lane closures during the project construction period. Upon implementation of mitigation identified below, potential impacts associated with wildfire would be reduced to less than significant.

Mitigation Measures

Implement Mitigation Measure HAZ-1.

XXI. Mandatory Findings of Significance

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|--|------------------------------------|-----------|
| (a) | Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | | | |
| (b) | Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | | | | |
| (c) | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | | \boxtimes | | |

Environmental Evaluation

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As discussed in each resource section above, the proposed project would have the potential to result in significant impacts to biological, cultural, and tribal cultural resources during project construction activities. Mitigation Measures BIO-1 through BIO-12, and CR-1 and CR-2 have been identified to address these potential impacts and, with implementation of these measures, impacts would be reduced to less than significant. Therefore, impacts associated with degradation of the quality of the environment, fish and wildlife species and populations, plant and animal communities, and examples of major periods of California history or prehistory would be *less than significant with mitigation*.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Evaluation of cumulative impacts has been incorporated into each resource section above. Cumulatively considerable impacts have been identified associated with air quality, energy, and GHG emissions. Mitigation measures AQ-1 through AQ-3 have been identified to address these potential impacts and, with implementation of these measures, impacts would be reduced to less than cumulatively considerable. Therefore, potential cumulative impacts would be *less than significant with mitigation*.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The project has the potential to result in significant impacts associated with air quality, cultural resources, energy, GHG emissions, hazards and hazardous materials, land use and planning, noise, transportation, tribal cultural resources, utilities/service systems, and wildfire that could result in substantial adverse effects on human beings. Mitigation measures have been identified to reduce these potential impacts to less than significant, including, but not limited to, standard idling restrictions, use of electric or alternative fuel equipment, limiting construction work to daytime hours, and installation of mufflers on construction equipment. With implementation of these measures, impacts would be reduced to less than significant. Therefore, potential impacts would be *less than significant with mitigation*.

2 REFERENCES



- County of Santa Barbara. 2018. AERA East Canyon Oil Field Redevelopment Plan Draft Environmental Impact Report; Chapter 4.5, Cultural, Tribal, Cultural, and Paleontological Resources.

 Available at: https://www.countyofsb.org/uploadedFiles/plndev/Content/Projects/4-05%20Cultural%20Tribal%20Cultural%20and%20Paleontological%20Resources.pdf. Accessed February 2022.
- Dibblee, T.W., and J.A. Minch. 2006. *Geologic Map of the Nipomo Quadrangle, San Luis Obispo County, California*. Available at: https://ngmdb.usgs.gov/Prodesc/proddesc_78097.htm. Accessed February 2022.
- Holland, V.L., and D.J. Keil. 1995. California Vegetation. Iowa: Kendall/Hunt Publishing.
- Miller, R. V. 1989. Mineral Land Classification Map Aggregate Resources and Active Mines of All Other Mineral Commodities; San Luis Obispo Santa Barbara P-C Region; Plate 16 and Plate 17.
- MKN Associates. 2021. Blacklake Sewer System Consolidation Project Southland WWTF Capacity Evaluation.
- ———. 2017. *Nipomo Community Services District Blacklake Sewer Master Plan*. Available at: https://ncsd.ca.gov/wp-content/uploads/2014/03/Draft-Blacklake-SMP-May2017.pdf. Accessed February 2022.
- Nipomo Community Services District (NCSD). 2007. *Water and Sewer Master Plan Update*. Prepared by Cannon Associates. December. Available at: http://ncsd.ca.gov/wp-content/uploads/documents/wsmp/FINAL%20REPORT.pdf. Accessed February 2022.
- . 2011. Nipomo Community Services District Southland Wastewater Treatment Facilities Improvements Final Environmental Impact Report. Available at: https://ncsd.ca.gov/wp-content/uploads/documents/sewer-reports/Final%20EIR%20certified.pdf. Accessed February 2022.
- Pacific Gas and Electric (PG&E). 2020. Where Your Electricity Comes From. Available at: https://www.pge.com/pge_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2020/1220-PowerContent-ADA.pdf. Accessed January 2022.
- ——. 2021. Nipomo Community Services District Service Report.
- San Luis Obispo Air Pollution Control District. 2012. *CEQA Air Quality Handbook*. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA_Handbook_2012_v2%20%28Updated%20Map2019%29_LinkedwithMemo.pdf. Accessed March 2021.
- org/images/cms/upload/files/FINAL_Clarification%20Memorandum%20201/2.pdf. Accessed March 2021.
- ———. 2021a. SLO APCD NOA Screening Buffers. Available at: https://www.google.com/maps/d/u/0/viewer?mid=1YAKjBzVkwi1bZ4rQ1p6b2OMyvIM&ll=35.03602954044851%2C-120.51371349567863&z=14. Accessed March 2021.

- ———. 2021b. Interim CEQA Greenhouse Gas Guidance for the San Luis Obispo County Air Pollution Control District's 2012 CEQA Air Quality Handbook. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA-GHGInterimGuidance Final.pdf. Accessed March 2021.
- San Luis Obispo Council of Governments (SLOCOG). 2015. 2014 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://www.slocog.org/programs/regional-planning/2014-rtpscs. Accessed February 2022.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. Second Edition. Sacramento, CA: California Native Plant Society.
- State Water Resources Control Board (SWRCB). 2017. Resolution No. 2017-0012 Comprehensive Response to Climate Change. Available at:

 https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf. Accessed March 2021.
- ——. 2022. GeoTracker. Available at: https://geotracker.waterboards.ca.gov/. Accessed February 2022.
- U.S. Environmental Protection Agency (USEPA). 2013. Energy Efficiency in Water and Wastewater Facilities. Available at: https://www.epa.gov/sites/default/files/2015-08/documents/wastewater-guide.pdf. Accessed February 2022.
- U.S. Fish and Wildlife Service (USFWS). 2002. *Recovery Plan for the California Red-legged Frog (Rana aurora draytonii)*. Portland, OR: U.S. Fish and Wildlife Service, viii + 173 pp.
- ———. 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. U.S. Fish and Wildlife Service. Sacramento, California.
- ——. 2021. National Wetlands Inventory. Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service. Available at: http://www.fws.gov/wetlands/. Accessed February 2022.
- U.S. Geological Survey (USGS). 2019. Areas of Land Subsidence in California. Available at:

 https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed February 2022.

APPENDIX A

Blacklake Sewer System Consolidation Project Lift Station Site Plan

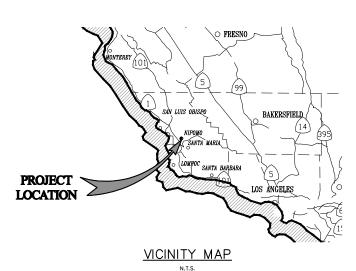
NIPOMO COMMUNITY SERVICES DISTRICT BLACKLAKE SEWER SYSTEM CONSOLIDATION PROJECT LIFT STATION AND SITE IMPROVEMENTS NIPOMO, CA

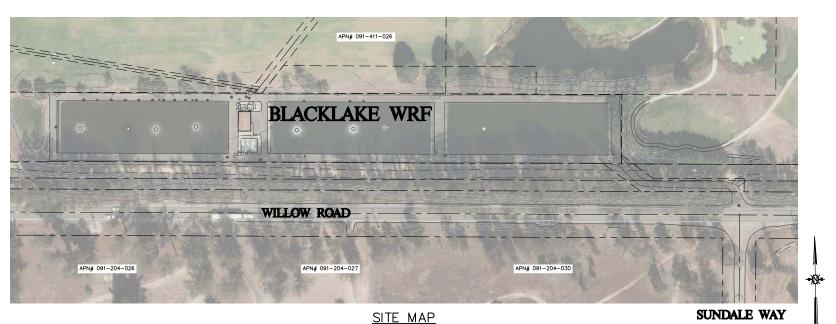
GENERAL NOTES

- VERIFY DIMENSIONS AND CONDITIONS AT THE SITE BEFORE STARTING WORK. ANY CONFLICTS BETWEEN DETAILS OR DIMENSIONS ON THE DRAWINGS SHALL BE REPORTED PROMPTLY TO THE ENGINEER.
- 2. TAKE PRECAUTIONARY MEASURE TO PROTECT UTILITIES AND STRUCTURES SHOWN AS WELL AS ANY AND ALL OTHERS NOT ON RECORD DRAWNISS OR NOT SHOWN ON THESE PLANS. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED TO ORIGINAL DESIGN CONDITION AND/OR APPLICABLE REQUIREMENTS OF THE AFFECTED UTILITY AT THE CONTRACTOR'S EXPENSE. APPROVAL BY THE DISTRICT SHALL ALSO BE REQUIRED.
- 3. COORDINATE UNDERGROUND UTILITY MARKING WITH THE LOCAL UNDERGROUND SERVICE ALERT JURISDICTION (CALL 811) PRIOR TO CONSTRUCTION.
- 4. VERIFY LOCATIONS AND DEPTHS OF EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION.
- 5. UPON LEARNING OF THE EXISTENCE AND LOCATIONS OF ANY UNDERGROUND FACILITIES NOT SHOWN OR SHOWN INACCURATELY ON THESE PLANS OR NOT PROPERLY MARKED BY THE UTILITY OWNER, IMMEDIATELY NOTHEY THE ENGINEER.
- 6. USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD OR UNDERGROUND POWER, GAS, OR OTHER UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT. PROTECT FROM DAMAGE INCURRED DURING CONSTRUCTION FROM ALL OVERHEAD UTILITY LINES WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. NOTIFY UTILITY COMPANIES PRIOR TO ANY WORK IN OVERHEAD LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR COST INCURRED.
- 7. MAINTAIN SITE SECURITY AND OWNER ACCESS THROUGHOUT CONSTRUCTION.
- 8. ALL SPECIFICATIONS, DRAWINGS, AND DETAILS INCLUDED IN THE CONTRACT DOCUMENTS SHALL FULLY APPLY TO THE WORK WHETHER SPECIFICALLY REFFERICED OR NOT.
- MAINTAIN THE WORK AREA IN A NEAT, CLEAN, AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE OWNER. STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCES BEING CONTROLLED AT ALL TIMES.
- 10. MAINTAIN A COMPLETE AND ACCURATE RECORD OF ALL CHANGES IN CONSTRUCTION FROM THAT SHOWN IN THESE PLANS AND SPECIFICATIONS FOR THE PURPOSE OF PROVIDING A BASIS FOR RECORD DARWINGS. THE CONTRACTOR SHALL NOTE DEVANTONS FROM THE PLANS ON A SET OF PLANS SPECIFICALLY SET ASIDE FOR THIS PURPOSE. ANY CHANGES SHALL BE MADE ON THE ORIGINALS OF THE PLANS, NO CHANGES FROM THAT SHOWN ON THESE PLANS AND SPECIFICATIONS SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
- RESTORE ALL PAVEMENT, CONCRETE, ASPHALT, SIDEWALKS, CURBS, TRUNCATED DOMES, AND DRIVEWAY SURFACES REMOVED OR DAMAGED DURING CONSTRUCTION UNLESS INDICATED OTHERWISE ON THE PLANS, PER DISTRICT STANDARDS.
- 12. LIMIT CONSTRUCTION ACTIVITIES TO THE RIGHT-OF-WAY, EASEMENTS, AND DESIGNATED AREAS SHOWN ON DRAWINGS.

EROSION CONTROL NOTES

- CONTRACTOR TO COMPLY WITH THE REQUIREMENTS OF THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD AND NIPOMO COMMUNITY SERVICES DISTRICT STANDARD SPECIFICATIONS.
- PROJECT DRIVEWAYS AND CONSTRUCTION ENTRANCES SHALL BE PROTECTED
 AGAINST EROSION AND TRACKING OF MUD AND DEBRIS AT ALL TIMES, INCLUDING
 EVENINGS, WEKKENDS, AND HOLIDAYS, SUCH PROTECTION MAY BE MODIFIED TO
 PROVIDE ACCESS TO THE WORK SITE DURING WORK HOURS.
- ALL STOCKPILES SHALL BE PROTECTED AGAINST WIND AND WATER EROSION, IMMEDIATELY UPON PLACEMENT AND REMOVED FROM STREET AT THE END OF EACH DAY, SUCH PROTECTION SHALL REMAIN IN PLACE UNTIL USE OR REMOVAL OF THE STOCKPILE, REGARDLESS OF THE TIME OF YEAR.
- ALL FRESH CUT AND FILL SLOPES SHALL BE IMMEDIATELY PROTECTED BY INSTALLATION OF EROSION CONTROL DEVICES, AND UNTIL PERMANENT EROSIC CONTROL IS ESTABLISHED.
- PERMANENT EROSION CONTROL MEASURES SHALL BE FULLY ESTABLISHED TO THE SATISFACTION OF THE OWNER. (TO BE COMPLETED NO LESS THAN 30 DAYS PRIOR TO REQUEST FOR FINAL APPROVAL.)
- WASTE MATERIALS SHALL NOT BE WASHED OFFSITE. THIS INCLUDES, BUT IS NOT LIMITED TO, SOIL, PAINT, GROUT, COLOR COAT, CONCRETE DUST, SAW RESIDUES, GRINDINGS, AND OIL.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT OF EROSION CONTROL DEVICES IN ACCORDANCE WITH THE COUNTY'S STANDARDS AND SWRCB REQUIREMENTS.





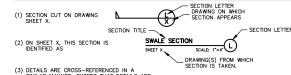
SHEET INDEX

| SHEET | DESCRIPTION | 27 | ELECTRICAL SITE PLAN | | | | |
|---------|-------------------------------|---------|---|-----|------|---|-----|
| 1 | TITLE SHEET | 28 | ENLARGED ELECTRICAL PLAN | | | | |
| 2 | SURVEY BOUNDARY MAP | 29 | CONTROL WIRING DIAGRAMS | | | | |
| 3 | STAGING PLAN | 30 | MOTOR CONTROL WIRING DIAGRAMS | | | | |
| STAGE I | | 31 | ELECTRICAL DETAILS | | | | |
| 4 | POND 3 ISOLATION PLAN | 32 | ELECTRICAL DETAILS | | | | |
| 5 | POND 3 ISOLATION PLAN | 33 | P&ID | | | | |
| 6 | POND 3 ISOLATION PLAN | 34 | P&ID | | | | |
| 7 | POND 3 ISOLATION PLAN | 35 | PANEL LAYOUT | | | | |
| 8 | POND 3 ROUGH GRADING PLAN | 36 | AC & DC POWER DISTRIBUTION | | | | |
| 9 | POND 3 FILL BORROW PLAN | 37 | PLC BASE INPUTS AND OUTPUTS | | | | |
| STAGE I | l | 38 | 38 EXPANSION SLOT 1 ANALOG IN&OUT MODULE | | | | |
| 10 | LIFT STATION SITE PLAN | 39 | EXPANSION SLOT 2 ANALOG INPUT MODULE | | | | |
| 11 | LIFT STATION GRADING PLAN | 40 | EXPANSION SLOT 3 DISCRETE INPUT MODULE | | | | |
| 12 | LIFT STATION PIPING PLAN | 41 | COMMUNICATION DIAGRAM | | | | |
| 13 | LIFT STATION DETAILS | 42 | FORCE MAIN PLAN & PROFILE STA 0+50 - 4+50 | | | | |
| 14 | AGENCY STANDARD DETAILS | 43 | ODOR CONTROL SITE PLAN | | | | |
| 15 | AGENCY STANDARD DETAILS | | STAGE III | | | | |
| 16 | GENERAL STRUCTURAL NOTES | 44 | LIFT STATION GRAVITY SEWER | STA | 1+00 | - | 5+0 |
| 17 | GENERAL STRUCTURAL NOTES | 45 | LIFT STATION GRAVITY SEWER | STA | 5+00 | - | 8+0 |
| 18 | GENERAL STRUCTURAL NOTES | STAGE | IV | | | | |
| 19 | TYPICAL DETAILS | 46 | BL-WRF DECOMMISSIONING PLAN | | | | |
| 20 | TYPICAL DETAILS | 47 | BL-WRF DECOMMISSIONING PLAN | | | | |
| 21 | STRUCTURAL DETAILS | 48 | BL-WRF DECOMMISSIONING PLAN | | | | |
| 22 | STRUCTURAL DETAILS | 49 | BL-WRF DECOMMISSIONING PLAN | | | | |
| 23 | STRUCTURAL DETAILS | 50 | 0 BL-WRF DECOMMISSIONING PLAN | | | | |
| 24 | ELECTRICAL ABBREV. AND LEGEND | 51 | BL-WRF DECOMMISSIONING PLAN | | | | |
| 25 | ELECTRICAL GENERAL NOTES | STAGE V | | | | | |
| 26 | SINGLE LINE DIAGRAM | 52 | ACCESS ROAD SURFACE IMPROVEMENT PLAN | 1 | | | |
| | | 5.3 | BL-WRF FINAL SITE RESTORATION PLAN | | | | |

LEGEND

| | <u>EXISTING</u> | <u>PROPOSED</u> |
|--------------------------------|-----------------|-----------------|
| TRACT BOUNDARY | | |
| PROPERTY LINE | | |
| RIGHT-OF-WAY | | |
| CURB | | |
| CURB & GUTTER | CONTRACTOR | |
| FENCE | × | x |
| DAYLIGHT LINE | | |
| EASEMENT | | |
| FLOWLINE | | - · · - |
| RETAINING WALL | TOP OF SLOPE | TOP OF SLOPE |
| SLOPE | | III |
| CONTOURS | $=$ \leq $=$ | |
| WATER MAIN | W | |
| SANITARY SEWER LINE | ss | ss |
| FORCE MAIN | FM | —— FM —— |
| STORM DRAIN LINE | —— SD —— | |
| GAS LINE | G | |
| ELECTRIC LINE | — E — | |
| OVERHEAD WIRES FIBER OPTICS | —— OH ——— | |
| TELEPHONE | т | |
| TYPICAL LATERALS | xx | |
| | | |
| SANITARY SEWER MANHOLE | (\$) | (8) |
| | | |
| STORM DRAIN MANHOLE | | |
| TELEPHONE MANHOLE | | |
| SANITARY SEWER CLEANOUT | © _{co} | |
| FIRE HYDRANT | 89 | |
| WATER VALVE | M | |
| FIRE DEPARTMENT CONNECTIO | N A | |
| ASPHALT CONCRETE | A | С |
| BLOWOFF VALVE | В | 0 |
| CENTERLINE | С | L |
| CLEANOUT | C | 0 |
| FINISHED GRADE | F | • |
| FINISHED SURFACE | F: | |
| FINISH FLOOR | FI | |
| FLOW LINE | FI | |
| GRADE BREAK | G | |
| HIGH POINT INVERT | H | |
| POINT OF CONNECTION | IN PC | |
| PROPERTY LINE | P | |
| PUBLIC UTILITY EASEMENT | PL | |
| RIGHT-OF-WAY | RC | w |
| TOP OF CURB | Te | |
| TOP OF FOOTING | т | |
| TOP OF WALL | TV | W |
| AC PAVING | | |
| NO 1 MINIO | | |

SECTION AND DETAIL NUMBERING SYSTEM



(3) DETAILS ARE CROSS—REFERENCED IN A SIMILAR MANNER; EXCEPT THAT DETAILS ARE IDENTIFIED BY NUMBER RATHER THAN LETTER.

1 INCH = 80 FEET

APPROVED BY:

PETER V. SEVCIK, P.E.
DIRECTOR OF ENGINEERING AND OPERATIONS

DATE

S.P (독) 및 (독) 및



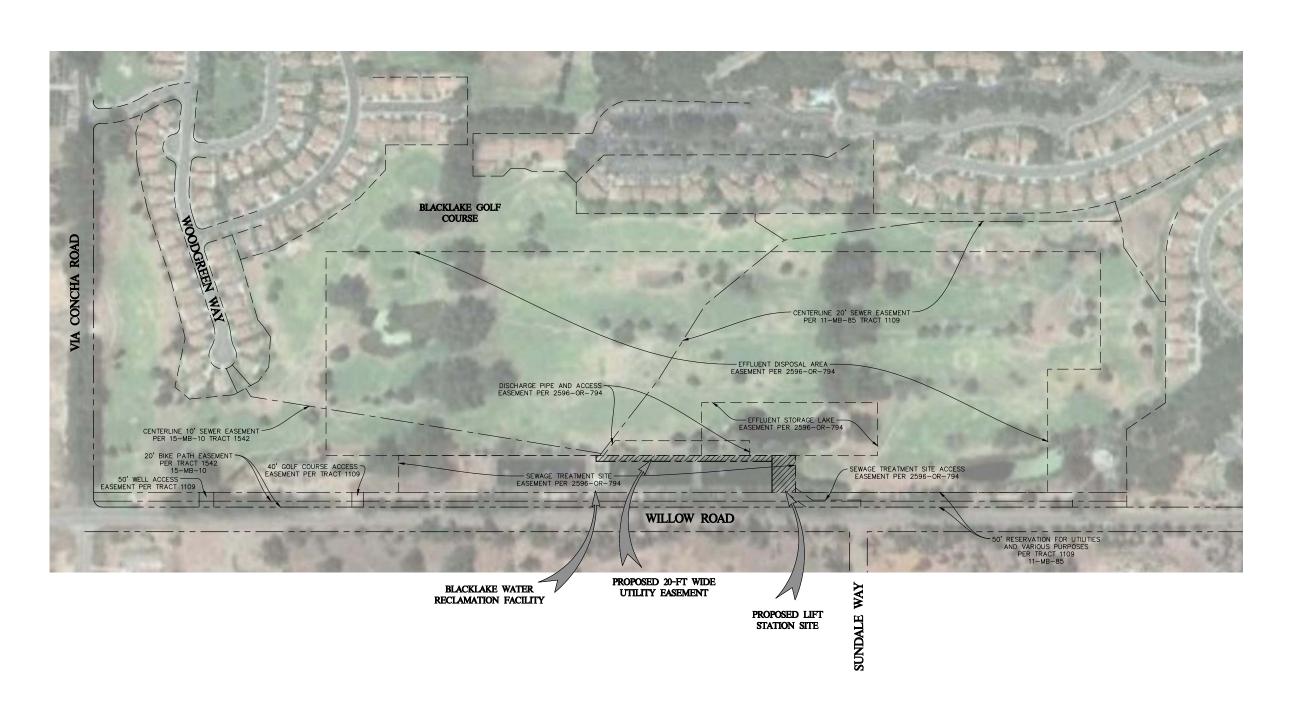
| | | _ | | |
|-----|----------|-------------------|----------------------|---|
| 1 2 | 4/X/2022 | SCALE AS SHOWN | CA JOB NO. 200614 | F CANNON. ALL DESIGNS F CANNON. ALL DESIGNS FEEE DRAWINGS ARE FOR |
| | AJS | снескер ву | | THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF CANNON. ALL DESIGNS AND INFORMATION ON THESE DRAWINGS ARE FOR THE OSCIPLED BOARD AND SUAL MOT |

95% SUBMITTAL NOT FOR CONSTRUCTION

POMO COMMUNITY SERVICES DISTRICT LAKE SEWER SYSTEM CONSOLIDATION PROJECT TITLE SHEET

NIPOMO COMMUNI
BLACKLAKE SEWER SYS'
TITLE

OF 53



SURVEY NOTES

BASIS OF BEARINGS

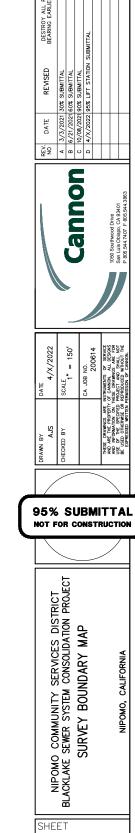
THE BASS OF BEARINGS FOR THIS SURVEY IS THE WORLD GEODETIC SYSTEM OF 1984 (WGS84) REFERENCE FRAME, AND CONSTRAINED TO THE CALIFORNIA COORDINATE SYSTEM, ZONG 5, NADBAS/2011 PEOCH 2010, NGS MONUMENT HPGN CA G5 G5, PID FV2048, SAN LUIS OBISPO COUNTY, CALIFORNIA, N=2226905.40 E=5788619.18

BENCHMARK

THE ELEVATIONS SHOWN HEREON ARE NAVD88 AS DETERMINED BY GPS OBSERVATIONS CONSTRAINED TO NOS MONUMENT HERO CA OF 50, PID FYZOVAB, SAN LUIS OBISPO COUNTY, CALFORNIA HAVING A PUBLISHED ELEVATION OF 220.8°

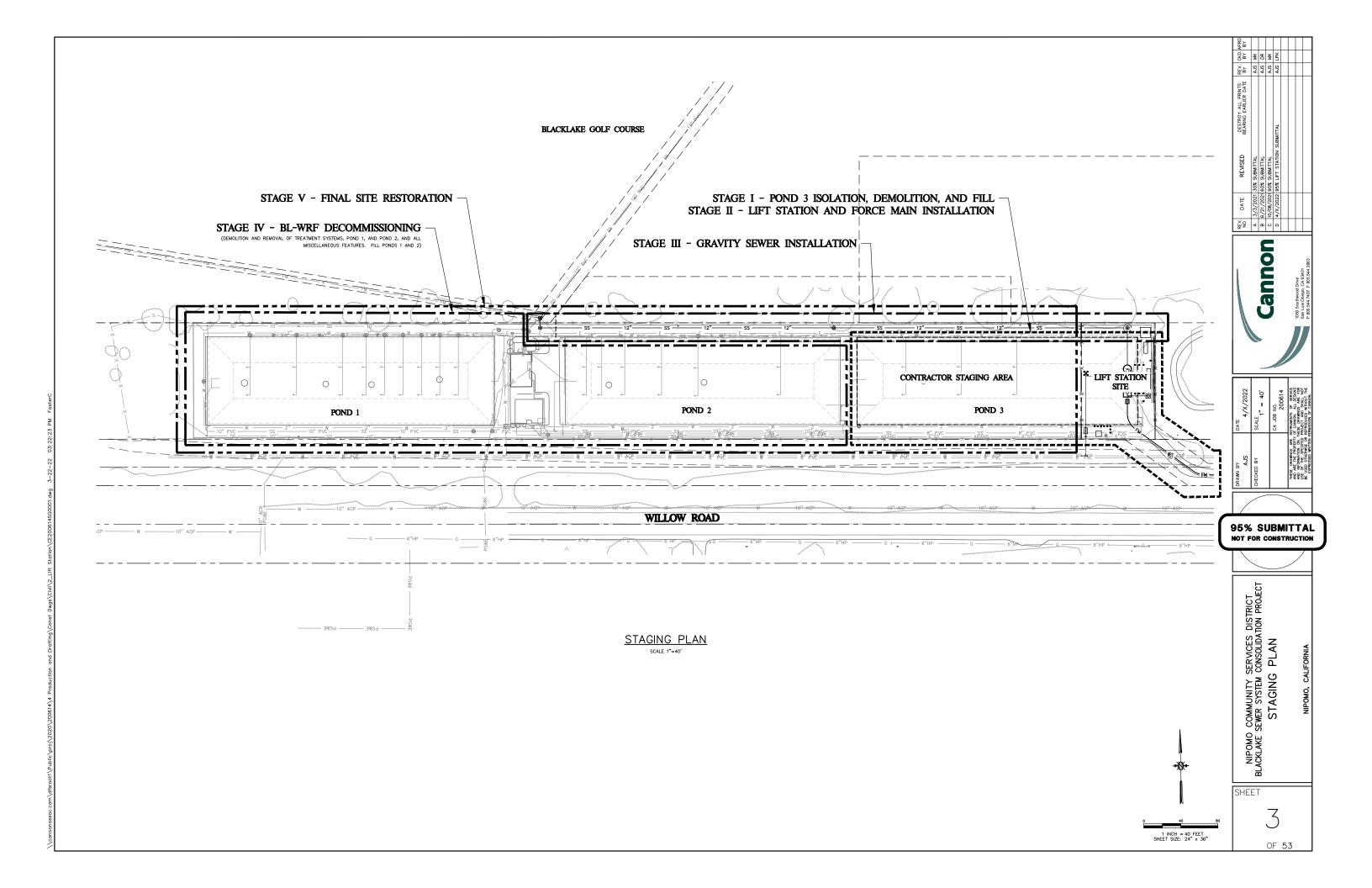
RIGHT-OF-WAY

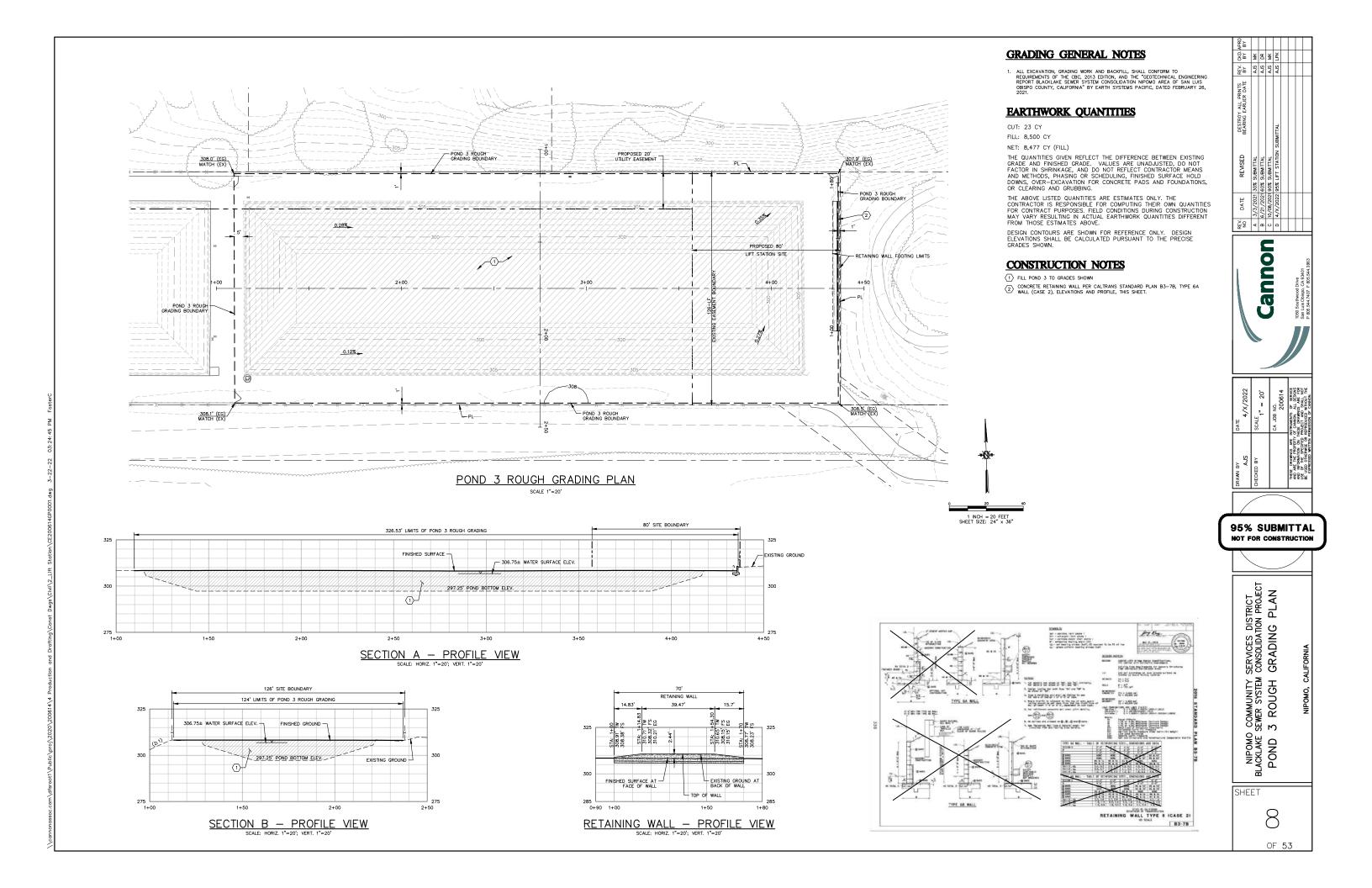
RIGHT-OF-WAY LINES SHOWN HEREON WERE DERIVED FROM AVAILABLE RECORD INFORMATION AND MINIMALLY CONSTRAINED TO FOUND SURVEY MONUMENTS. A FULL AND RESOLVED BOUNDARY SURVEY WAS NOT PERFORMED FOR THIS PROJECT. CENTERLINE INFORMATION IS BASED ON RIGHT-OF-WAY AND COUNTY CONSTRUCTION CENTERLINES.

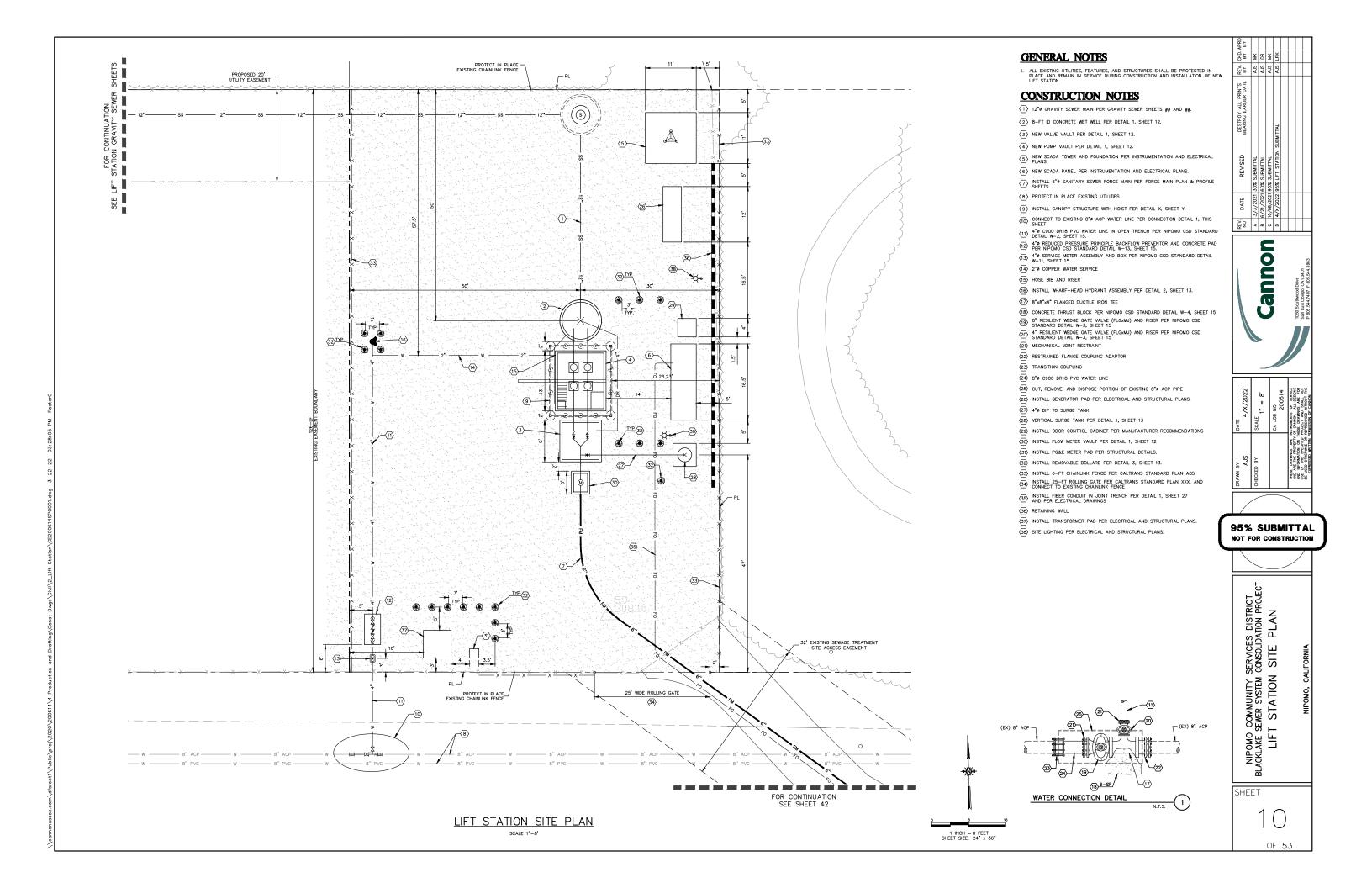


OF 53

1 INCH = 150 FEET SHEET SIZE: 24" x 36" BY BY BY AJS MK AJS MK AJS MK AJS LPK





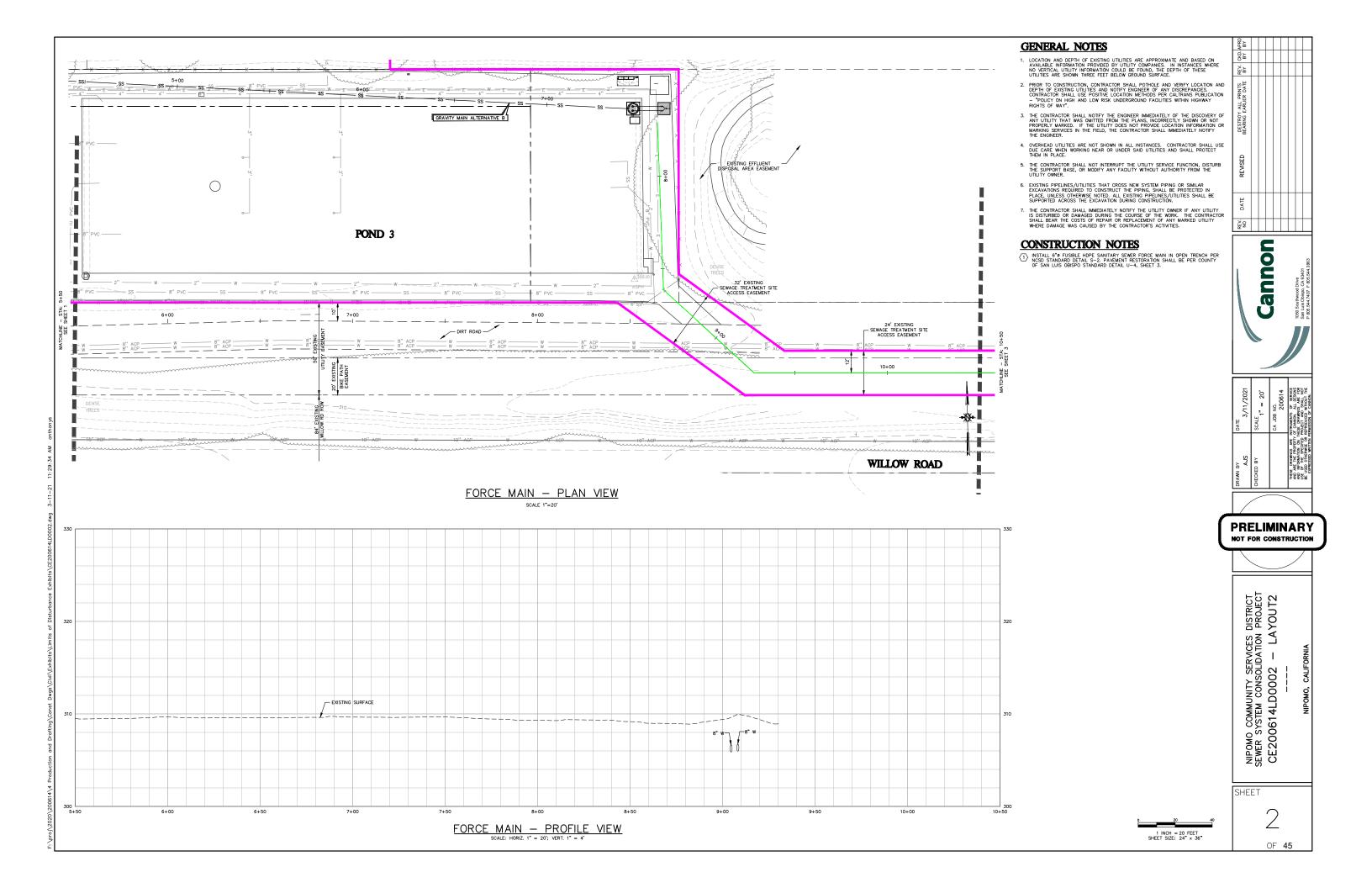


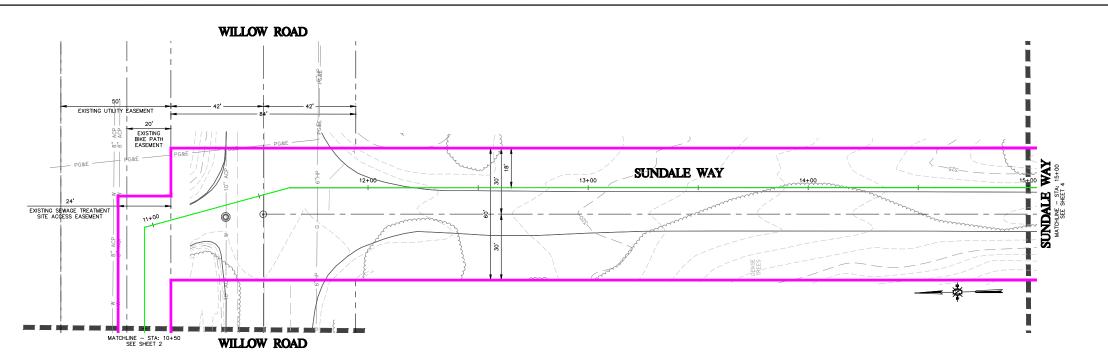
APPENDIX B

Blacklake Sewer System Consolidation Project Force Main Pipeline Limits of Disturbance



F:\poi\2020\200614\4 Production and Drafting\Const Dwgs\Civi\Exhibits\Limits of Disturbance Exhibits\CE200614LD0001.dwg 3-11-21 11:28:55 AM ant





GENERAL NOTES

- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE INFORMATION PROVIDED BY UTILITY COMPANIES. IN INSTANCES WHERE NO VERTICAL UTILITY INFORMATION COULD BE FOUND, THE DEPTH OF THESE UTILITIES ARE SHOWN THREE FEET BELOW GROUND SURFACE.
- 2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL POTHOLE AND VERIFY LOCATION AND DEPTH OF EXTRINO UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCE CONTRACTOR SHALL USE POSITIVE LOCATION METHODS PER CALIFRANS FUBLICATION "POLICY ON HIGH AND LOW RISK UNDERGROUND FACILITIES WITHIN HIGHWAY RIGHTS OF WAY".
- 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF THE DISCOVERY OF ANY UTILITY THAT WAS OMITTED FROM THE PLANS, INCORRECTLY SHOWN OR NOT PROPERLY MARKED. IF THE UTILITY DOES NOT PROVIDE LOCATION INFORMATION OR MARKING SERVICES IN THE FIELD, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- 4. OVERHEAD UTILITIES ARE NOT SHOWN IN ALL INSTANCES. CONTRACTOR SHALL USE DUE CARE WHEN WORKING NEAR OR UNDER SAID UTILITIES AND SHALL PROTECT THEM IN PLACE.
- 5. THE CONTRACTOR SHALL NOT INTERRUPT THE UTILITY SERVICE FUNCTION, DISTURB THE SUPPORT BASE, OR MODIFY ANY FACILITY WITHOUT AUTHORITY FROM THE UTILITY OWNER.
- 6. EXISTING PIPELINES/UTILITIES THAT CROSS NEW SYSTEM PIPING OR SIMILAR EXCAVATIONS REQUIRED TO CONSTRUCT THE PIPING, SHALL BE PROTECTED IN PLACE, UNLESS OTHERWISE NOTED. ALL EXISTING PIPELINES/UTILITIES SHALL BE SUPPORTED ACROSS THE EXCAVATION DURING CONSTRUCTION.
- 7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER IF ANY UTILITY IS DISTURBED OR DAMAGED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BEAR THE COSTS OF REPAIR OR REPLACEMENT OF ANY MARKED UTILITY WHERE DAMAGE WAS CAUSED BY THE CONTRACTOR'S ACTIVITIES.

CONSTRUCTION NOTES

INSTALL 6"% FUSIBLE HDPE SANITARY SEWER FORCE MAIN IN OPEN TRENCH PER NCSD STANDARD DETAIL 5-2. PAVEMENT RESTORATION SHALL BE PER COUNTY OF SAN LUIS OBISPO STANDARD DETAIL U-4, SHEET 3.





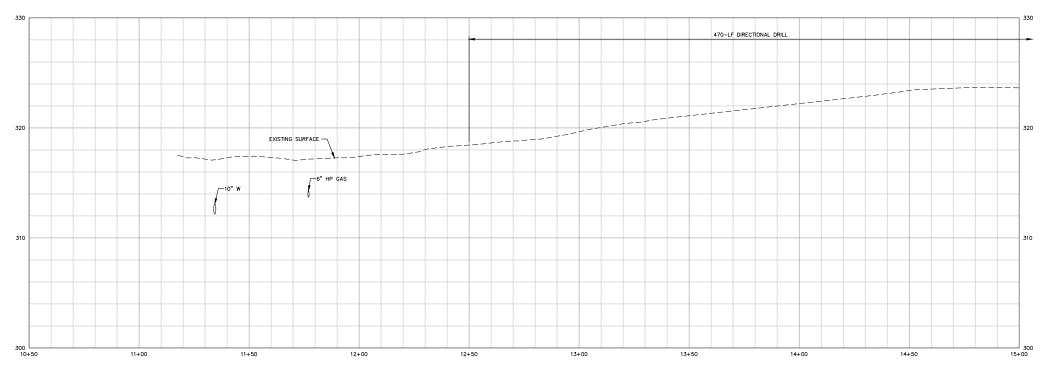
| DRAWN BY | DATE |
|--|--|
| AJS | 3/11/2021 |
| СНЕСКЕD ВҮ | SCALE 1" = 20' |
| | CA JOB NO. 200614 |
| THESE DRAMINGS ARE INSTRUMENTS AND ARE THE PROPERTY OF CANNON. AND INFORMATION ON THESE DRAMINGS OF THE SECRETED PROJECT AND BE USED OTHERWISE OR REPRODUCED | NSTRUMENTS OF SERVICE OF CANNON, ALL DESIGNS HESE DRAWNGS ARE FOR PROJECT AND SHALL NOT REPRODUCED WITHOUT THE |

PRELIMINARY NOT FOR CONSTRUCTION

DISTRICT
N PROJECT
EXHIBITS NIPOMO COMMUNITY SERVICES SEWER SYSTEM CONSOLIDATION LIMITS OF DISTURBANCE

SHEET

FORCE MAIN - PLAN VIEW SCALE 1"=20'

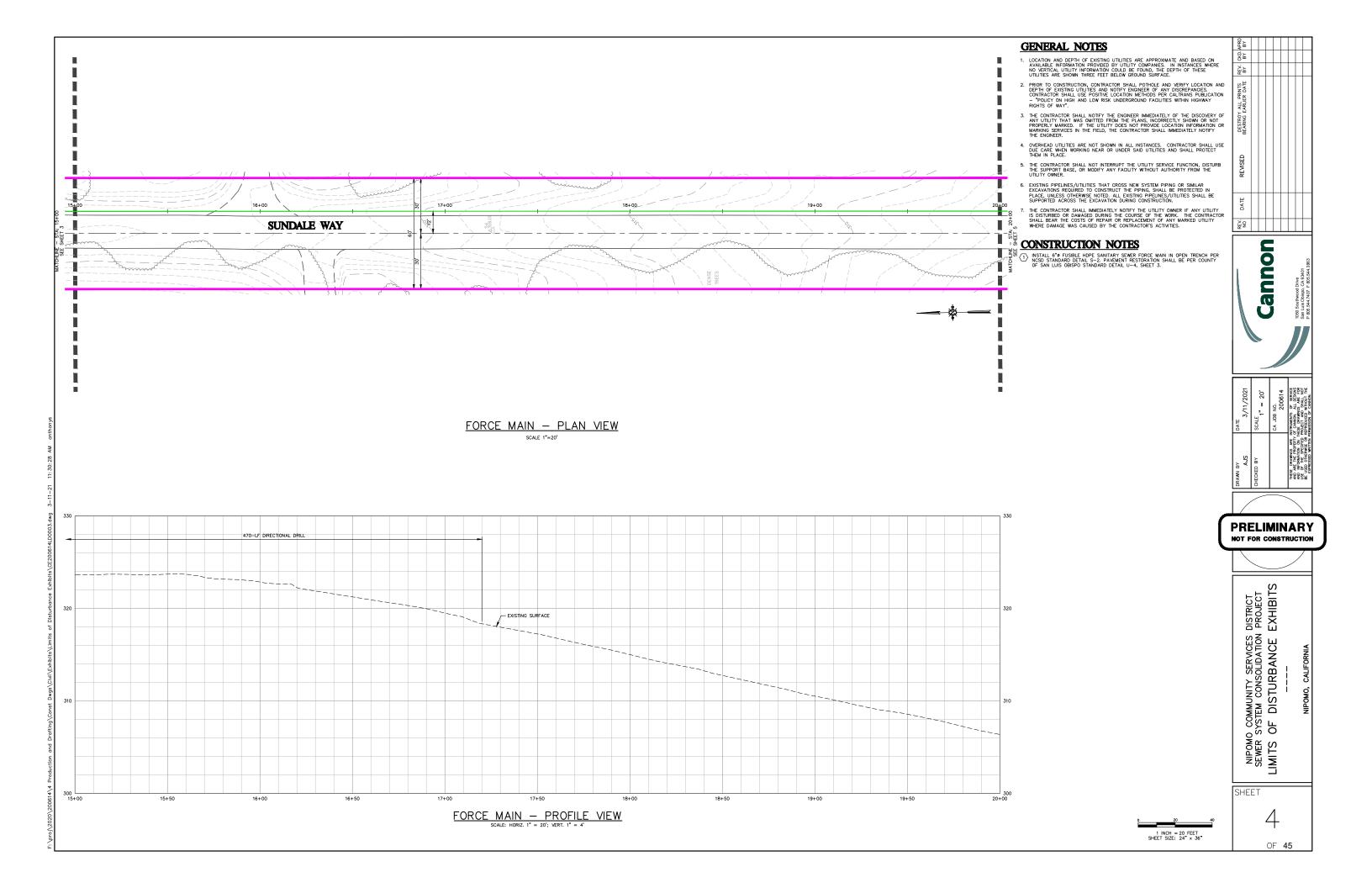


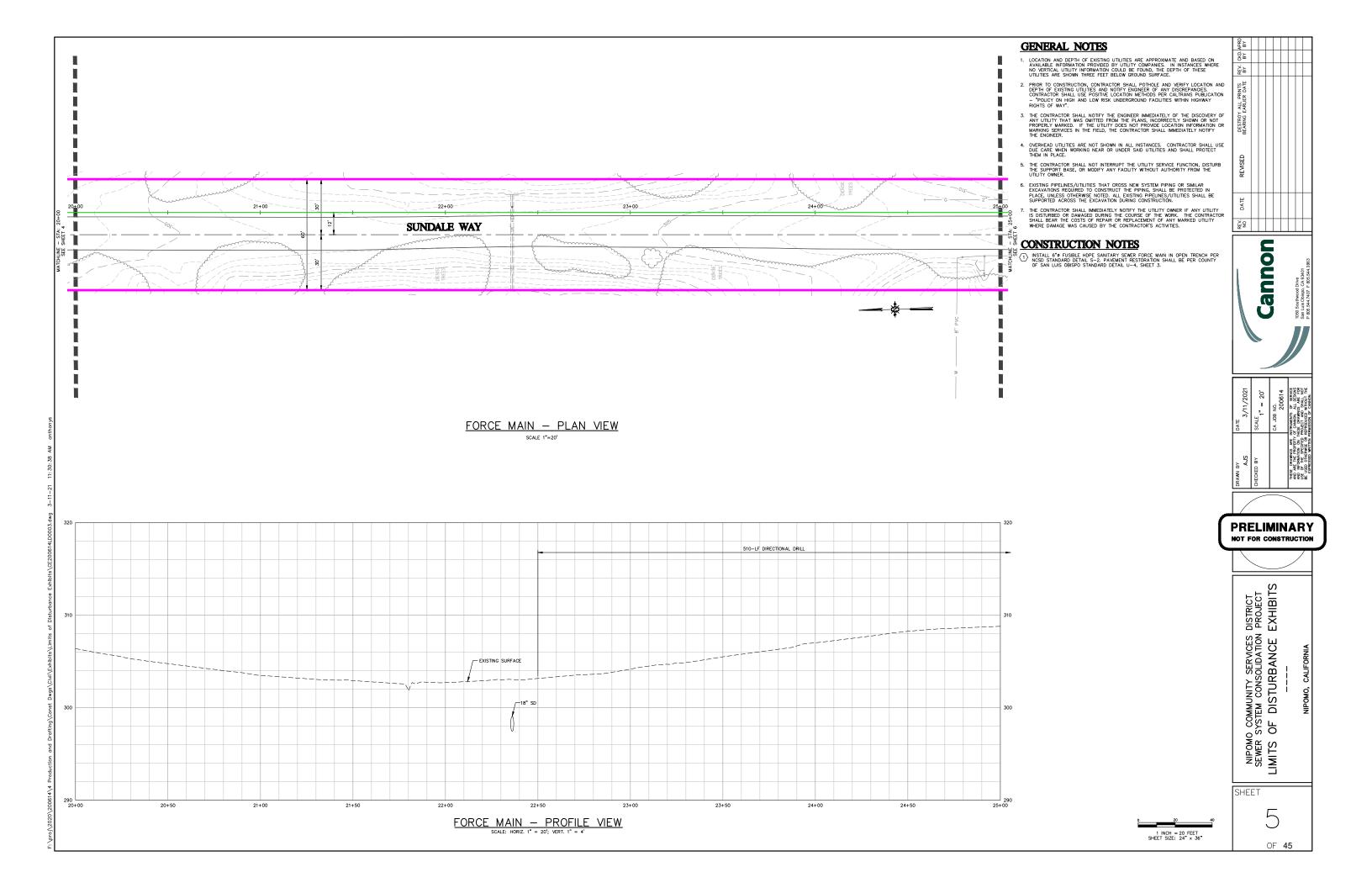
FORCE MAIN — PROFILE VIEW

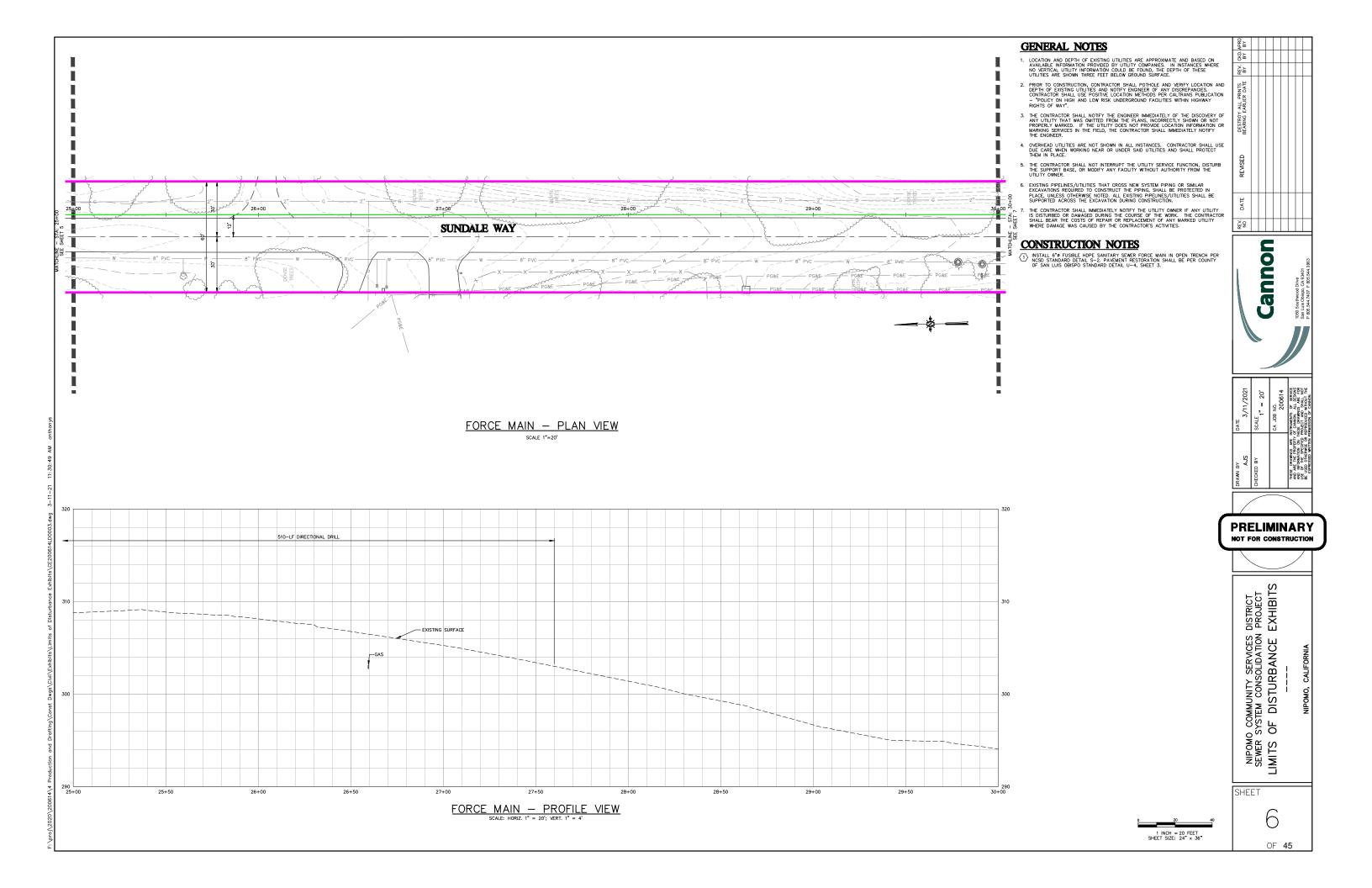
SCALE: HORIZ. 1" = 20'; VERT. 1" = 4'

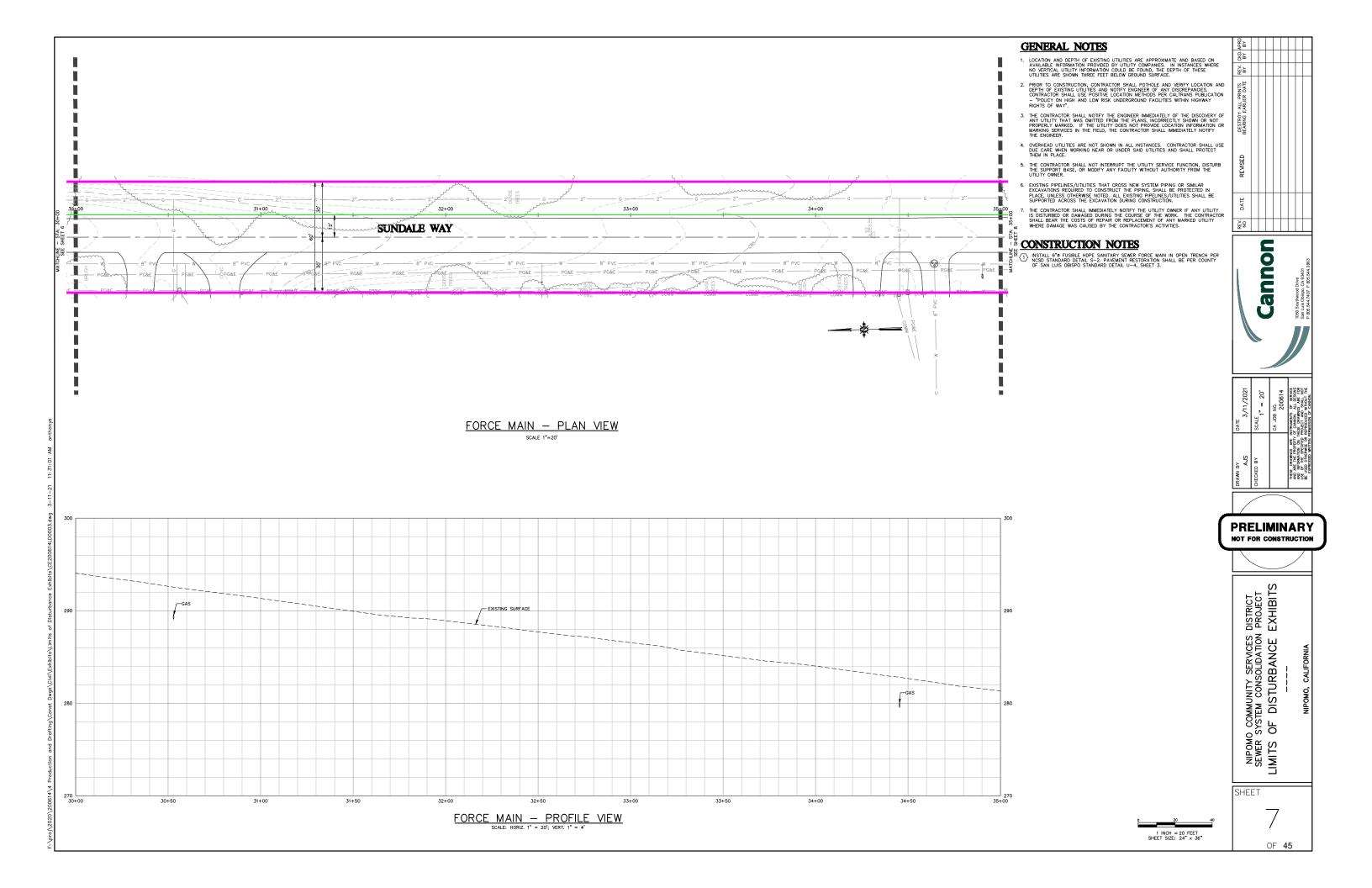
1 INCH = 20 FEET SHEET SIZE: 24" x 36"

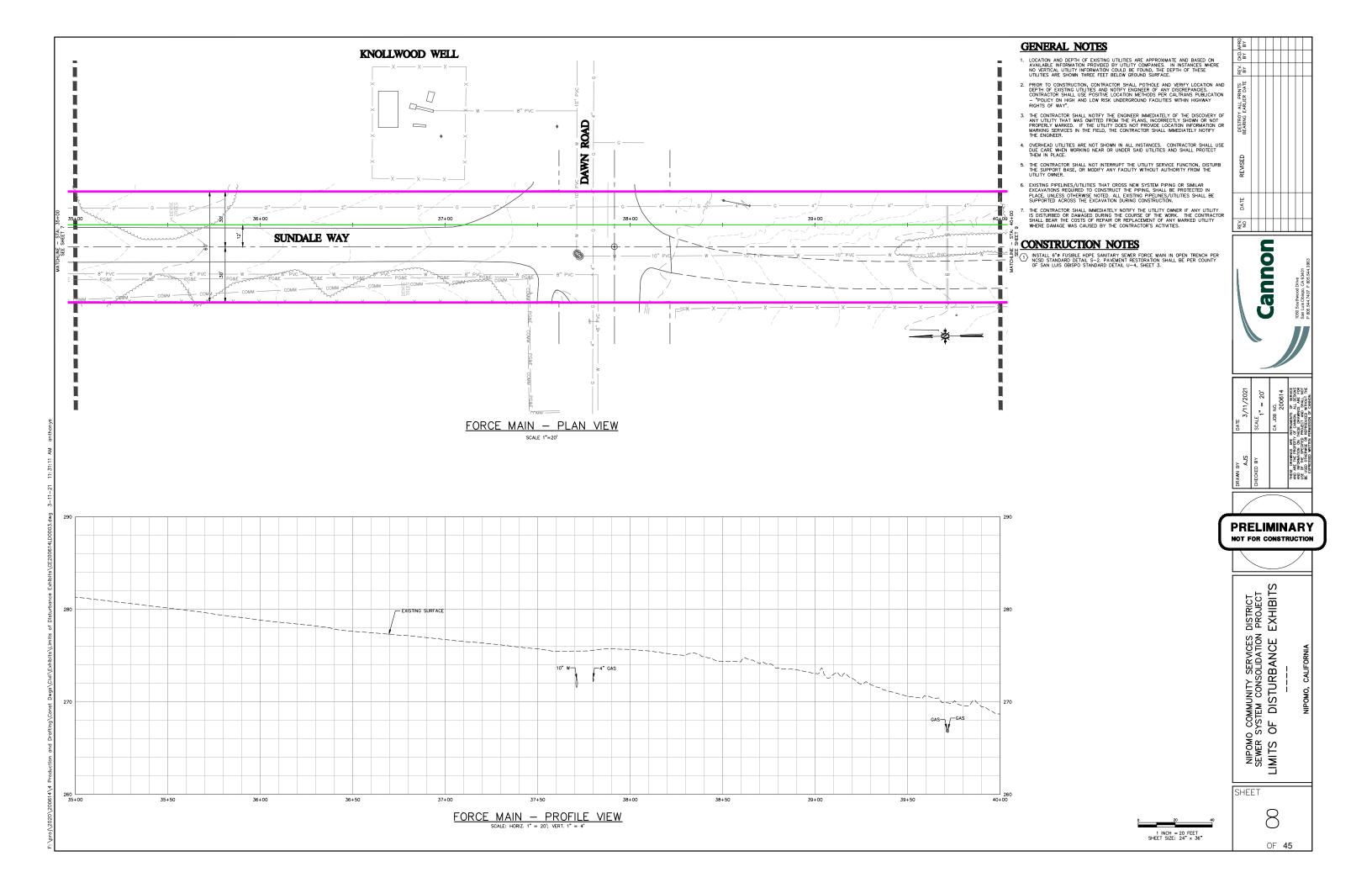
OF **45**

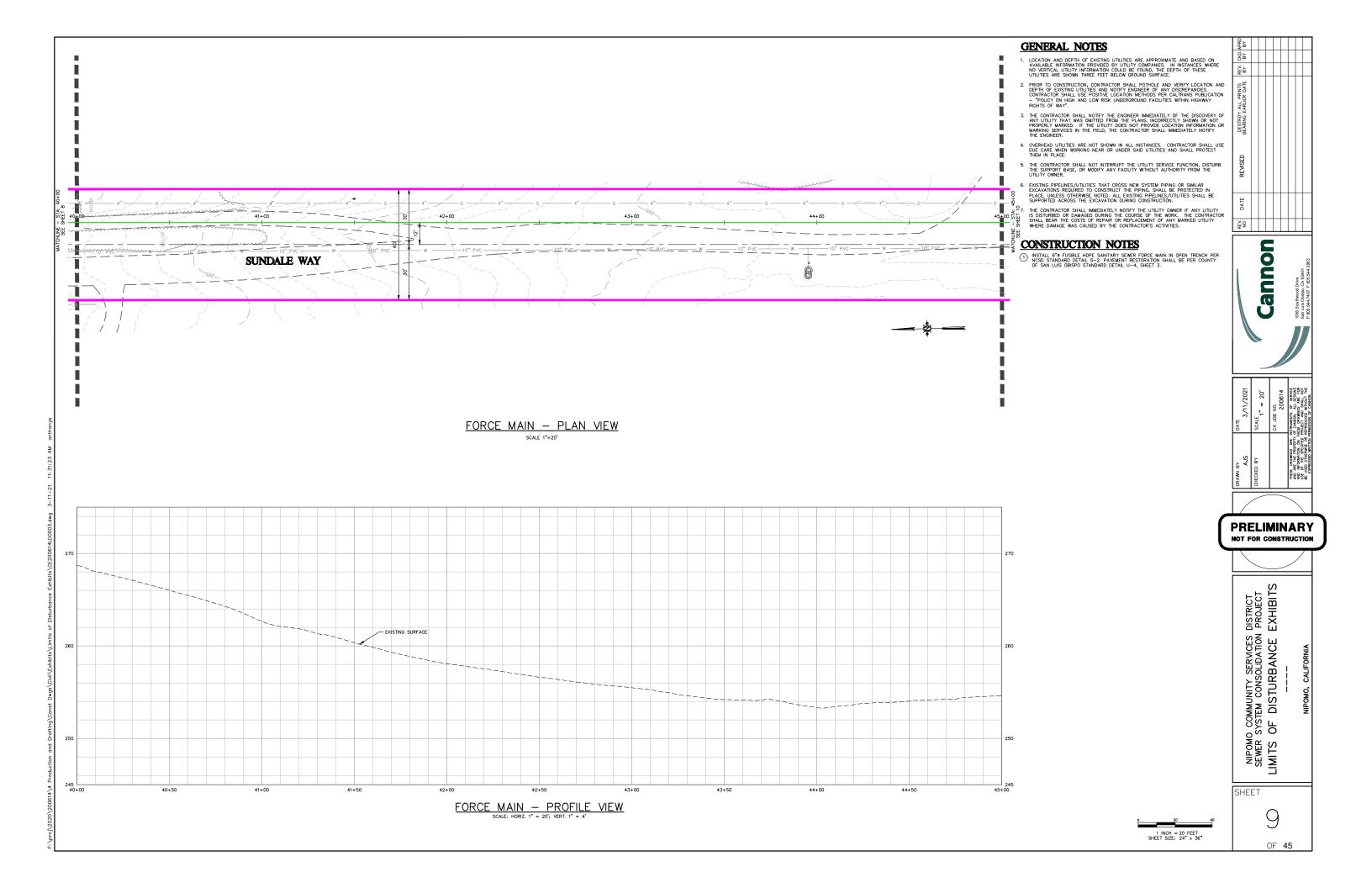


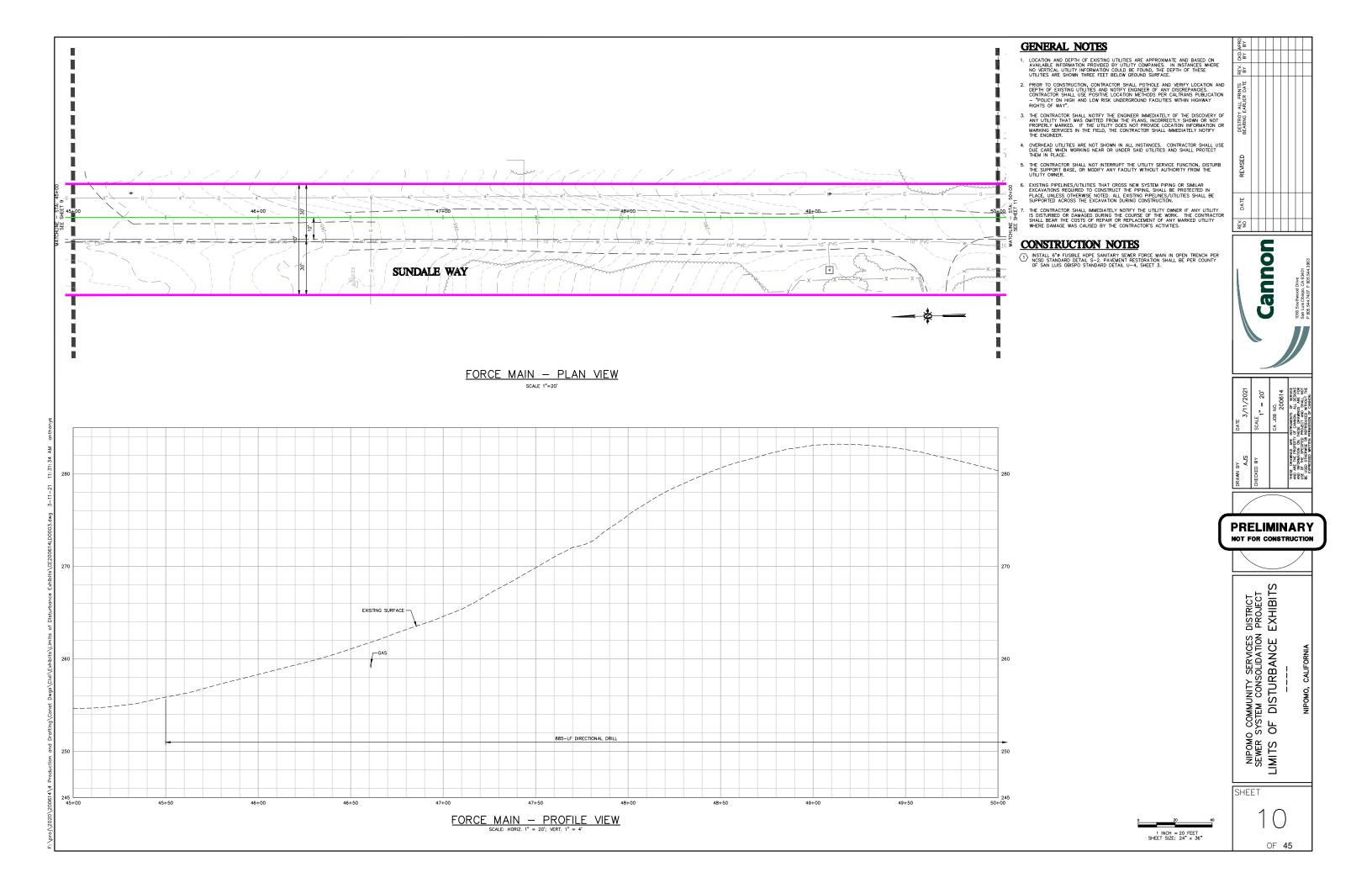


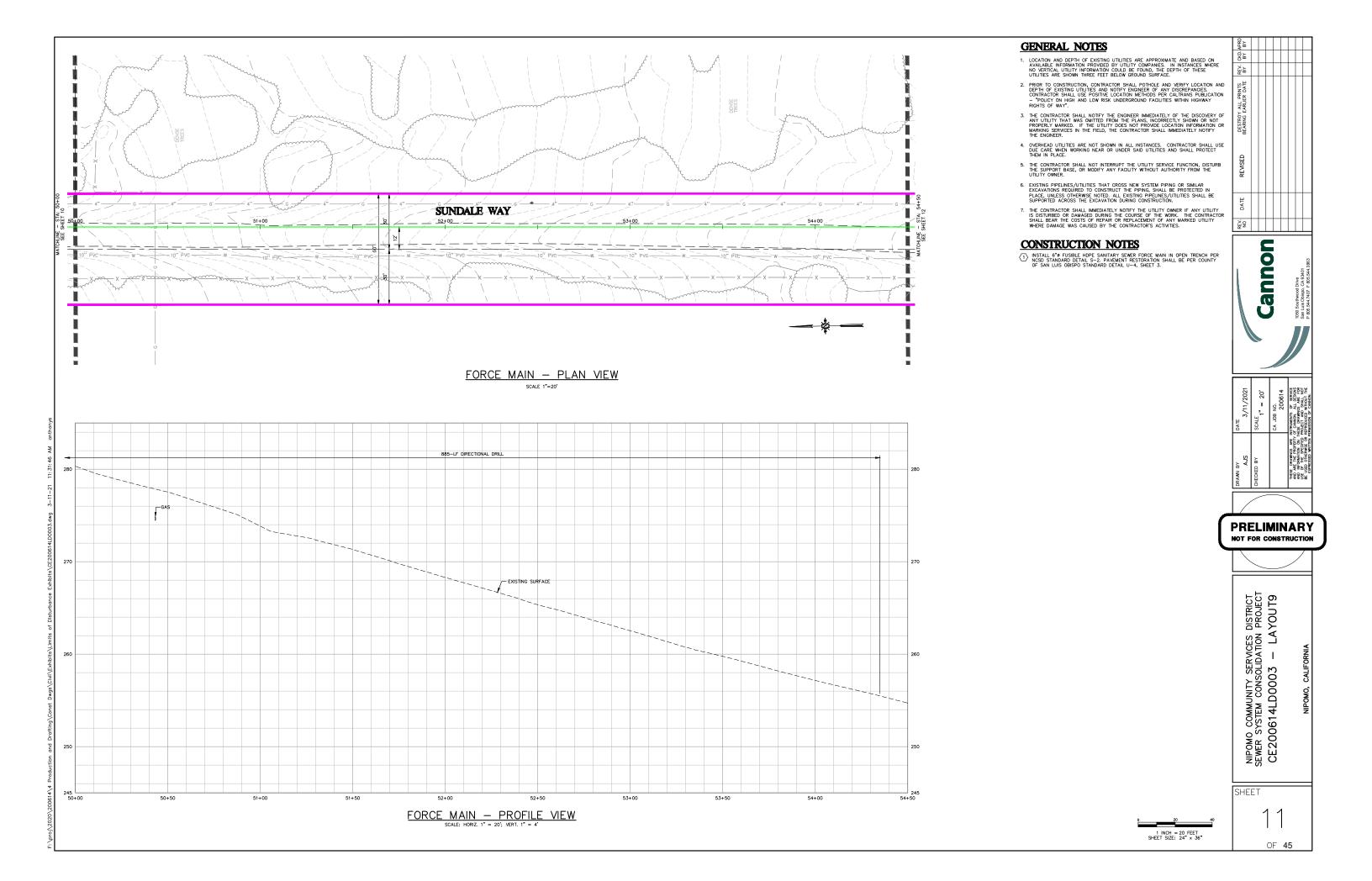


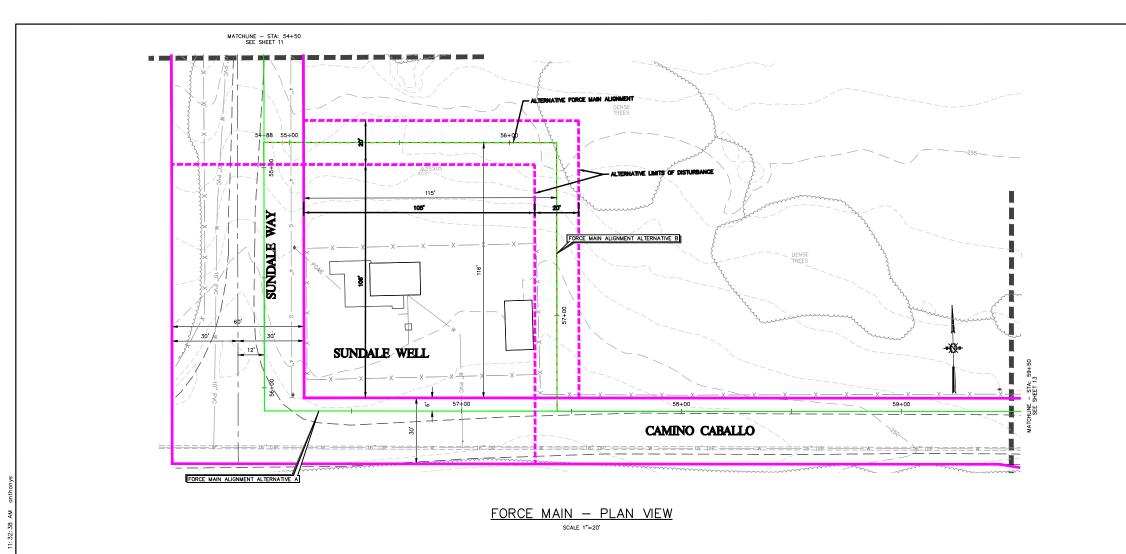












GENERAL NOTES

- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE INFORMATION PROVIDED BY UTILITY COMPANIES. IN INSTANCES WHERE NO VERTICAL UTILITY INFORMATION COULD BE FOUND, THE DEPTH OF THESE UTILITIES ARE SHOWN THREE FEET BELOW GROUND SURFACE.
- 2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL POTHOLE AND VERIFY LOCATION AND DEPTH OF EWISTING UTILITIES AND NOTIFY ENDINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL USE POSITIVE LOCATION METHODS FOR CALTENS PUBLICATION "POLICY ON HIGH AND LOW RISK UNDERGROUND FACILITIES WITHIN HIGHWAY RIGHTS OF WAY".
- 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF THE DISCOVERY OF ANY UTILITY THAT WAS OMITTED FROM THE PLANS, INCORRECTLY SHOWN OR NOT PROPERLY MARKED. IF THE UTILITY DOES NOT PROVIDE LOCATION INFORMATION OR MARKING SERVICES IN THE FIELD, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- 4. OVERHEAD UTILITIES ARE NOT SHOWN IN ALL INSTANCES. CONTRACTOR SHALL USE DUE CARE WHEN WORKING NEAR OR UNDER SAID UTILITIES AND SHALL PROTECT THEM IN PLACE.
- 5. THE CONTRACTOR SHALL NOT INTERRUPT THE UTILITY SERVICE FUNCTION, DISTURB THE SUPPORT BASE, OR MODIFY ANY FACILITY WITHOUT AUTHORITY FROM THE UTILITY OWNER.
- 6. EXISTING PIPELINES/UTILITIES THAT CROSS NEW SYSTEM PIPING OR SIMILAR EXCAVATIONS REQUIRED TO CONSTRUCT THE PIPING, SHALL BE PROTECTED IN PLACE, UNLESS OTHERWISE NOTED. ALL EXISTING PIPELINES/UTILITIES SHALL BE SUPPORTED ACROSS THE EXCAVATION DURING CONSTRUCTION.
- 7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER IF ANY UTILITY IS DISTURBED OR DAMAGED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BEAR THE COSTS OF REPAIR OR REPLACEMENT OF ANY MARKED UTILITY WHERE DAMAGE WAS CAUSED BY THE CONTRACTOR'S ACTIVITIES.

CONSTRUCTION NOTES

INSTALL 6"% FUSIBLE HDPE SANITARY SEWER FORCE MAIN IN OPEN TRENCH PER NCSD STANDARD DETAIL 5—2. PAVEMENT RESTORATION SHALL BE PER COUNTY OF SAN LUIS OBISPO STANDARD DETAIL U-4, SHEET 3.





PRELIMINARY

DISTRICT
N PROJECT
EXHIBITS

NOT FOR CONSTRUCTION

NIPOMO COMMUNITY SERVICES SEWER SYSTEM CONSOLIDATION LIMITS OF DISTURBANCE

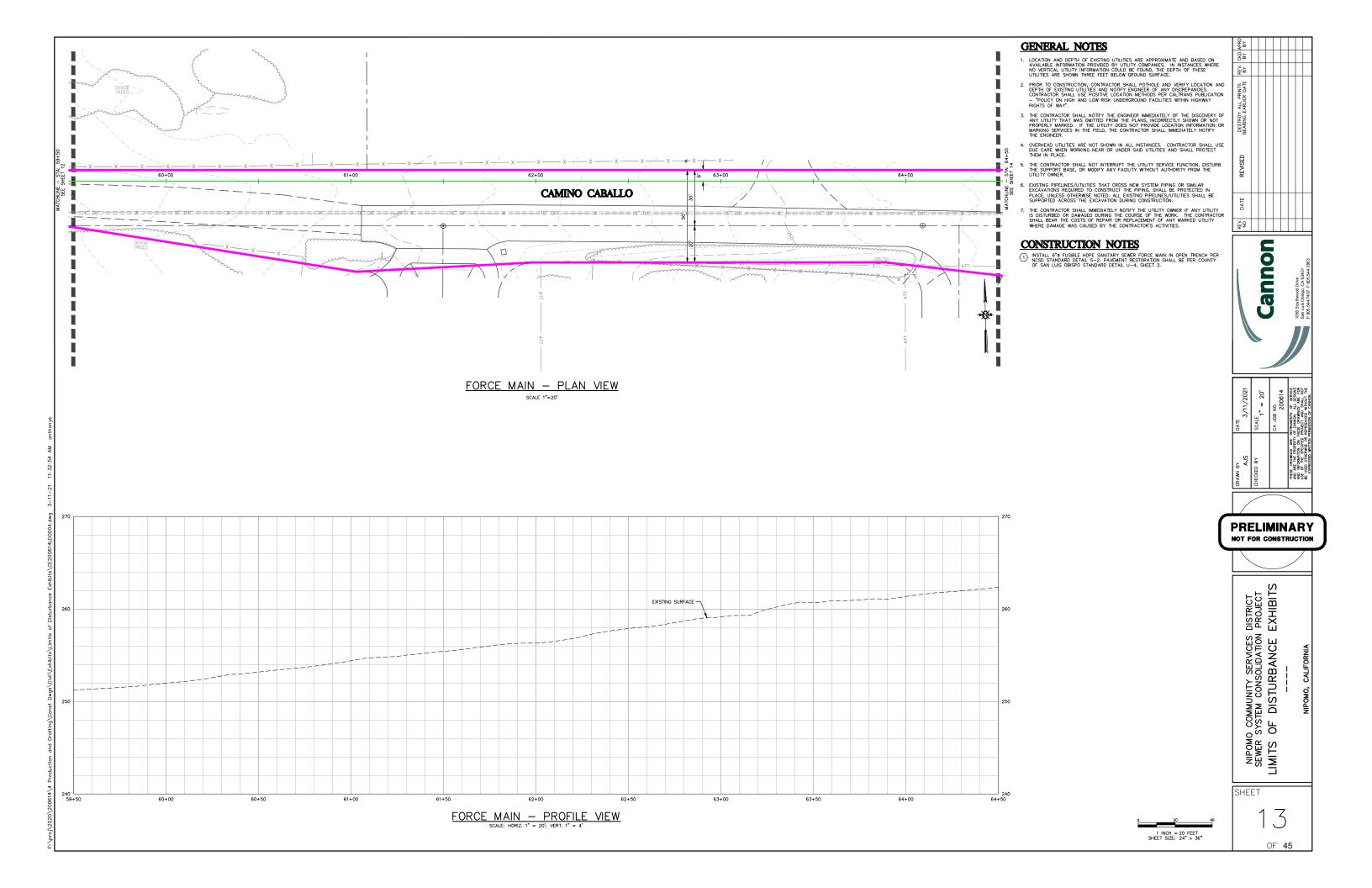
SHEET

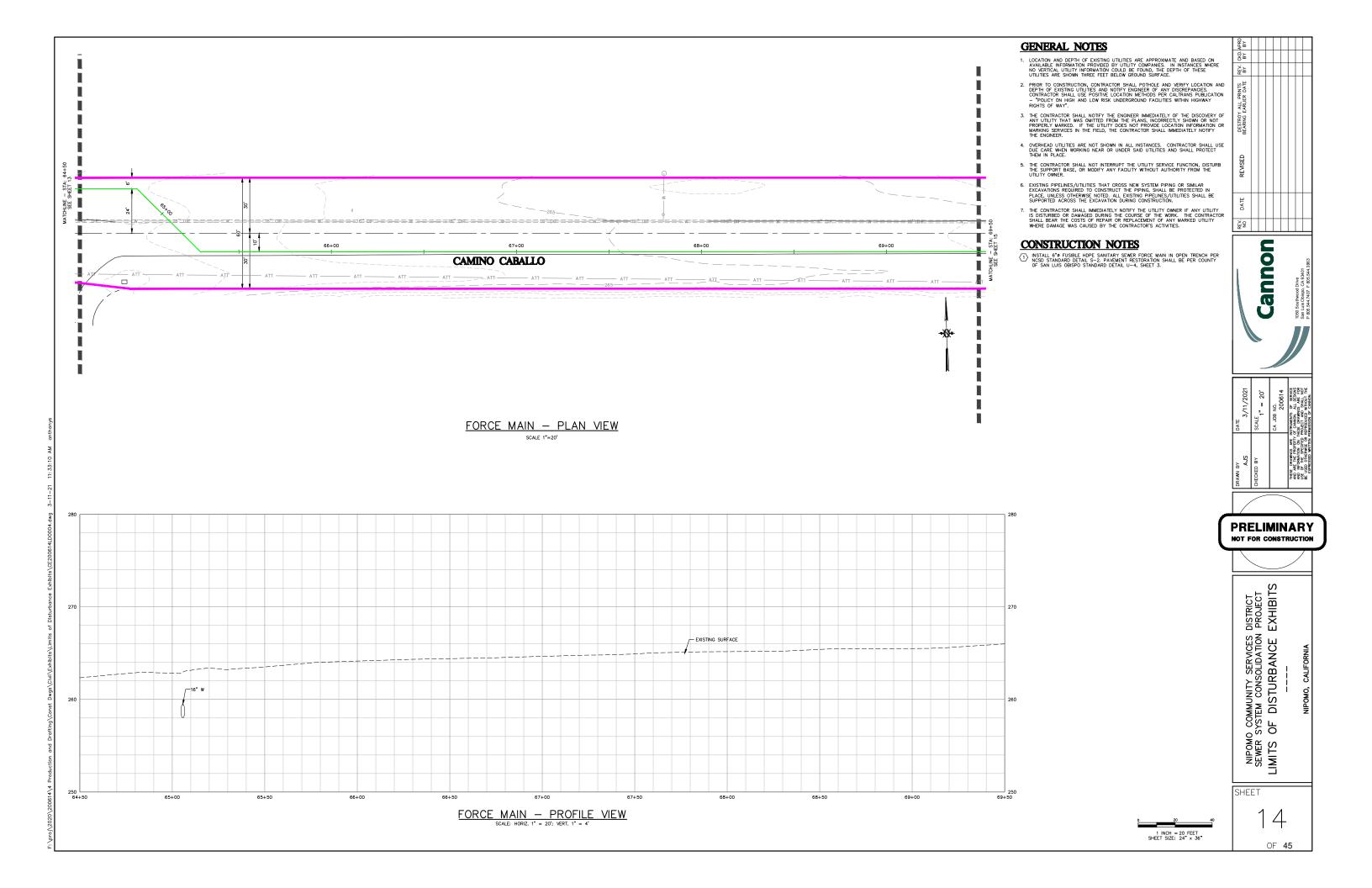
1 INCH = 20 FEET SHEET SIZE: 24" x 36"

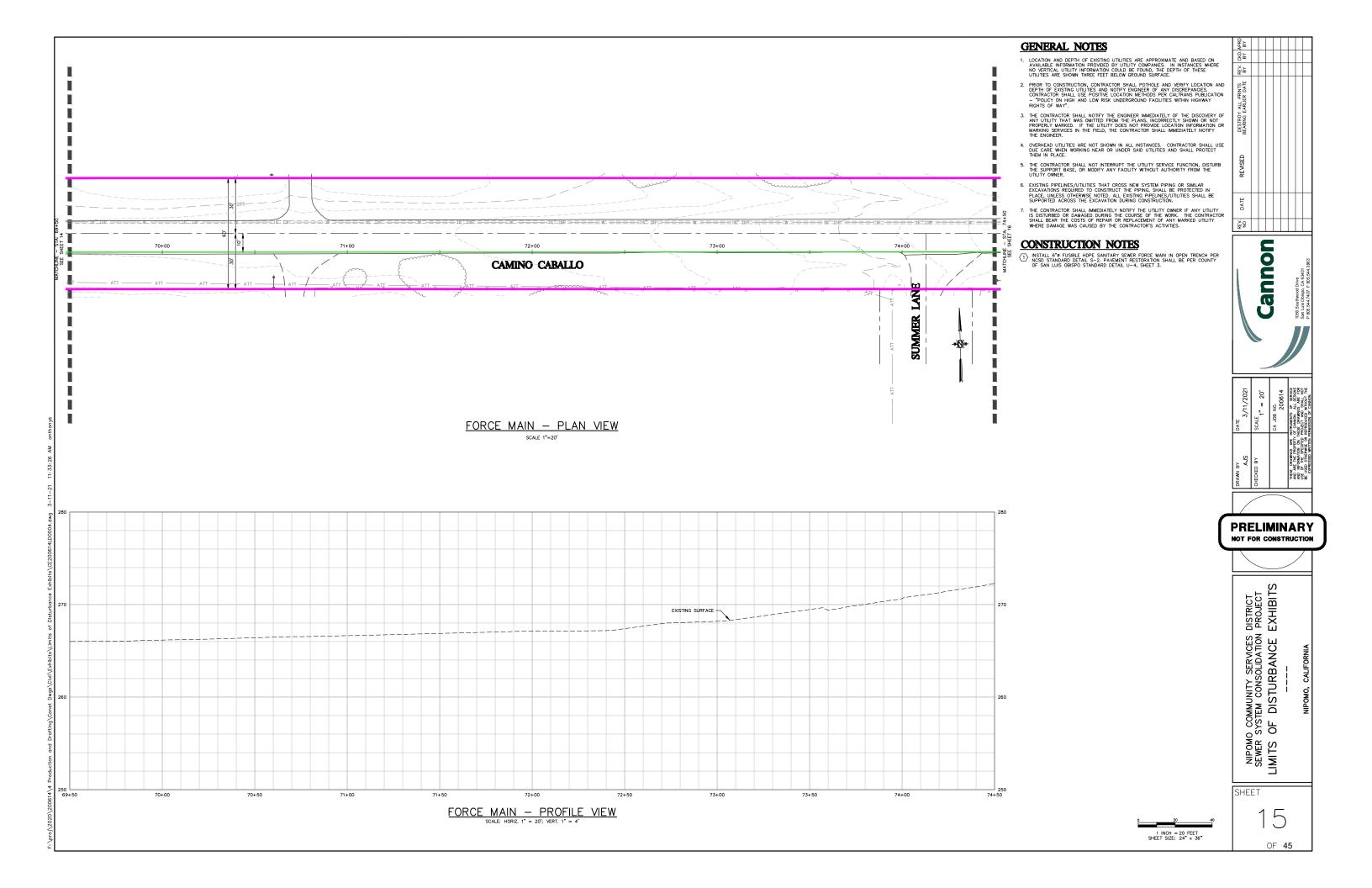
OF **45**

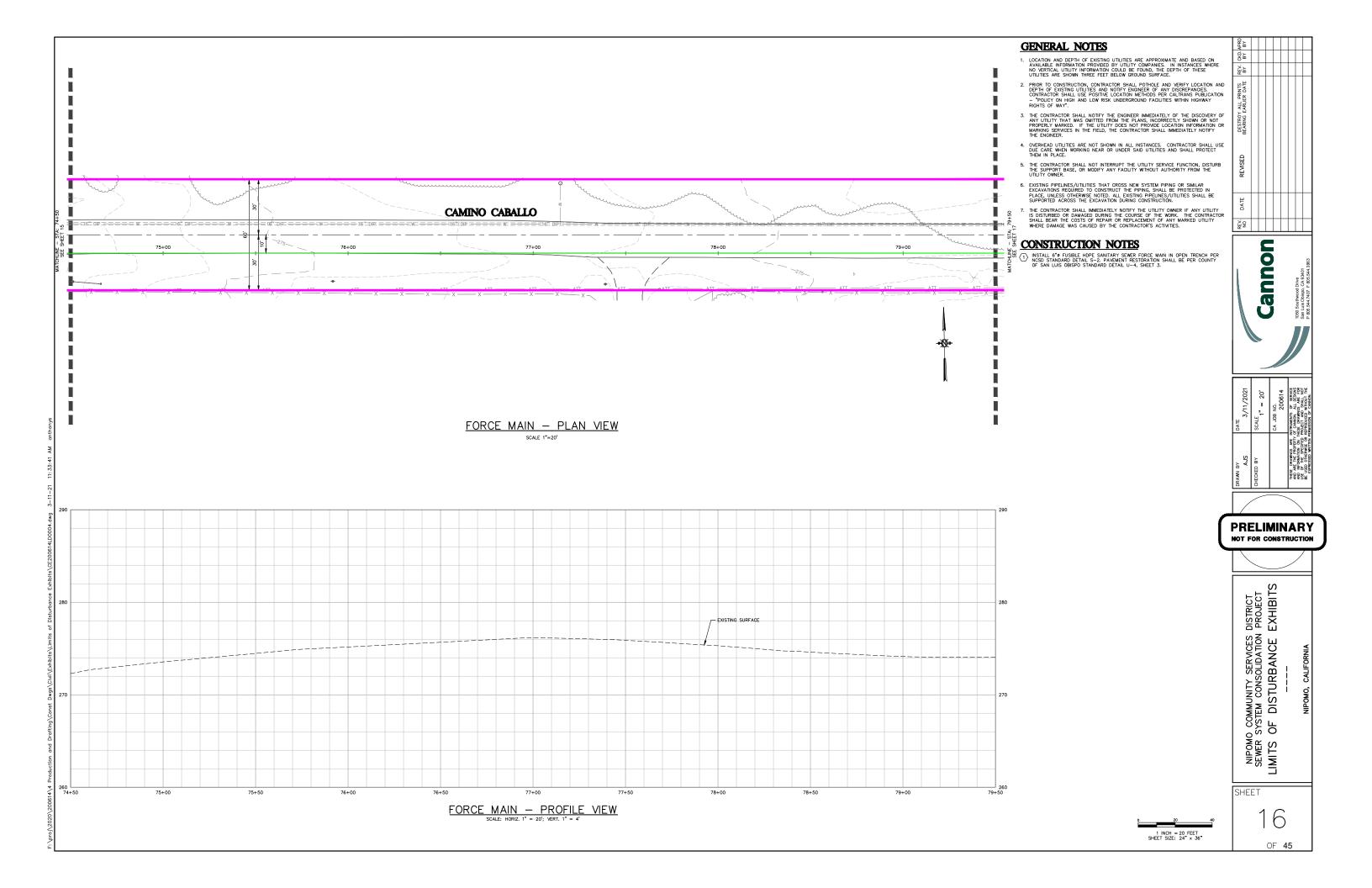
56+00 55+00 55+50 58+50 59+00

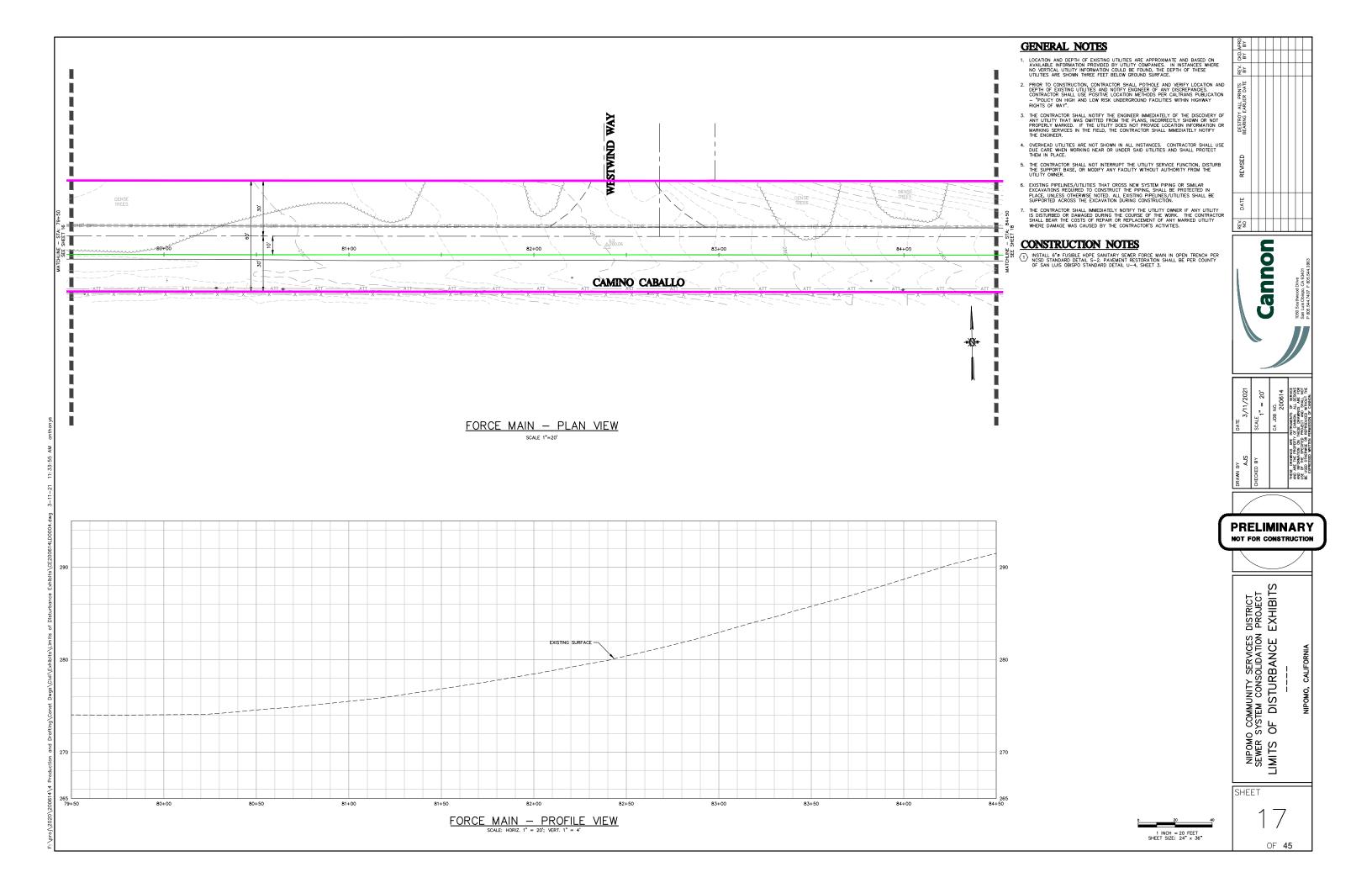
> FORCE MAIN - PROFILE VIEW SCALE: HORIZ. 1" = 20'; VERT. 1" = 4'

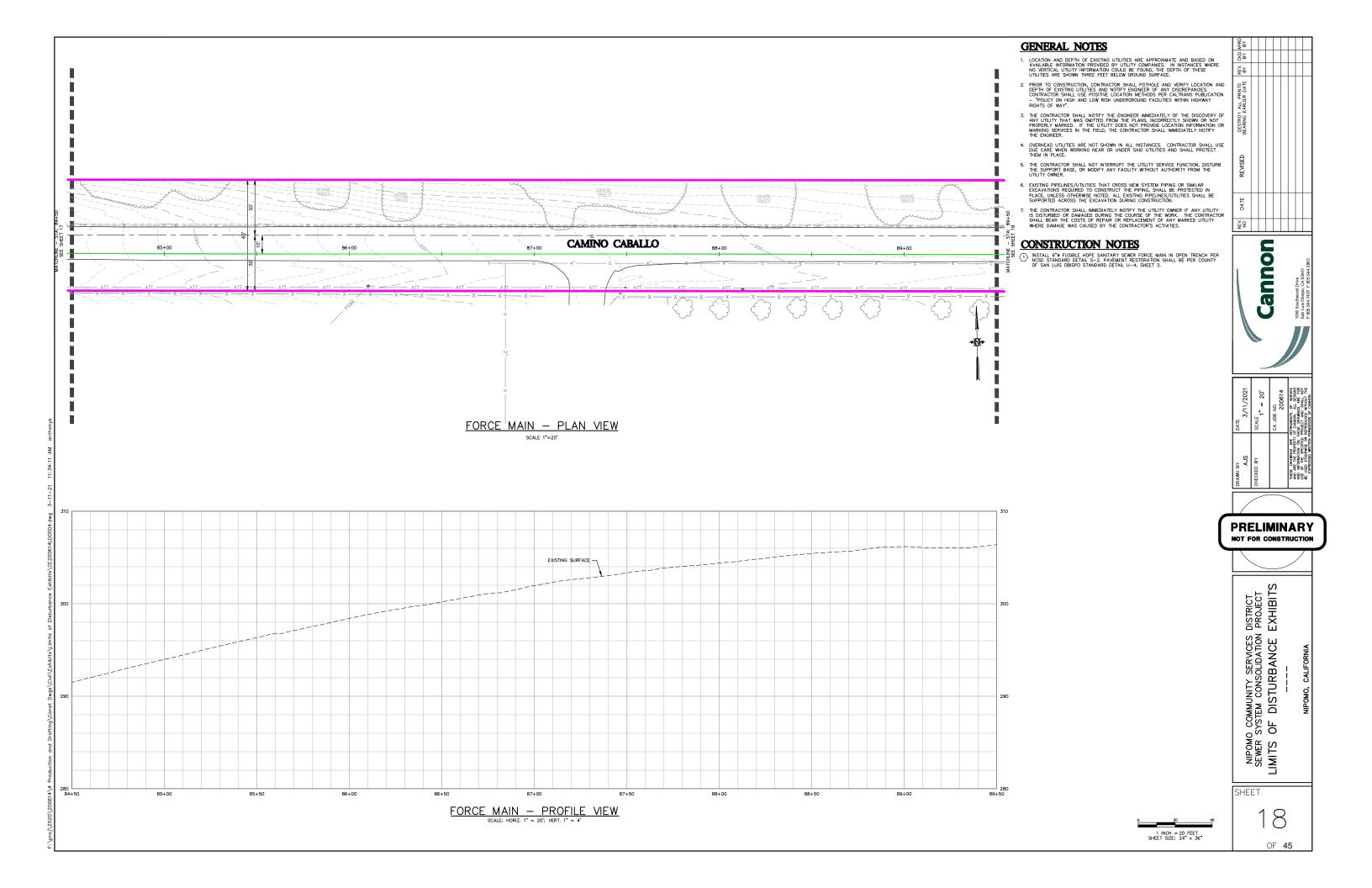


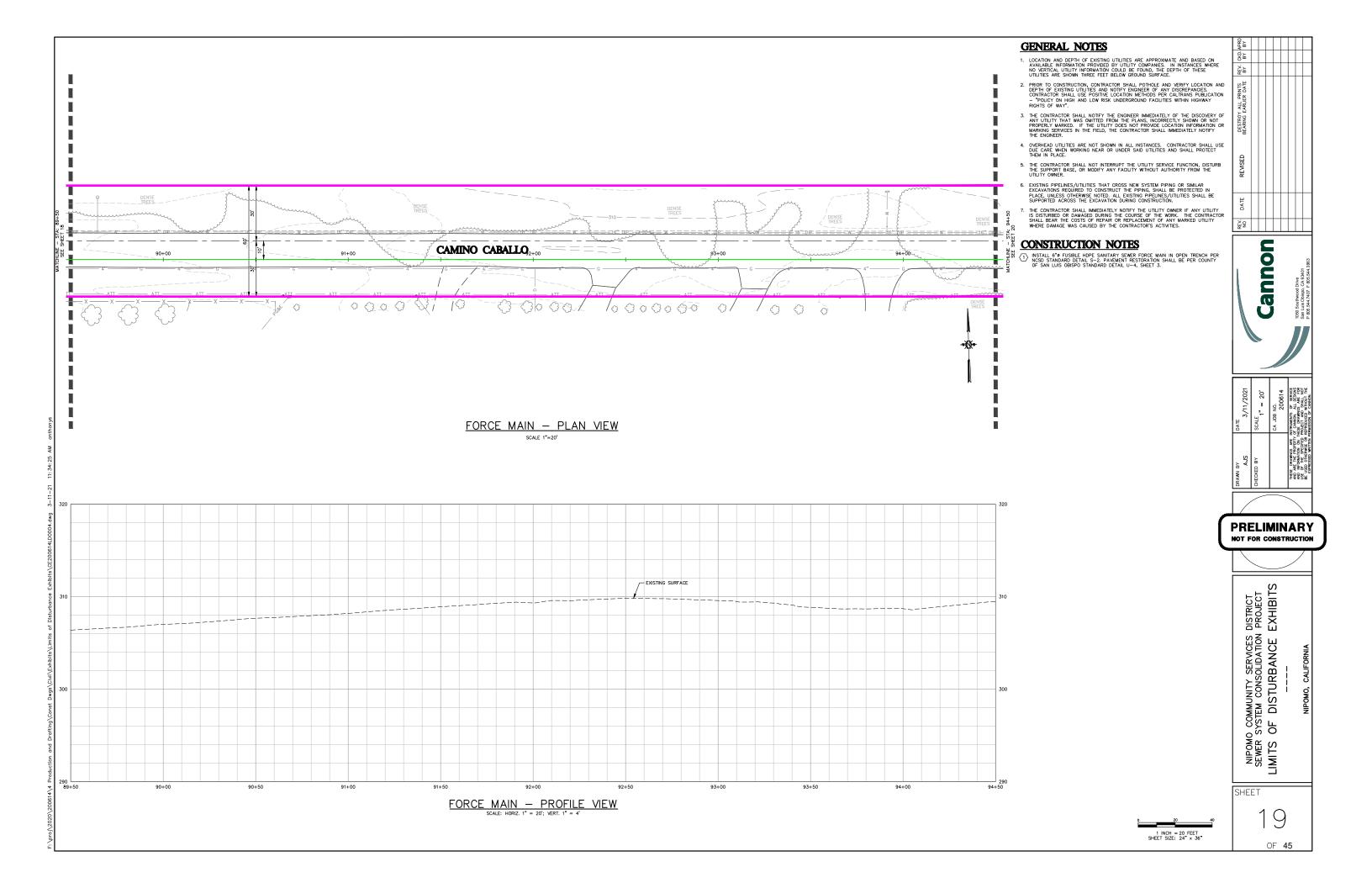


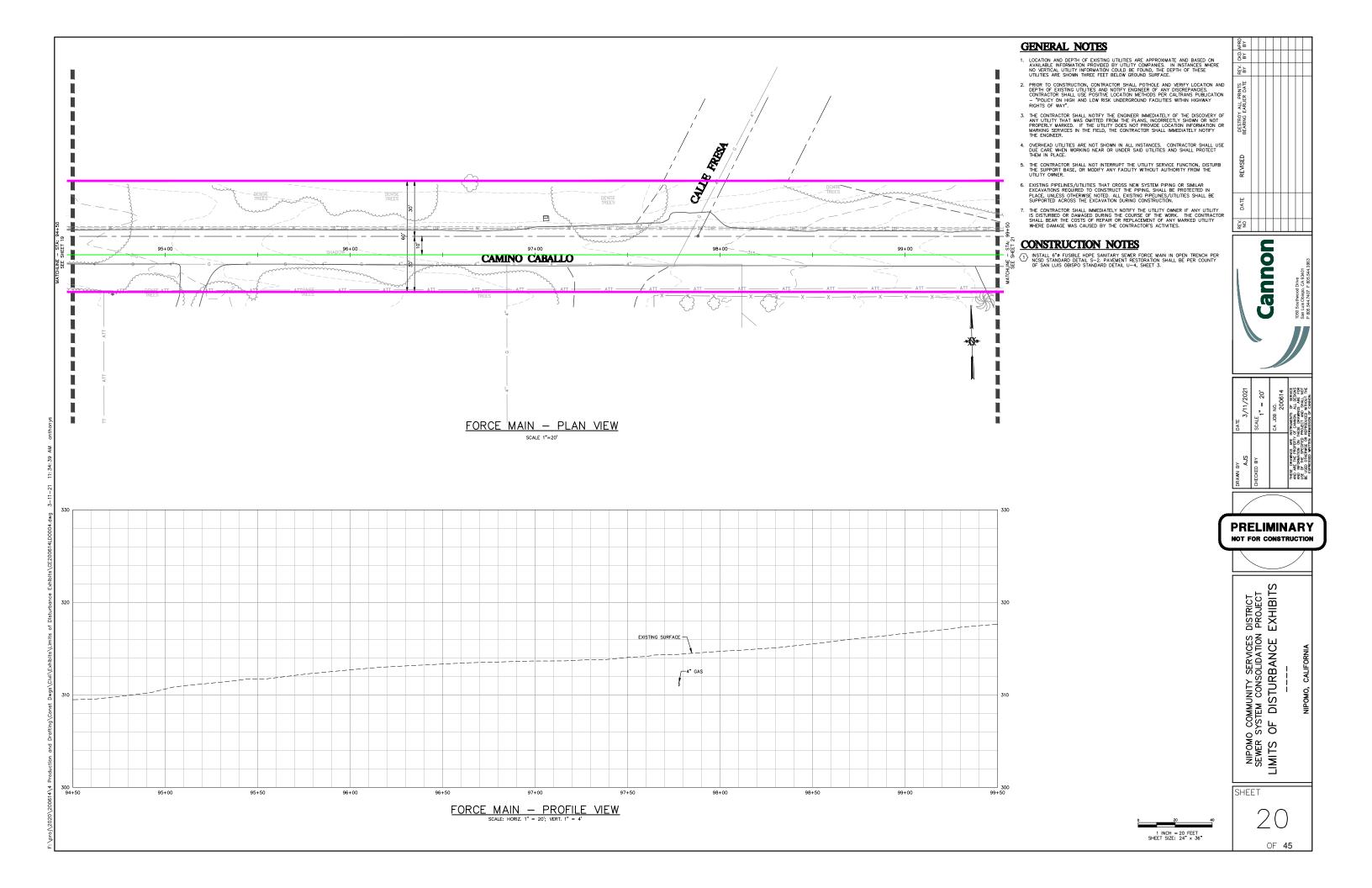


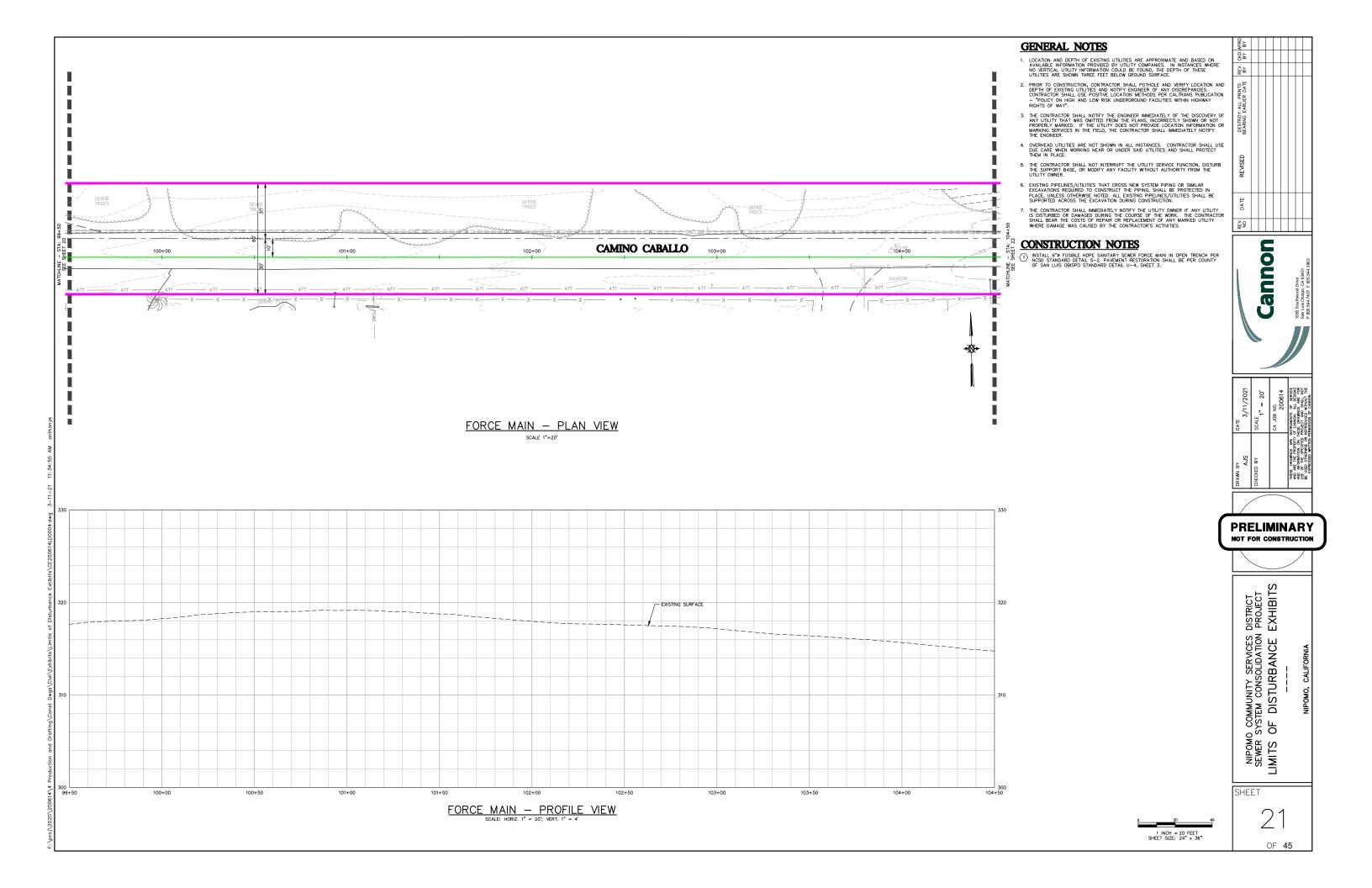


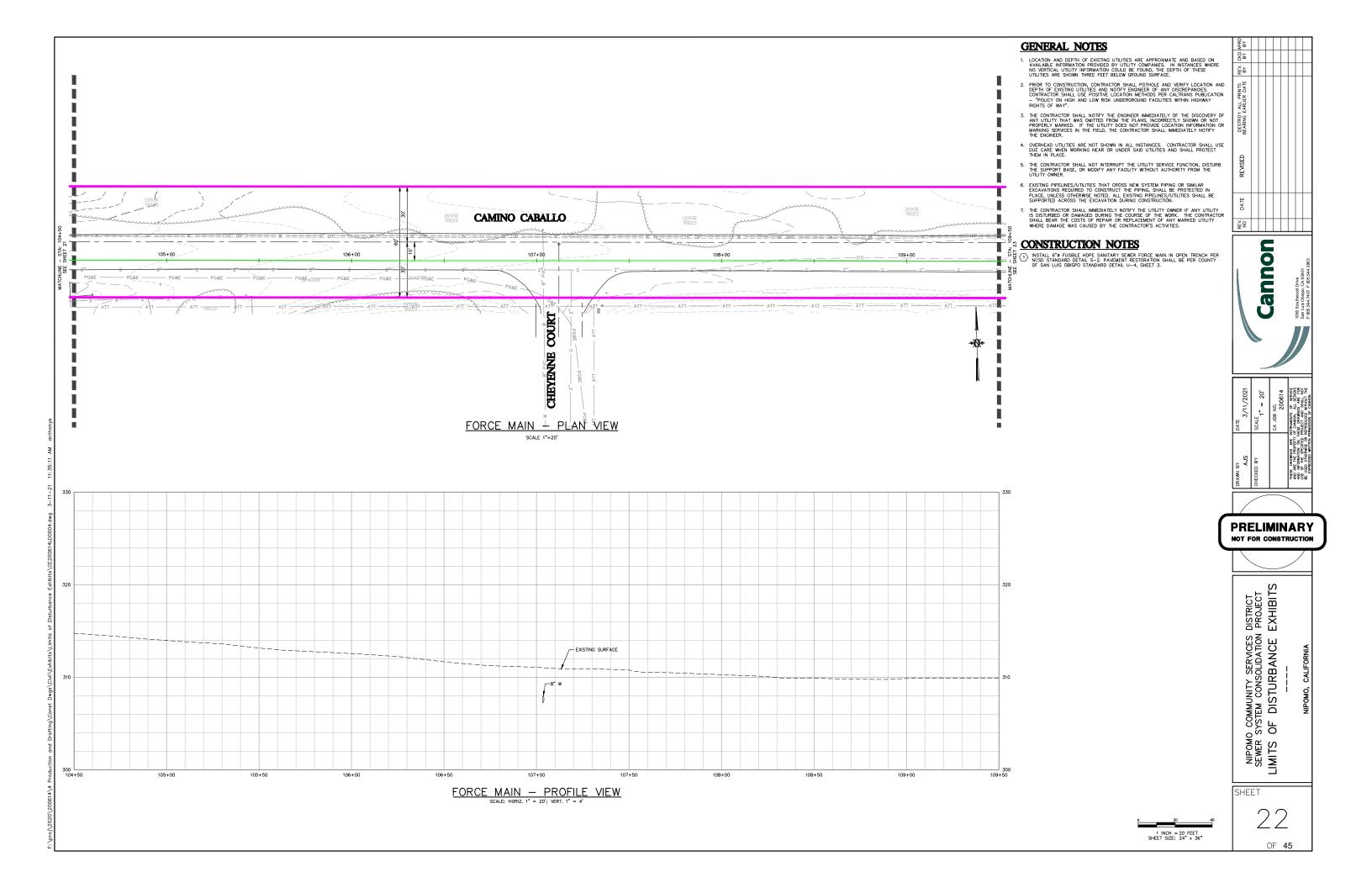


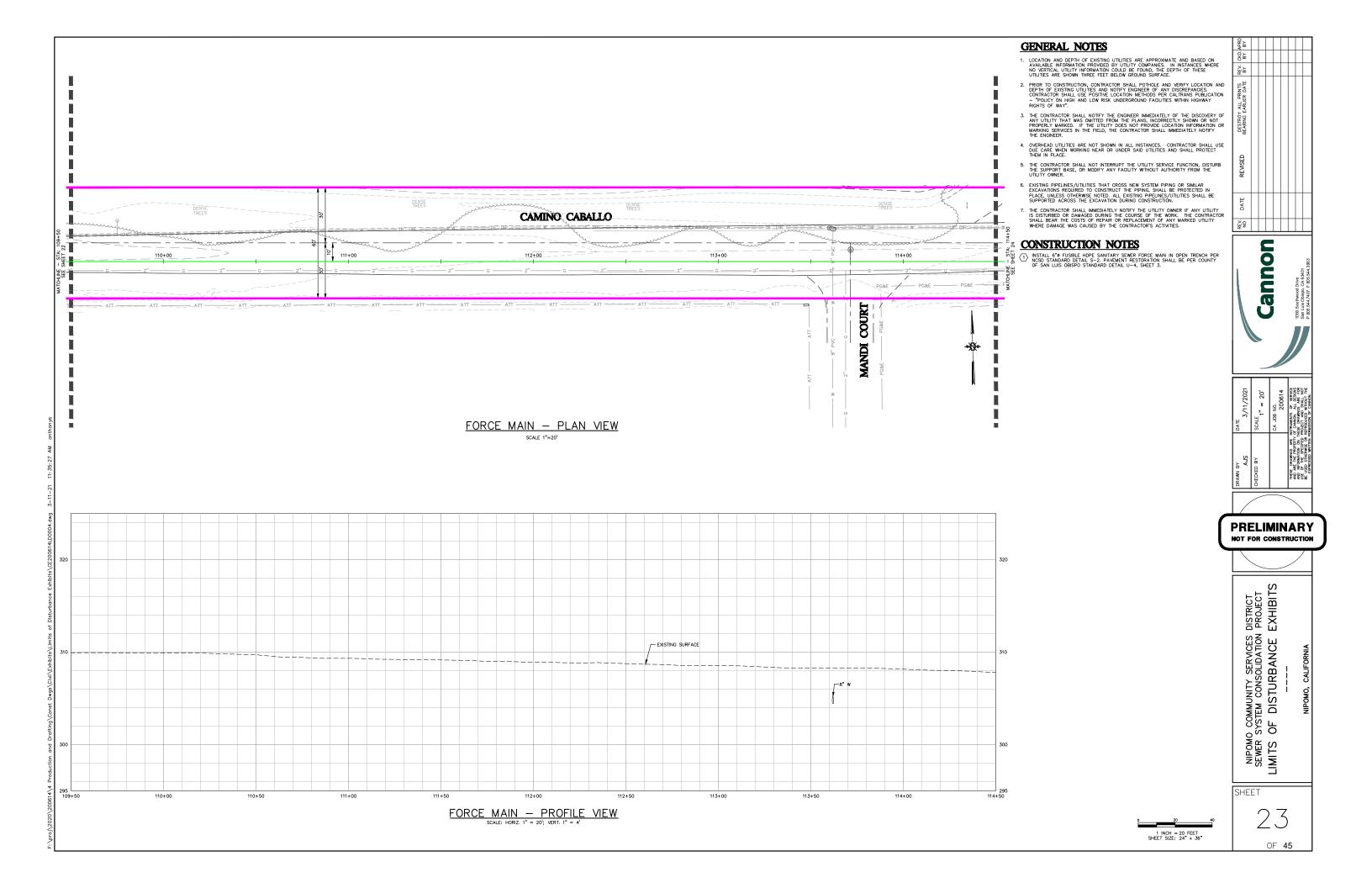


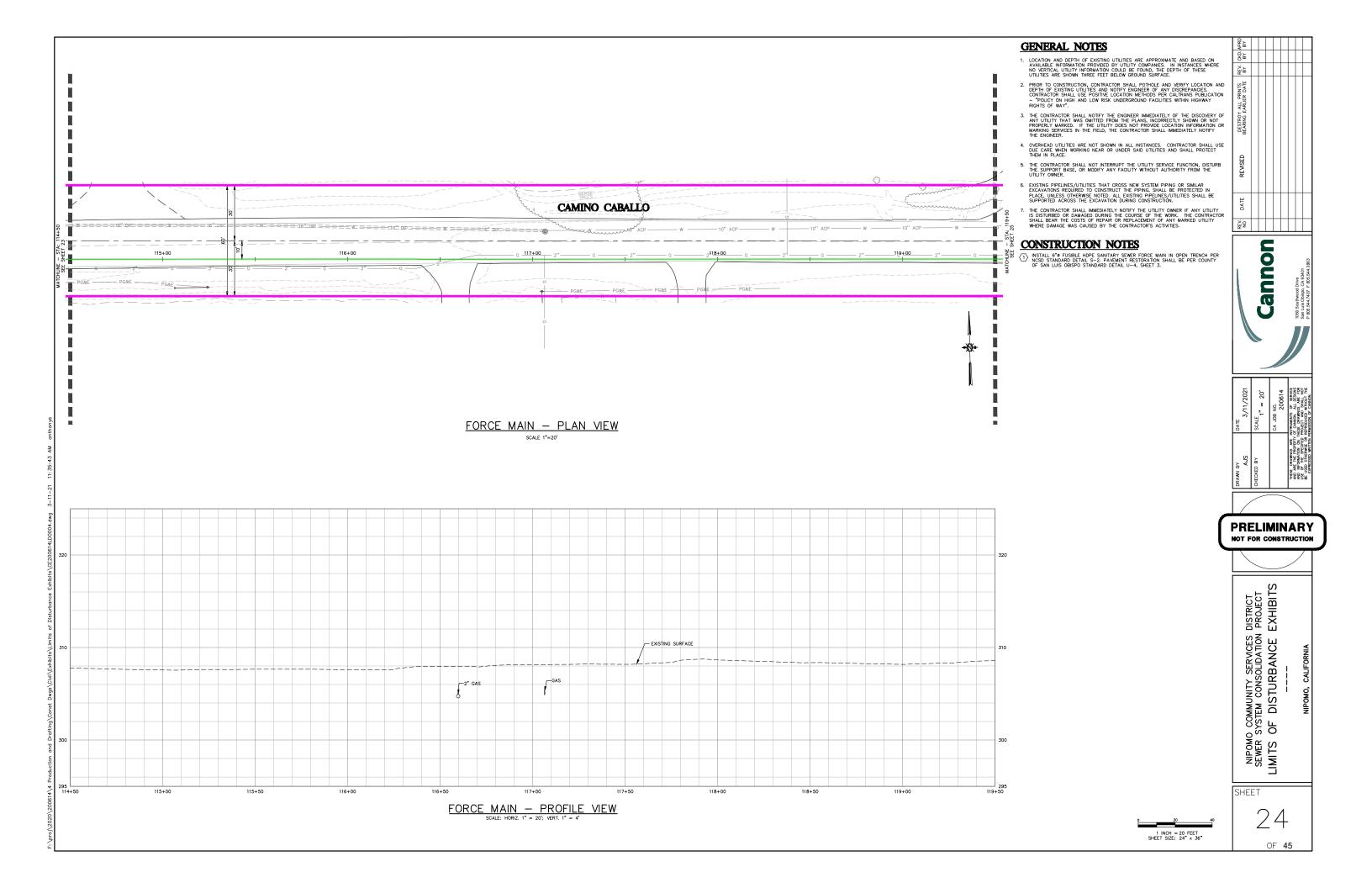


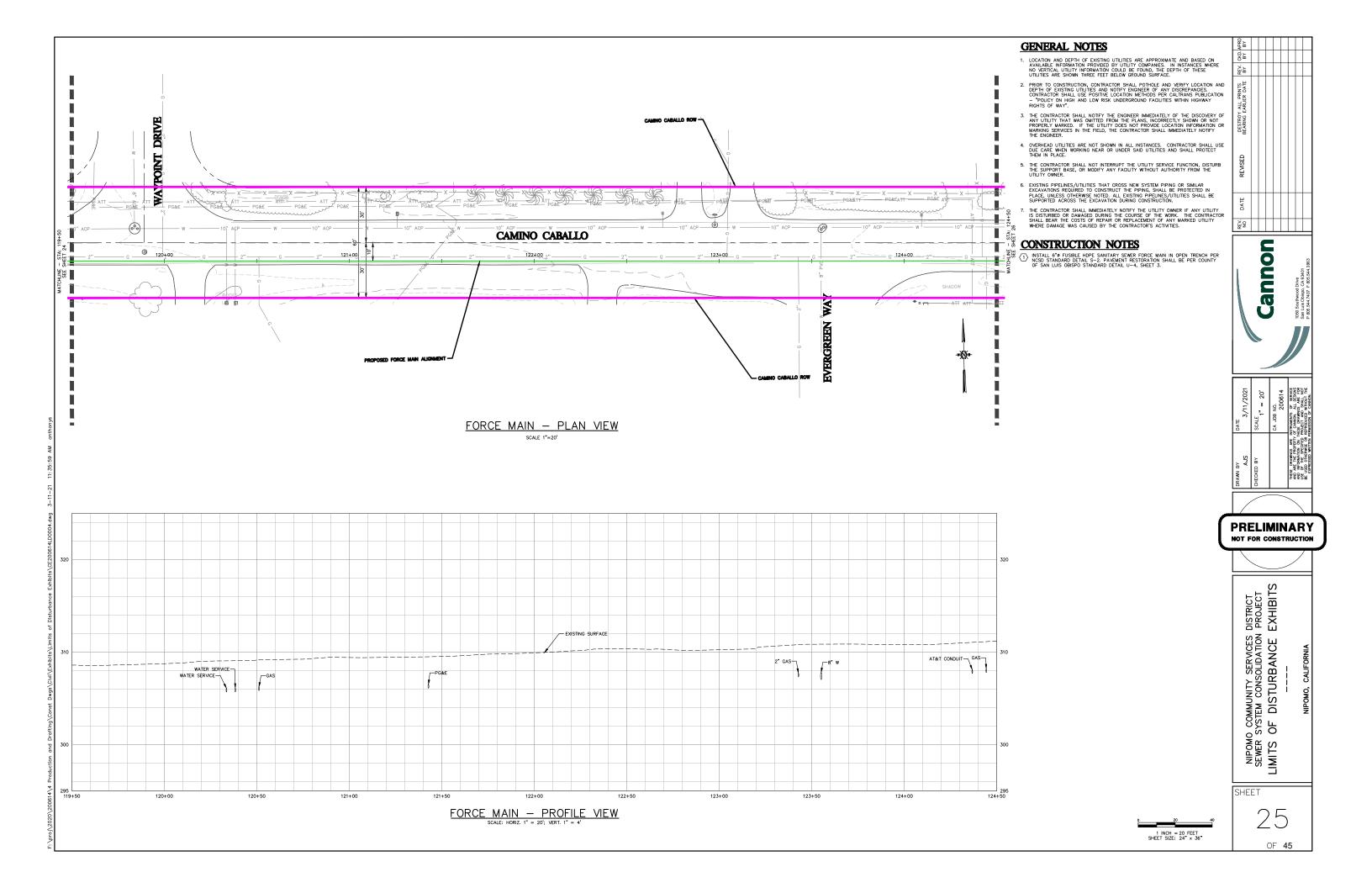


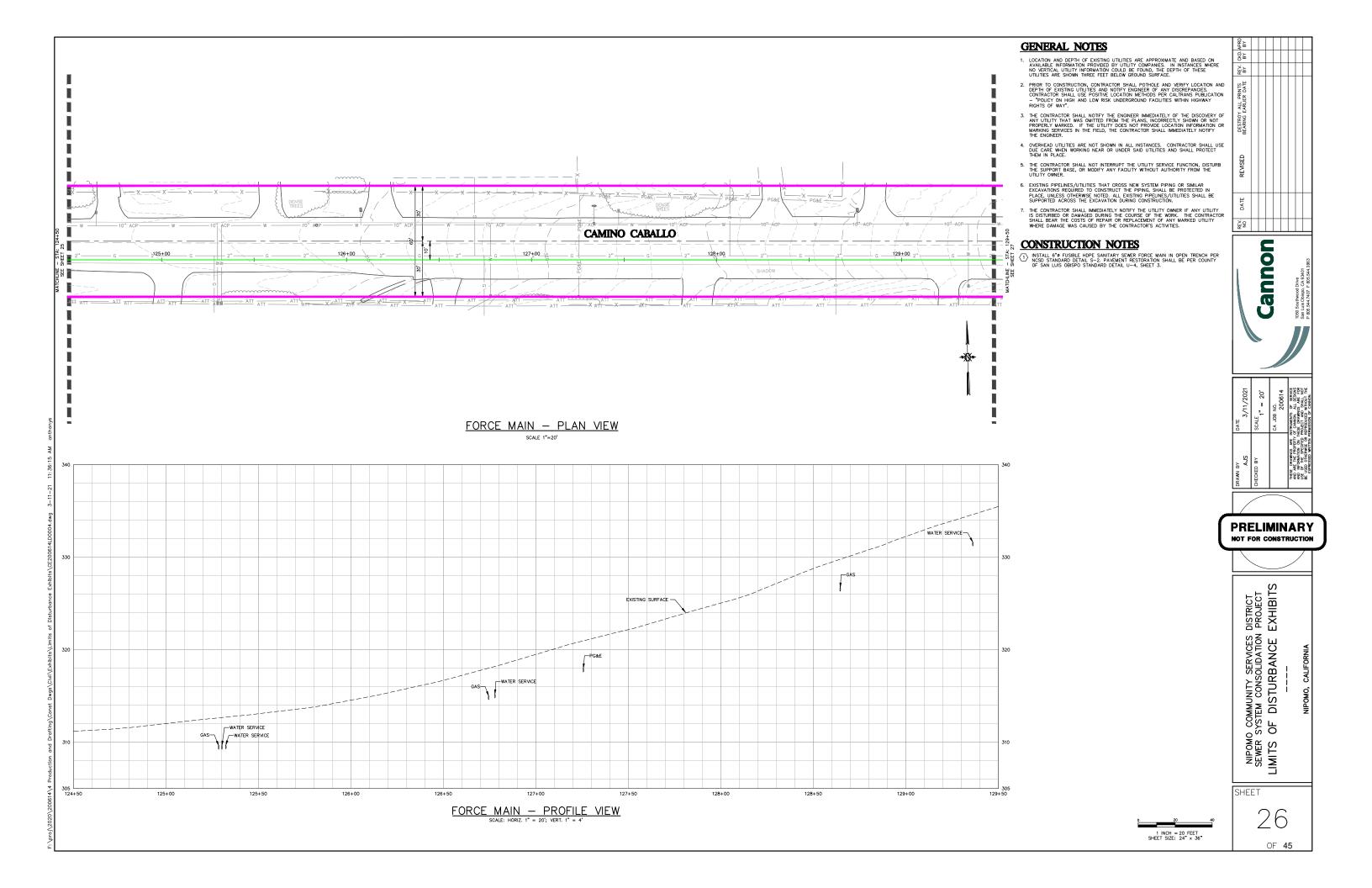


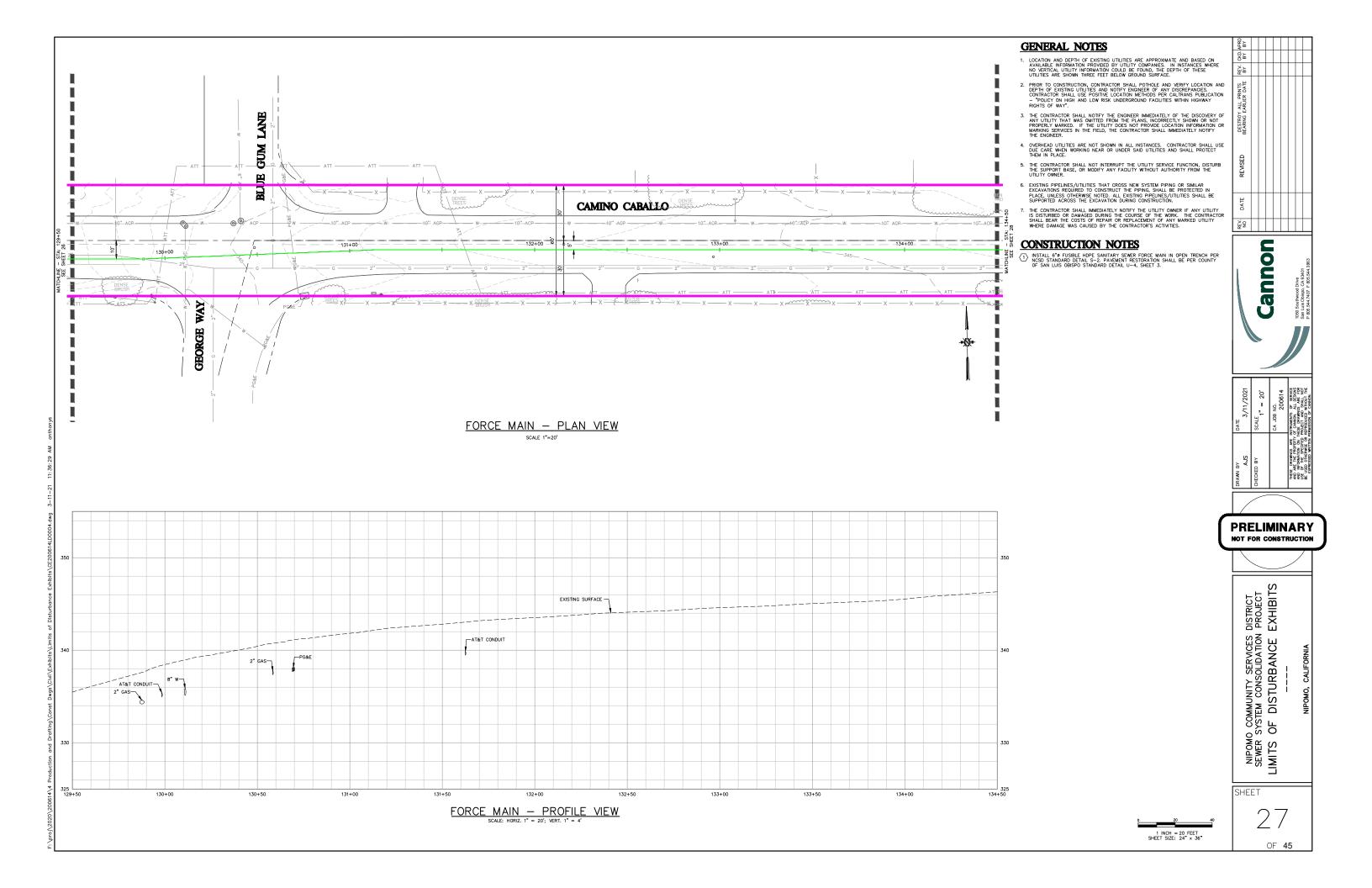


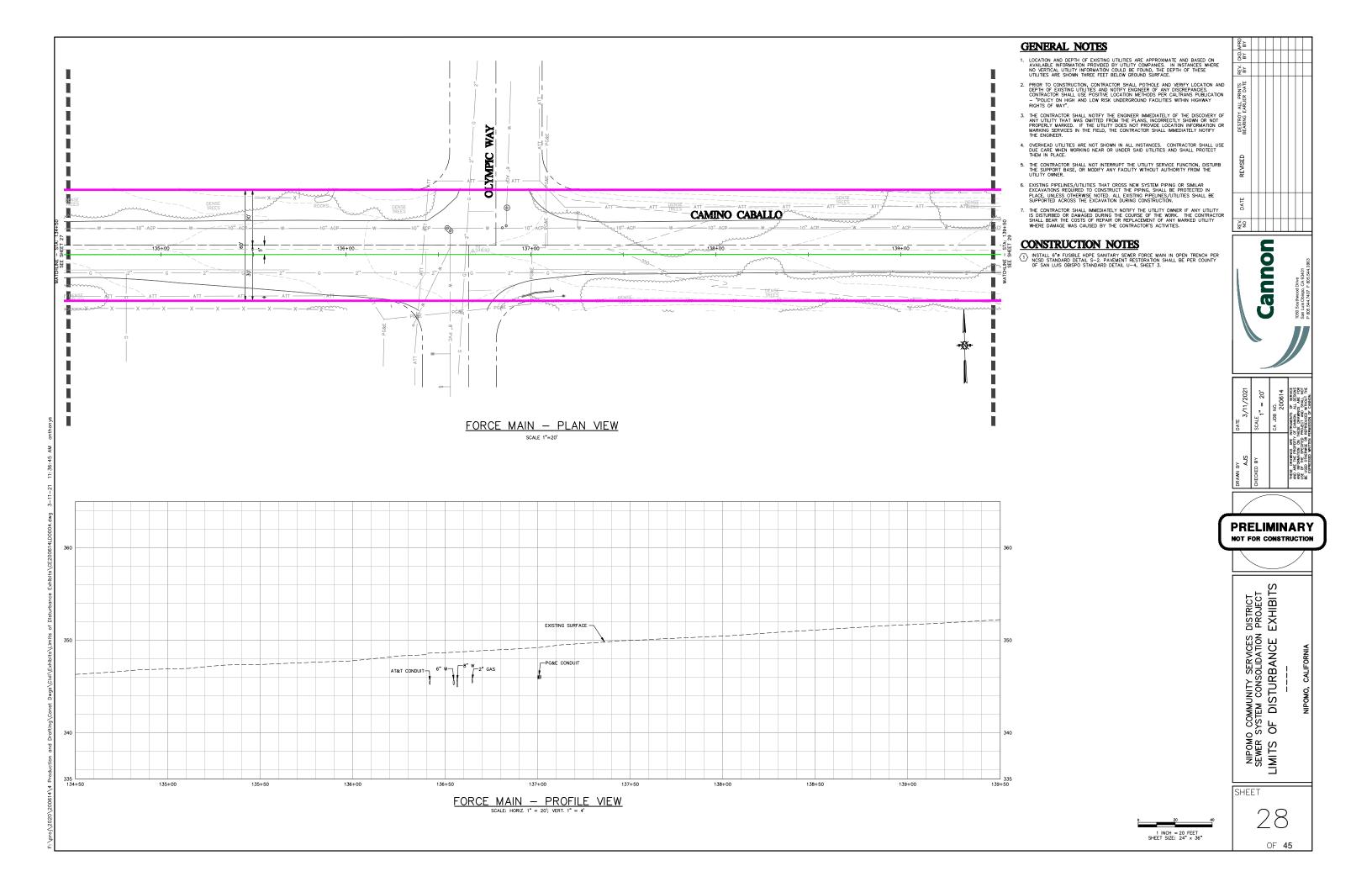


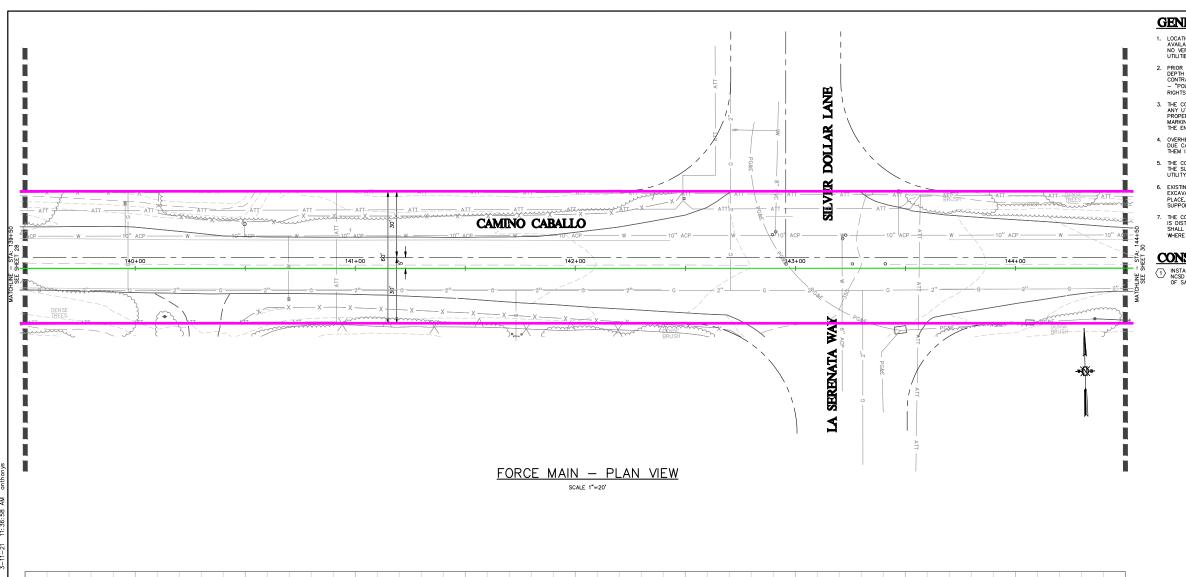












GENERAL NOTES

- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE INFORMATION PROVIDED BY UTILITY COMPANIES. IN INSTANCES WHERE NO VERTICAL UTILITY INFORMATION COULD BE FOUND, THE DEPTH OF THESE UTILITIES ARE SHOWN THREE FEET BELOW GROUND SURFACE.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL POTHOLE AND VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL USE POSITIVE LOCATION METHODS PER CALTRANS PUBLICATION — "POLICY ON HIGH AND LOW RISK UNDERGROUND FACILITIES WITHIN HIGHWAY RIGHTS OF WAY".
- 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF THE DISCOVERY OF ANY UTILITY THAT WAS OMITTED FROM THE PLANS, INCORRECTLY SHOWN OR NOT PROPERLY MARKED. IF THE UTILITY DOES NOT PROVIDE LOCATION INFORMATION OR MARKING SERVICES IN THE FIELD, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- 4. OVERHEAD UTILITIES ARE NOT SHOWN IN ALL INSTANCES. CONTRACTOR SHALL USE DUE CARE WHEN WORKING NEAR OR UNDER SAID UTILITIES AND SHALL PROTECT THEM IN PLACE.
- 5. THE CONTRACTOR SHALL NOT INTERRUPT THE UTILITY SERVICE FUNCTION, DISTURB THE SUPPORT BASE, OR MODIFY ANY FACILITY WITHOUT AUTHORITY FROM THE UTILITY OWNER.
- 6. EXISTING PIPELINES/UTILITIES THAT CROSS NEW SYSTEM PIPING OR SIMILAR EXCAVATIONS REQUIRED TO CONSTRUCT THE PIPING, SHALL BE PROTECTED IN PLACE, UNIESS OTHERWISE NOTED. ALL EXISTING PIPELINES/UTILITIES SHALL BE SUPPORTED ACROSS THE EXCAVATION DURING CONSTRUCTION.
- 7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER IF ANY UTILITY IS DISTURBED OR DAMAGED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BEAR THE COSTS OF REPEAR OR REPLACEMENT OF ANY MARKED UTILITY WHERE DAMAGE WAS CAUSED BY THE CONTRACTOR'S ACTIVITIES.

CONSTRUCTION NOTES

T) INSTALL 6° 6 FUSIBLE HOPE SANITARY SEWER FORCE MAIN IN OPEN TRENCH PER NCSD STANDARD DETAIL 5-2. PAZEMENT RESTORATION SHALL BE PER COUNTY OF SAN LIUS OBJECTO STANDARD DETAIL 1-4. SHEET 3.





| DRAWN BY | DATE |
|--|---|
| AJS | 3/11/2021 |
| снескер вү | SCALE 1" = 20' |
| | CA JOB NO. 200614 |
| THE PRANKERS ARE INSTRUMENTS OF SER AND ARE THE PROPERTY OF CANNON ALL DESIGN AND INFORMATION ON THESE DRAWNES ARE USED OF THE SPECIFIED PROCECT AND SHALL BE USED OTHERWISE OR REPROVINCED WITHOUT EXPRESSED WRITTEN PERMISSION OF CANNON | INSTRUMENTS OF SERVICE OF CANNON. ALL DESIGNS THESE DRAWNGS ARE FOR PROJECT AND SHALL NOT REPORTED THE REPROJUCED WITHOUT THE PERMISSION OF CANNON. |

PRELIMINARY NOT FOR CONSTRUCTION

OT FOR CONSTRUCTION

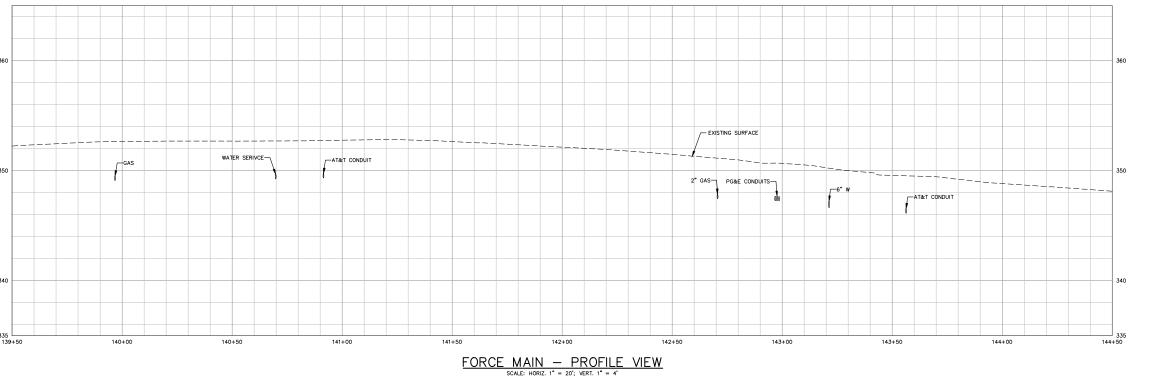
NIPOMO COMMUNITY SERVICES DISTRICT SEWER SYSTEM CONSOLIDATION PROJECT LIMITS OF DISTURBANCE EXHIBITS

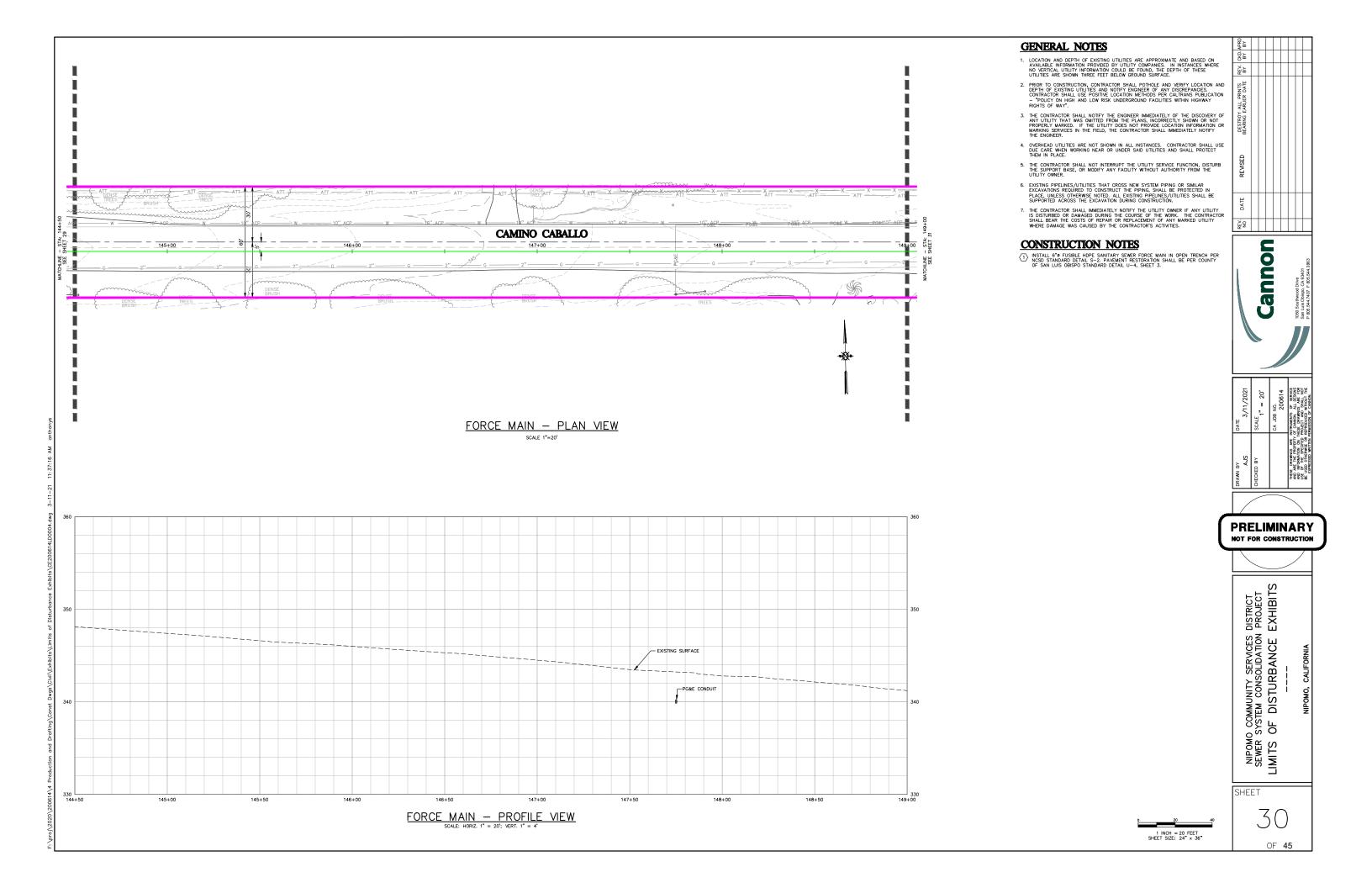
SHEET

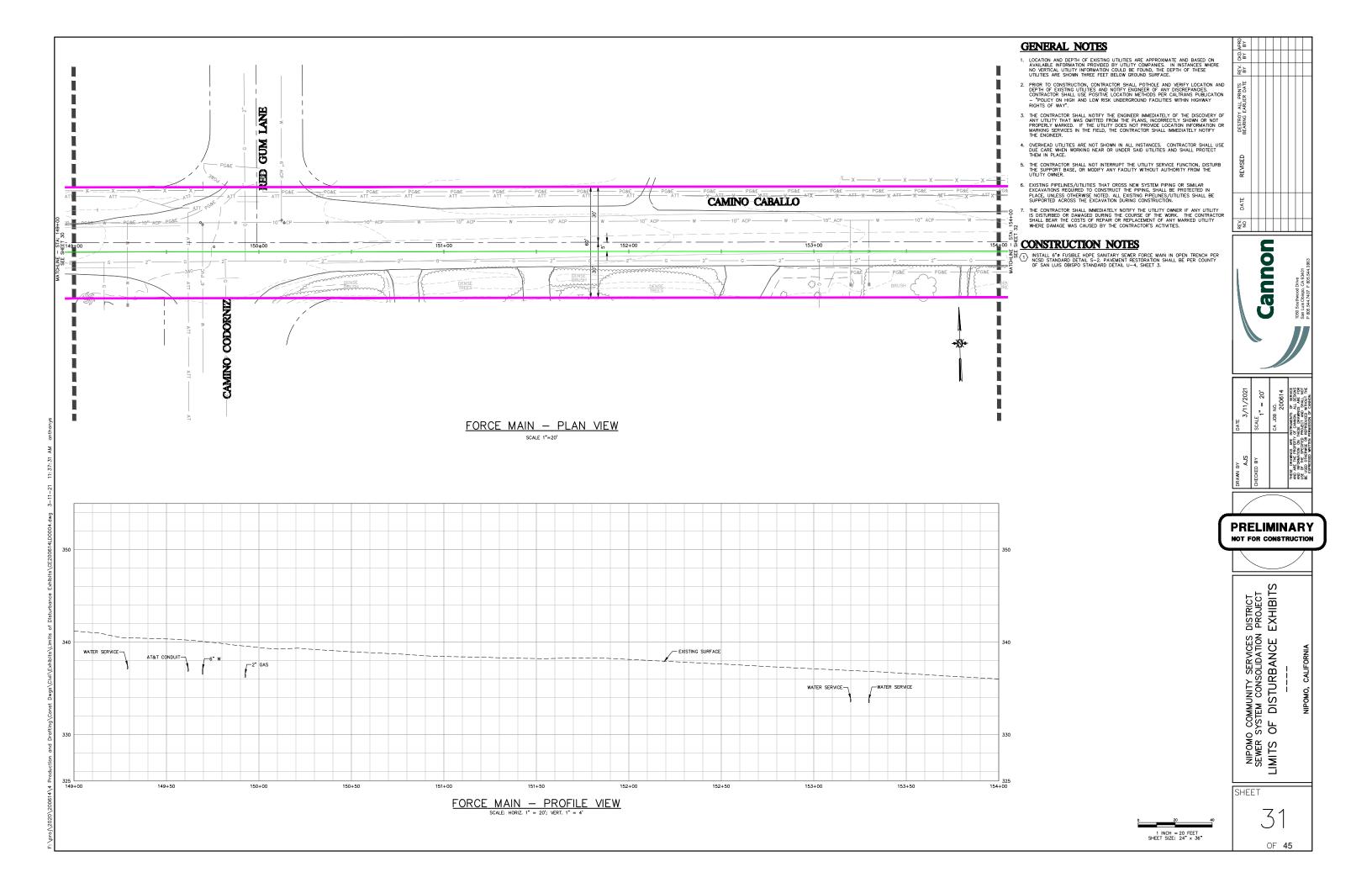
29

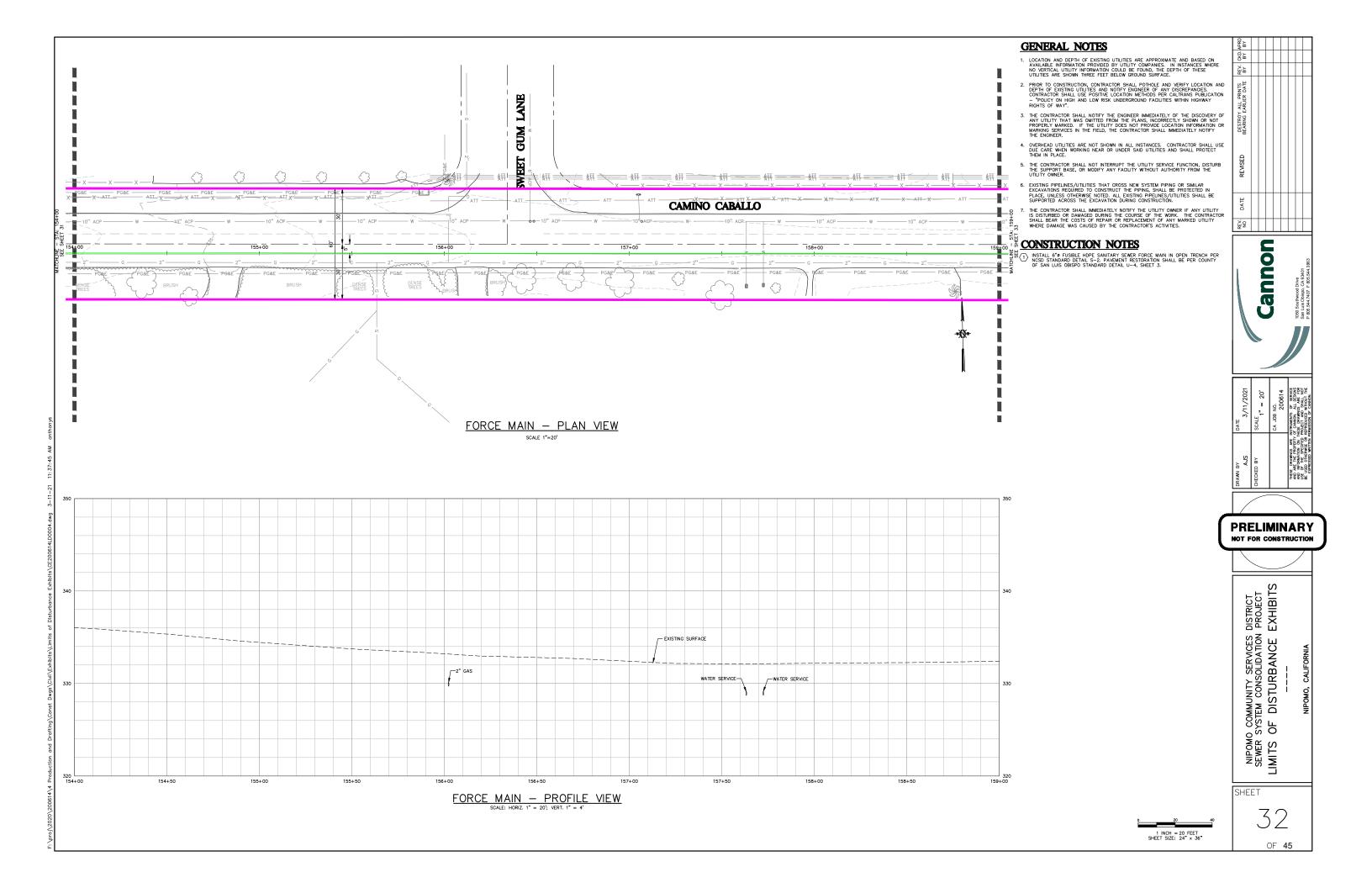
OF **45**

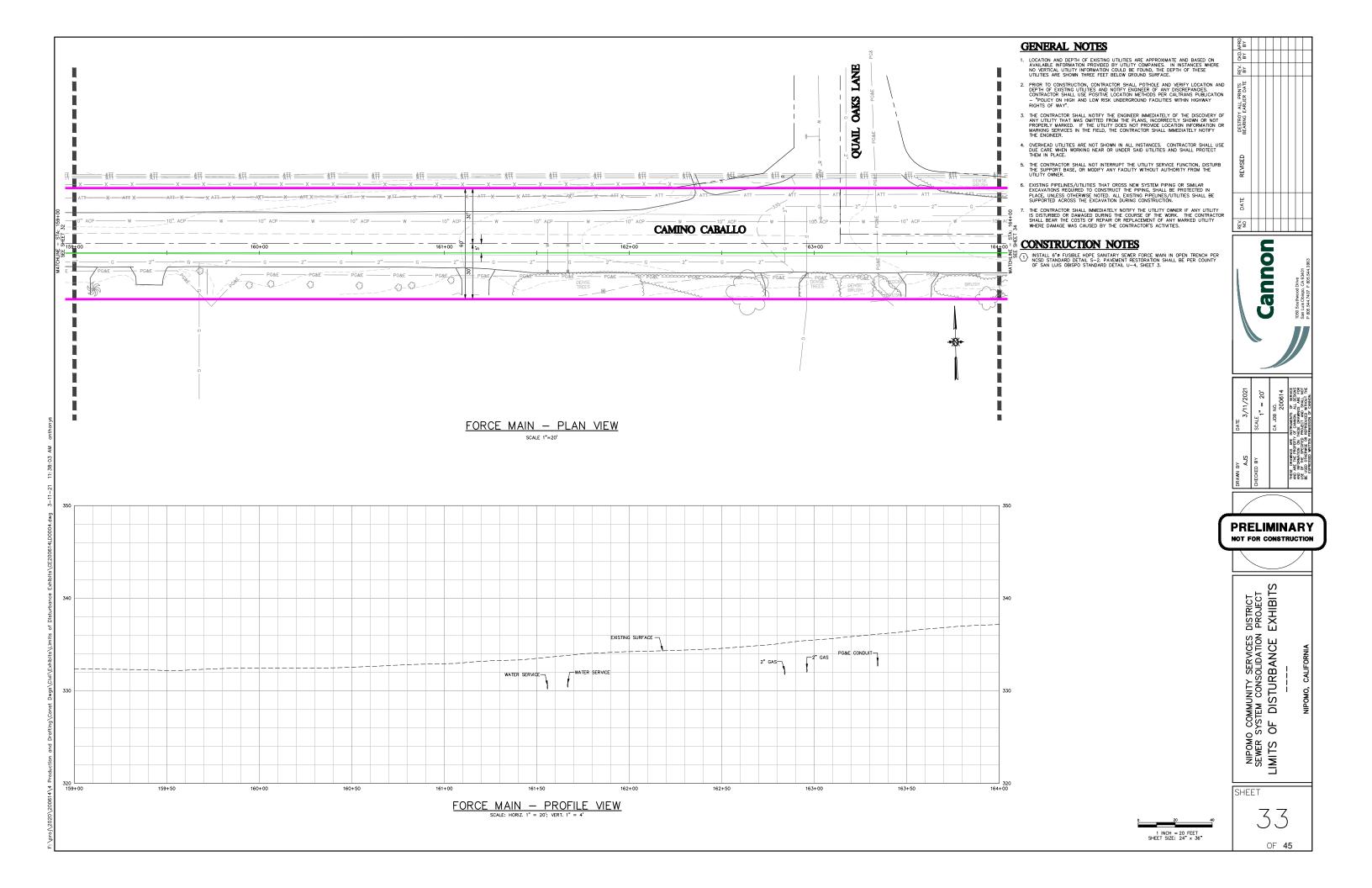
0 20 40 1 INCH = 20 FEET SHEET SIZE: 24" x 36"

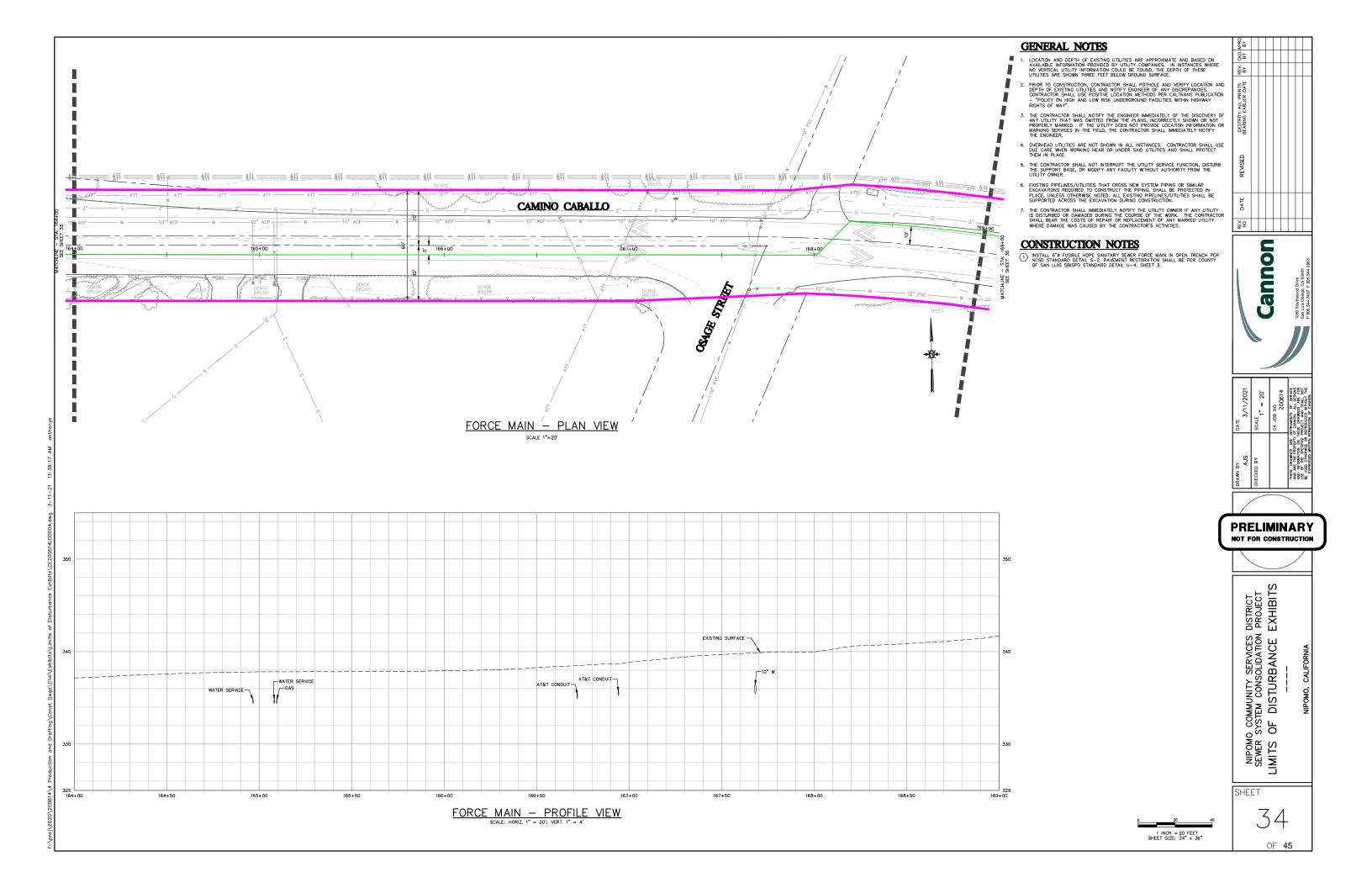


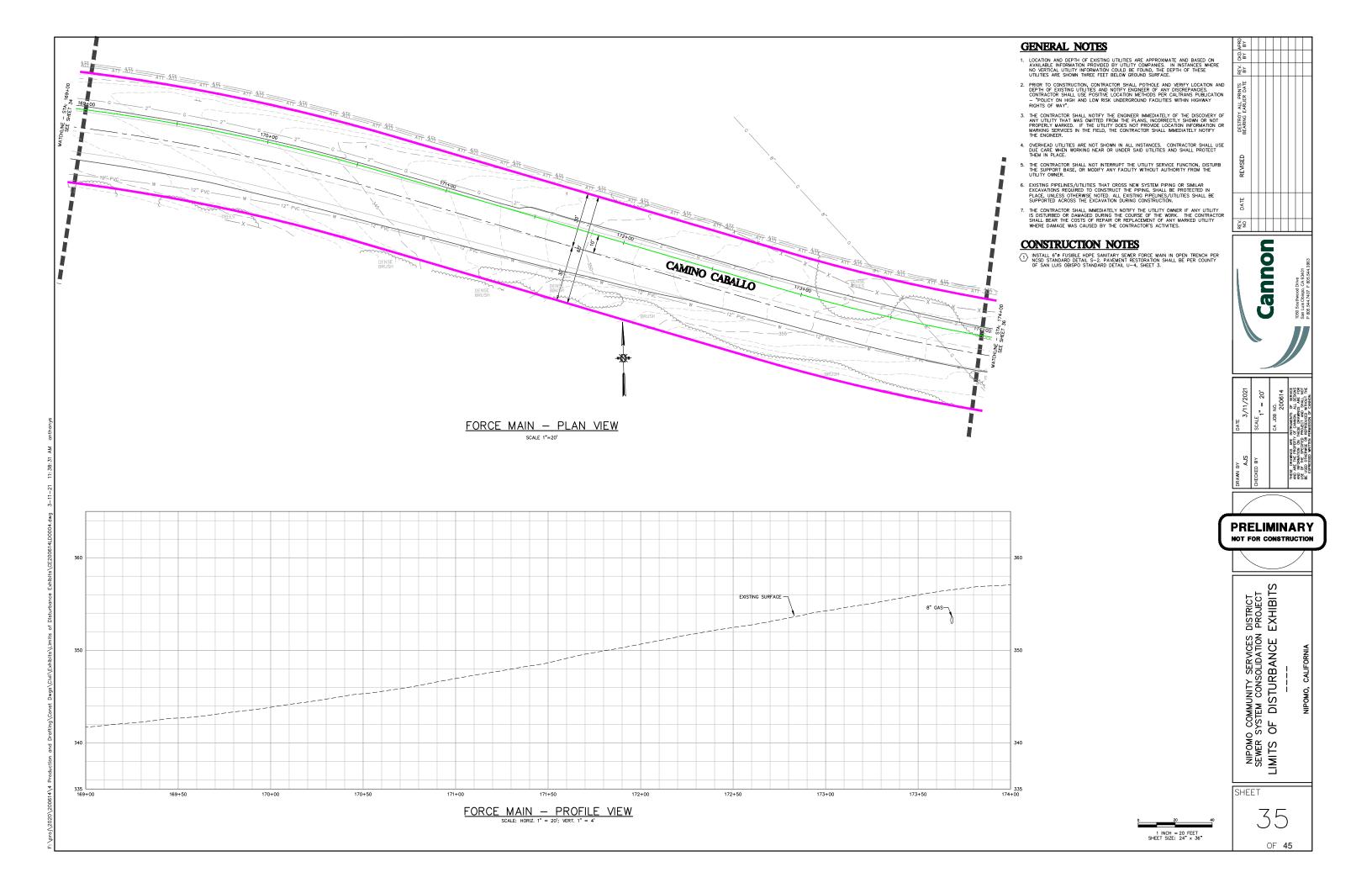


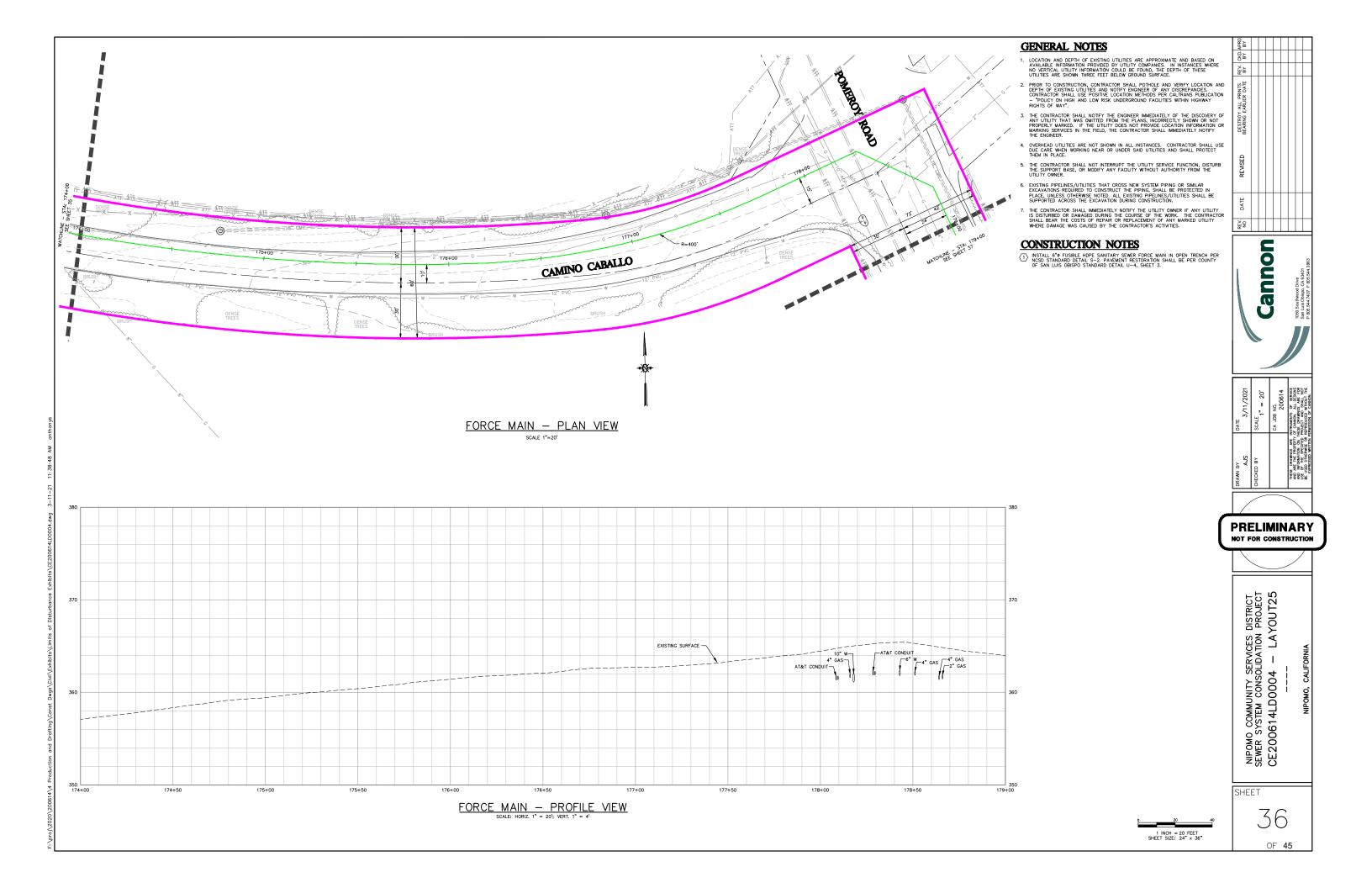


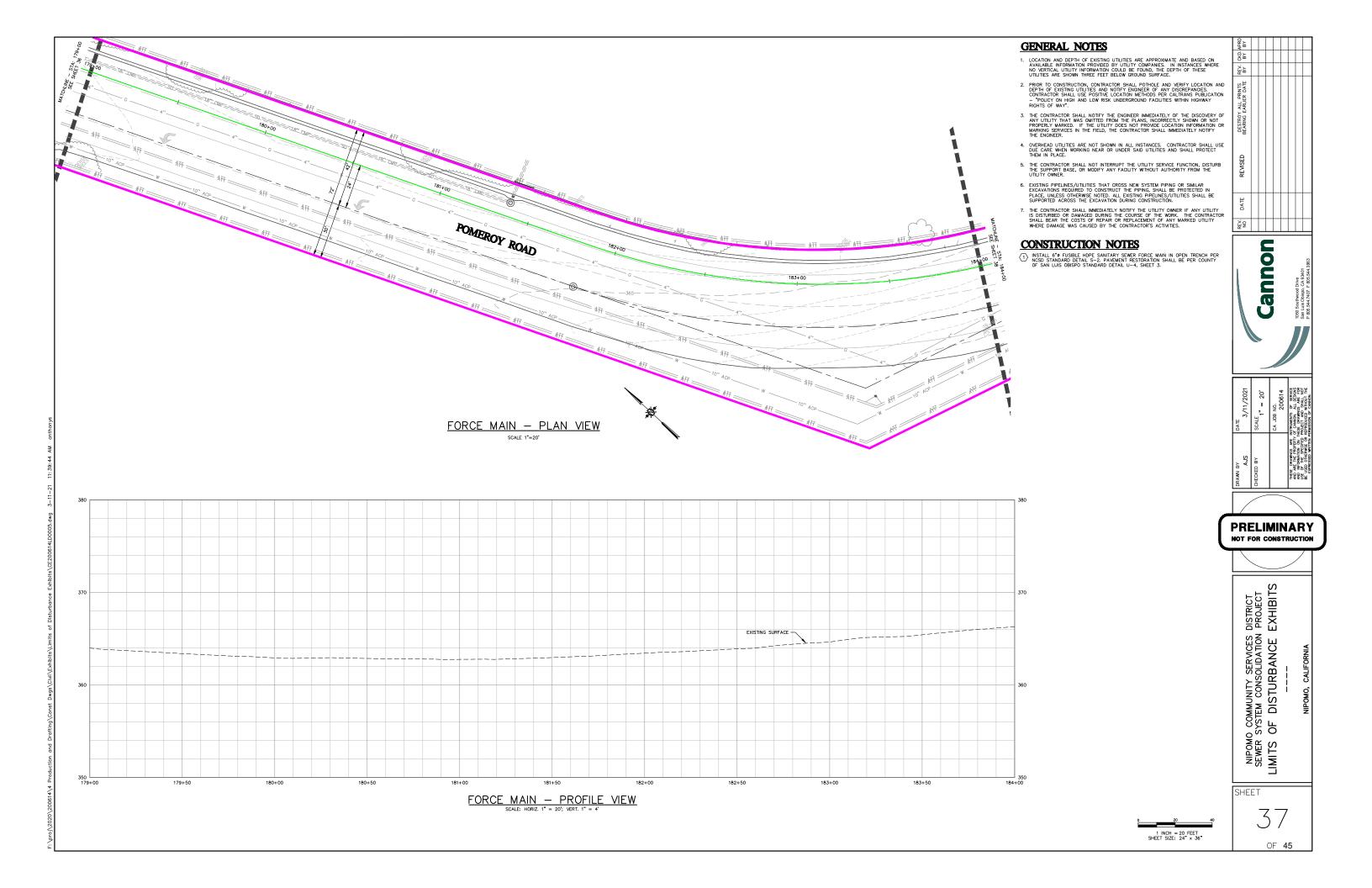


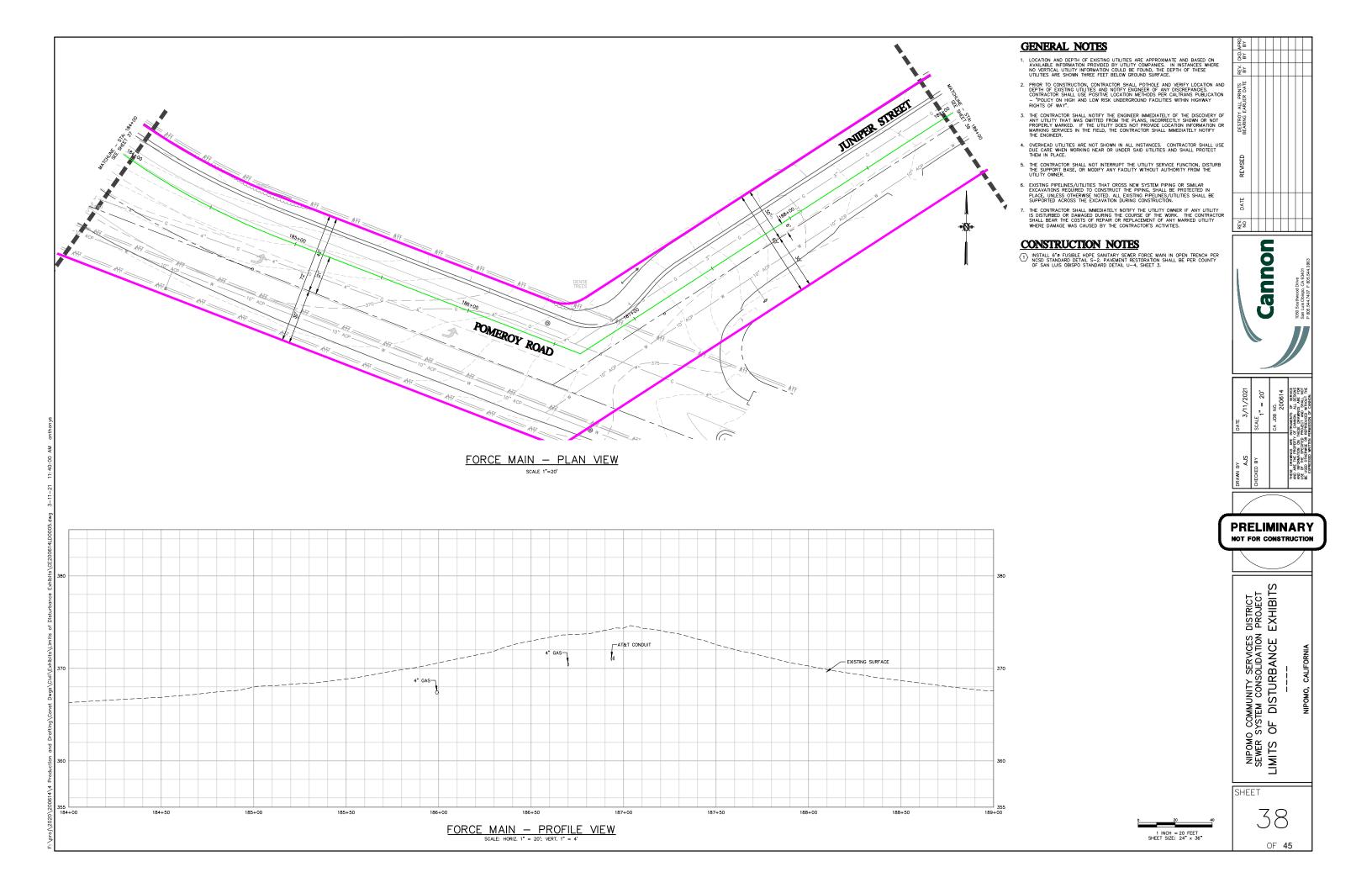


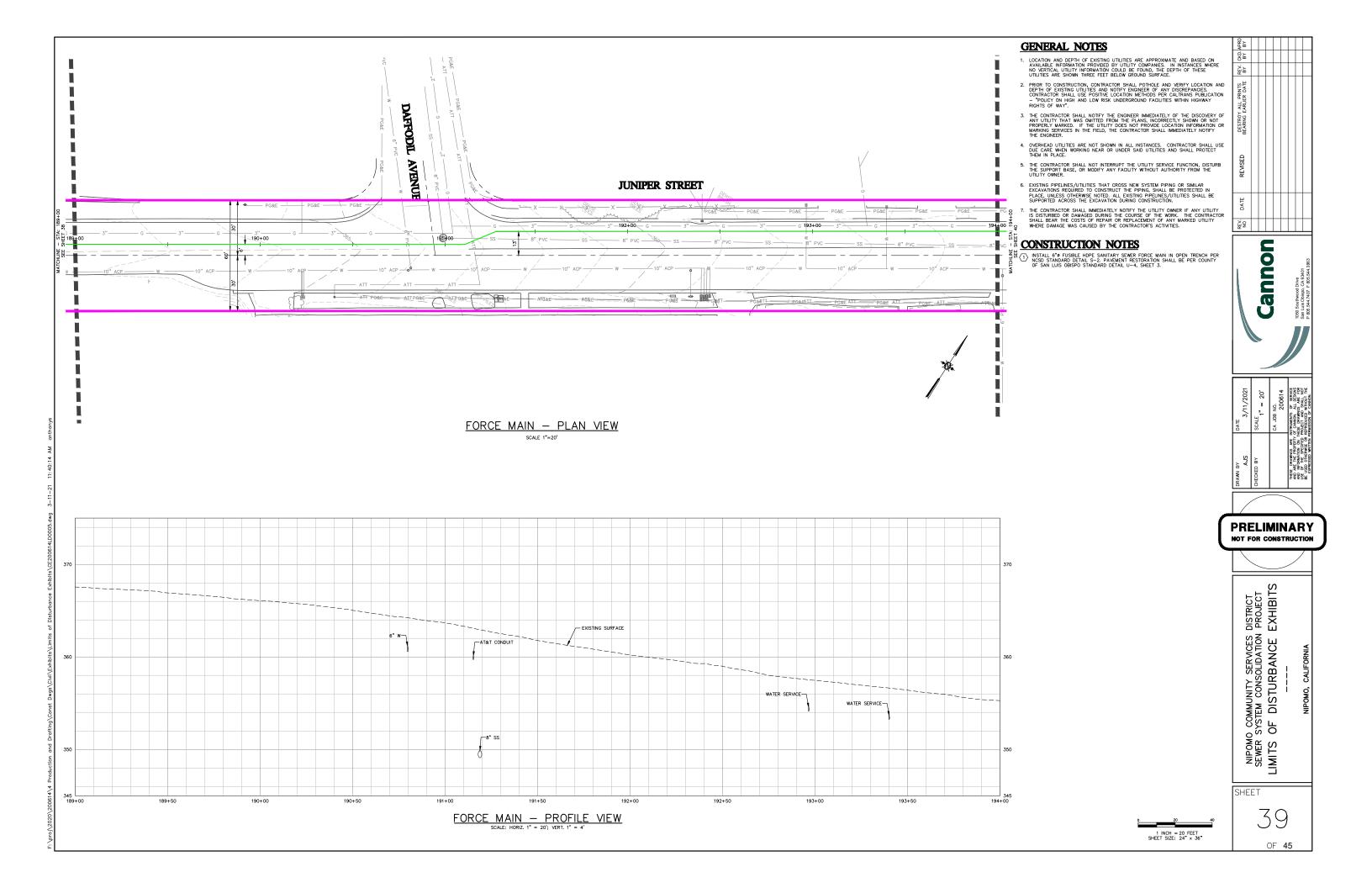


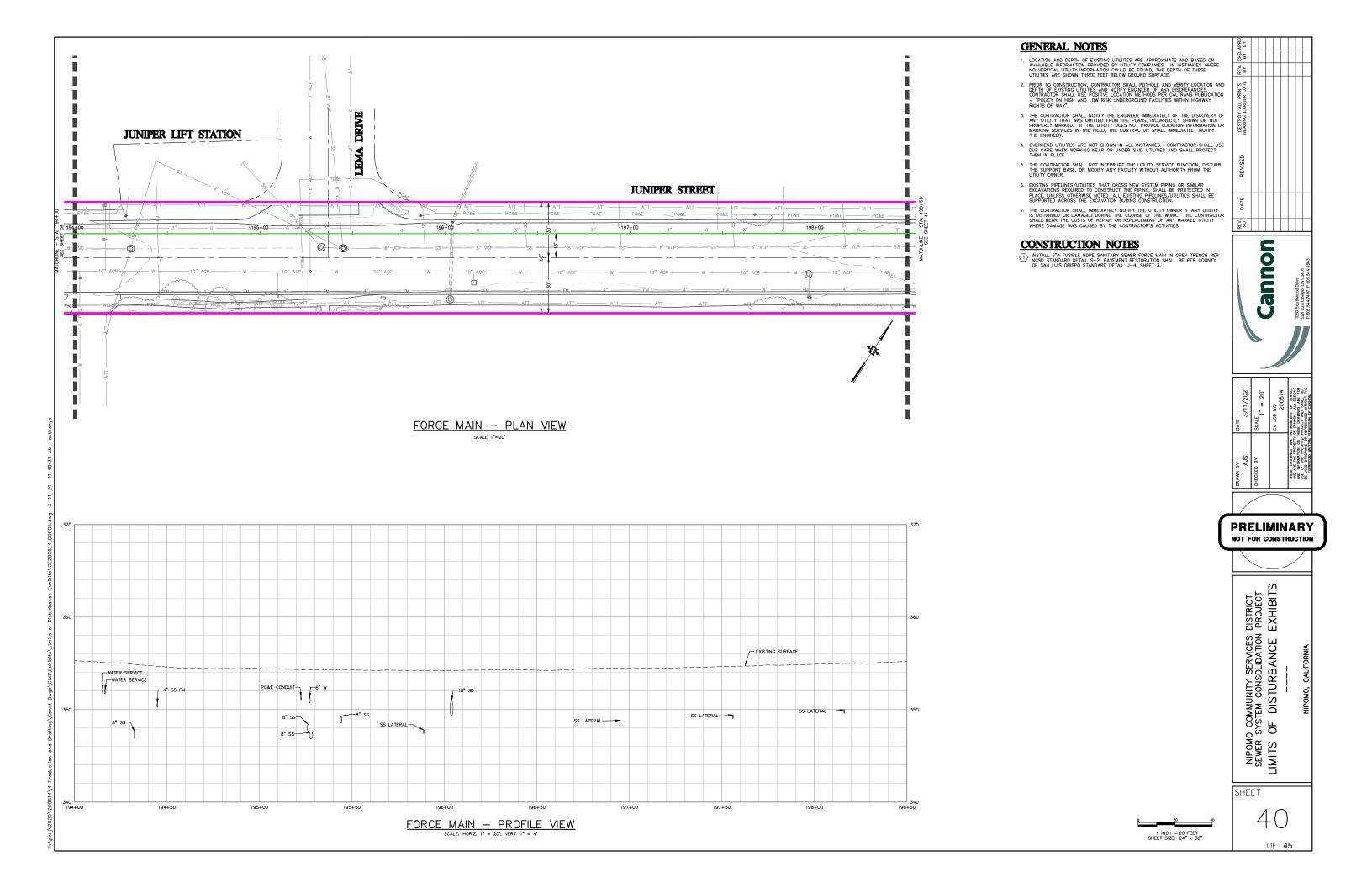


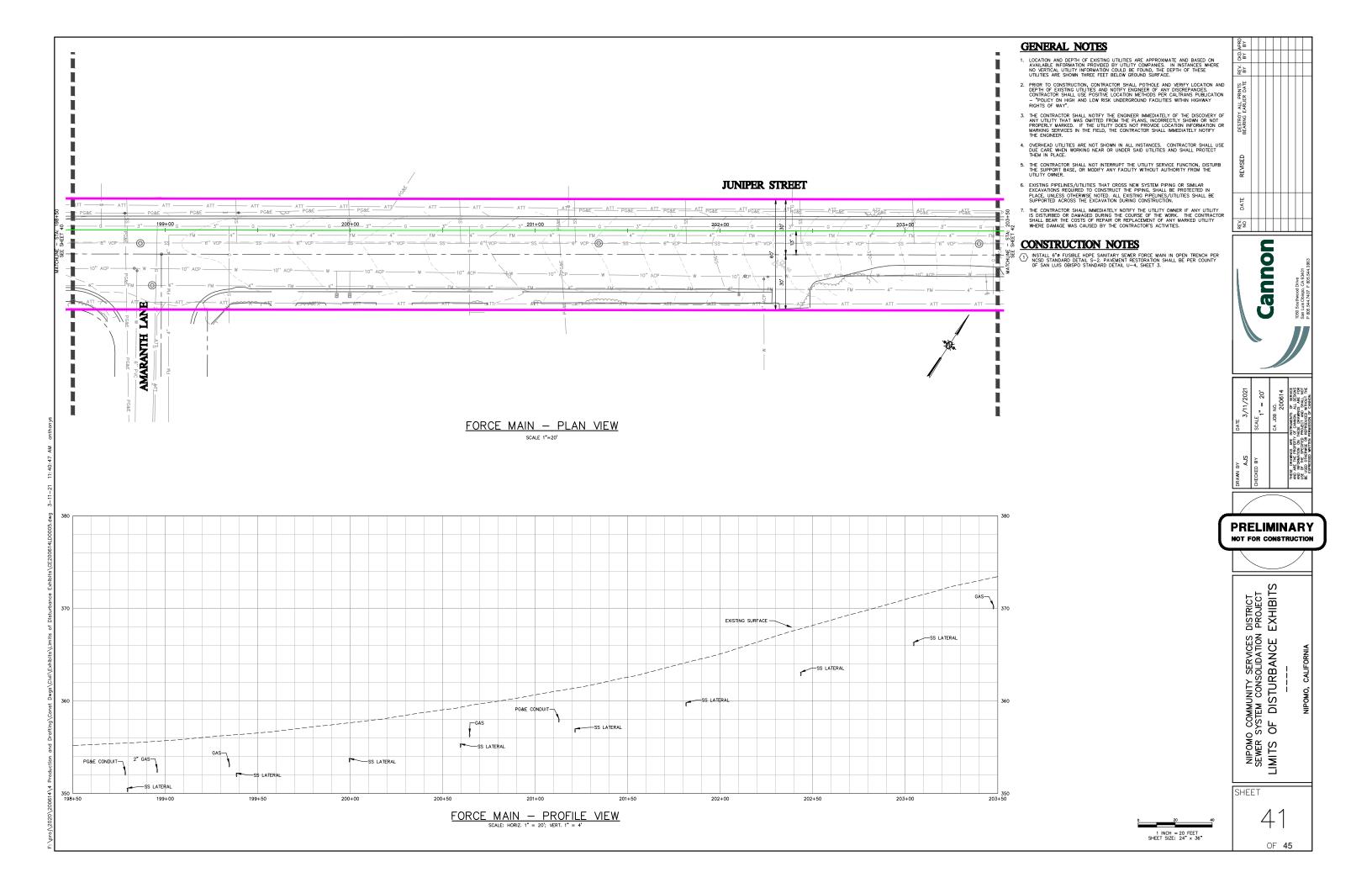


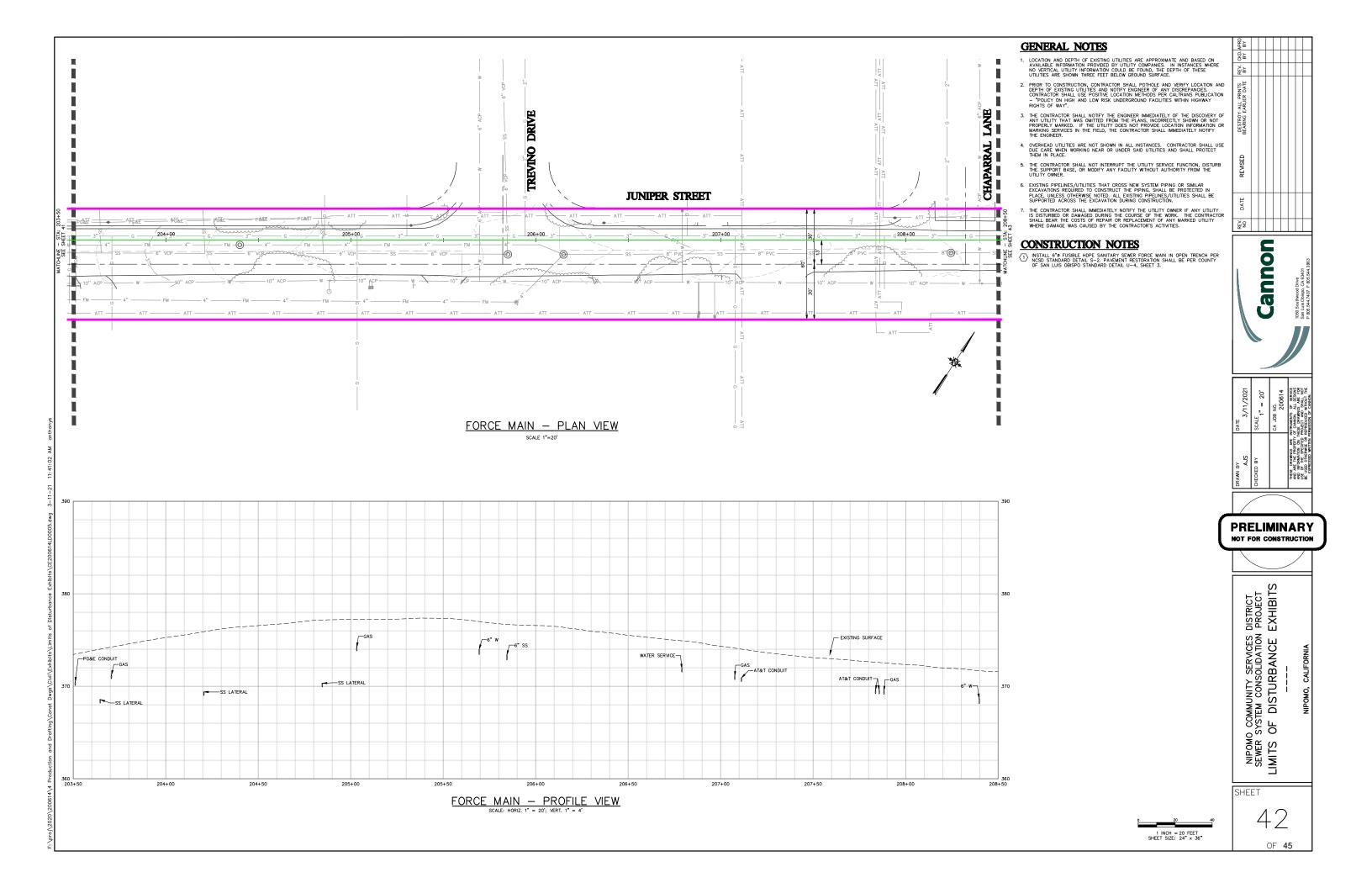


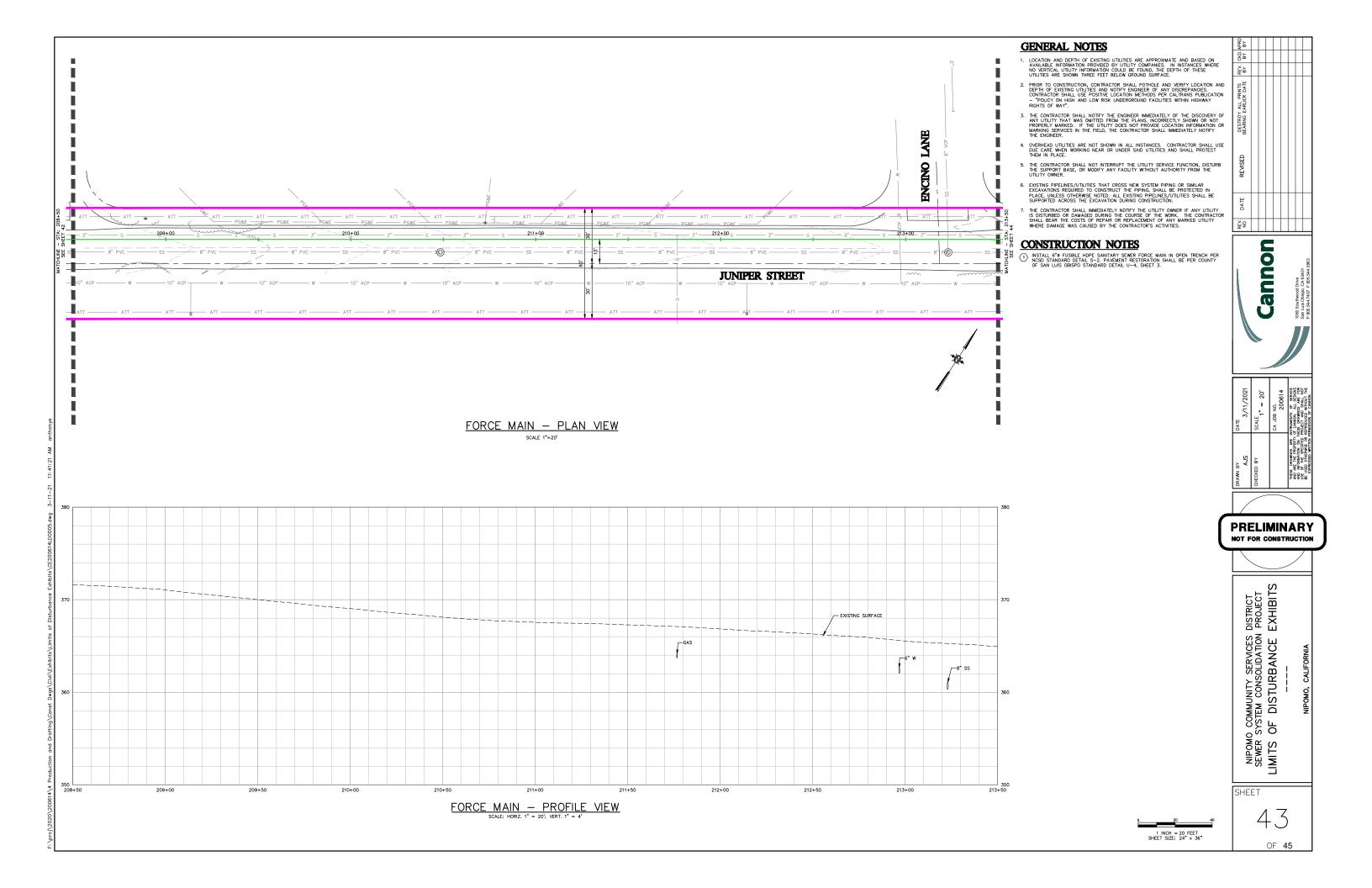


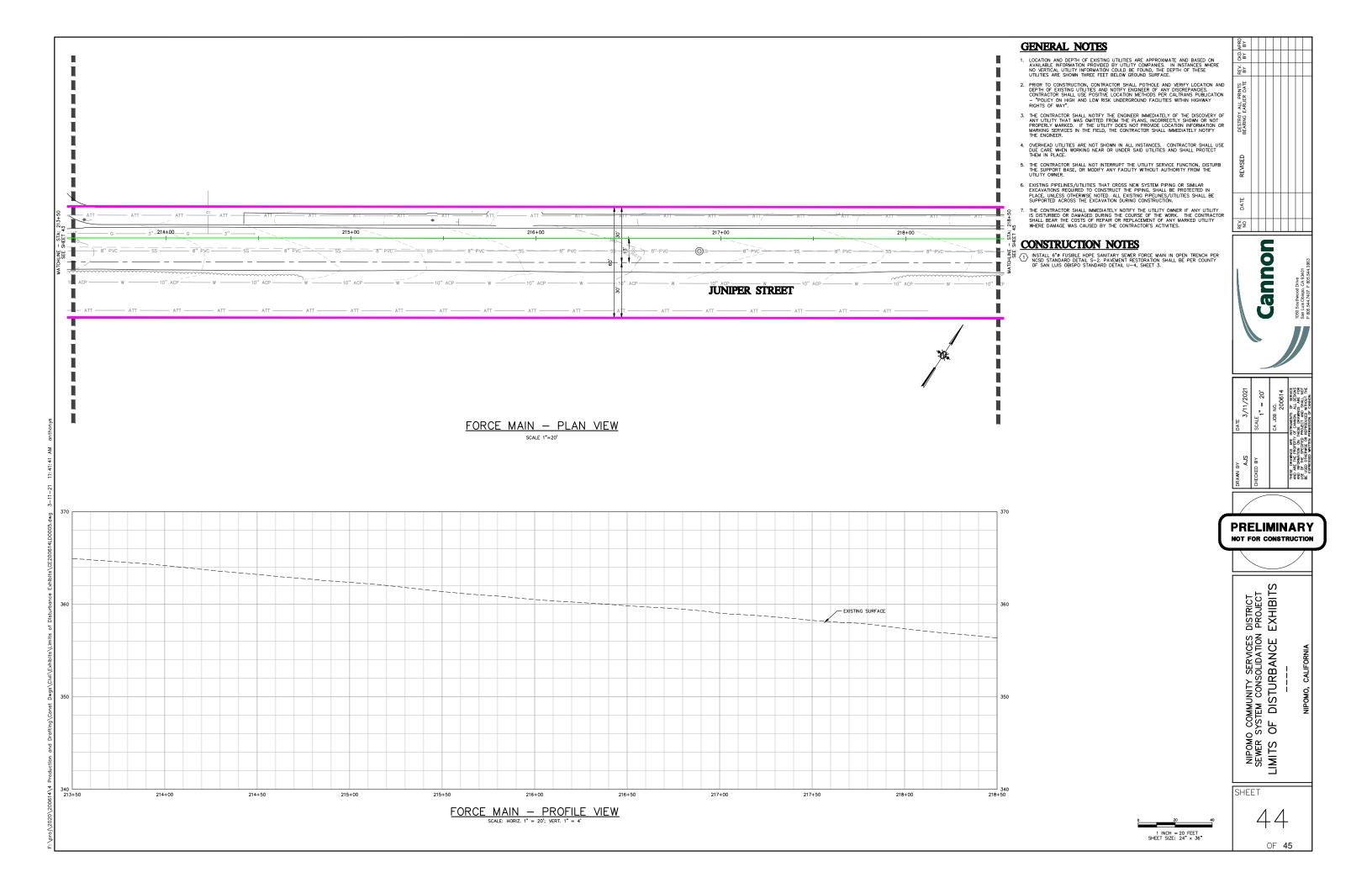


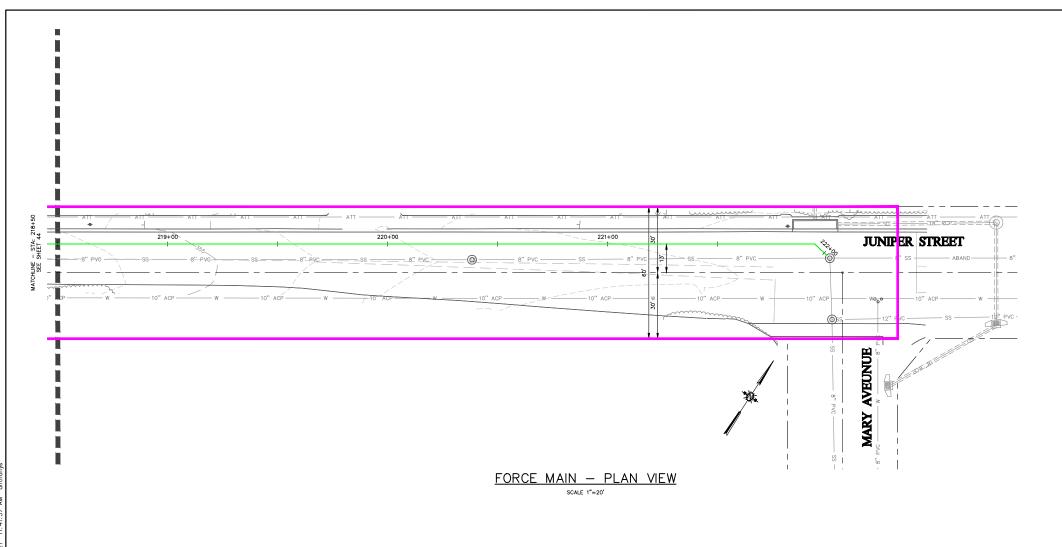


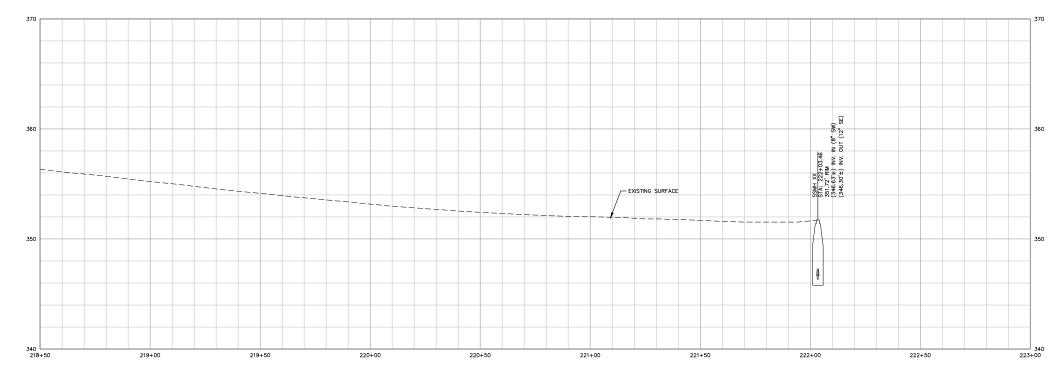












FORCE MAIN — PROFILE VIEW

SCALE: HORIZ. 1" = 20"; VERT. 1" = 4"

GENERAL NOTES

- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE INFORMATION PROVIDED BY UTILITY COMPANIES. IN INSTANCES WHERE NO VERTICAL UTILITY INFORMATION COULD BE FOUND, THE DEPTH OF THESE UTILITIES ARE SHOWN THREE FEET BELOW GROUND SURFACE.
- 2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL POTHOLE AND VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL USE POSITIVE LOCATION METHOS PER CALITRANS PUBLICATION "POLICY ON HIGH AND LOW RISK UNDERGROUND FACILITIES WITHIN HIGHWAY RIGHTS OF WAY".
- 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF THE DISCOVERY OF ANY UTILITY THAT WAS OMITTED FROM THE PLANS, INCORRECTLY SHOWN OR NOT PROPERLY MARKED. IF THE UTILITY DOES NOT PROVIDE LOCATION INFORMATION OR MARKING SERVICES IN THE FIELD, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- 4. OVERHEAD UTILITIES ARE NOT SHOWN IN ALL INSTANCES. CONTRACTOR SHALL USE DUE CARE WHEN WORKING NEAR OR UNDER SAID UTILITIES AND SHALL PROTECT THEM IN PLACE.
- 5. THE CONTRACTOR SHALL NOT INTERRUPT THE UTILITY SERVICE FUNCTION, DISTURB THE SUPPORT BASE, OR MODIFY ANY FACILITY WITHOUT AUTHORITY FROM THE UTILITY OWNER.
- 6. EXISTING PIPELINES/UTILITIES THAT CROSS NEW SYSTEM PIPING OR SIMILAR EXCAVATIONS REQUIRED TO CONSTRUCT THE PIPING, SHALL BE PROTECTED IN PLACE, UNLESS OTHERWISE NOTED. ALL EXISTING PIPELINES/UTILITIES SHALL BE SUPPORTED ACROSS THE EXCAVATION DURING CONSTRUCTION.
- 7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER IF ANY UTILITY IS DISTURBED OR DAMAGED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BEAR THE COSTS OF REPAIR OR REPLACEMENT OF ANY MARKED UTILITY WHERE DAMAGE WAS CAUSED BY THE CONTRACTOR'S ACTIVITIES.

CONSTRUCTION NOTES

INSTALL 6"# FUSIBLE HDPE SANITARY SEWER FORCE MAIN IN OPEN TRENCH PER NOSO STANDARD DETAIL 5-2. PAVEMENT RESTORATION SHALL BE PER COUNTY OF SAN LUIS OBISPO STANDARD DETAIL U-4, SHEET 3.

| APRD BY | | | | |
|---|--|--|--|--|
| REV. CKD. APRD BY BY BY | | | | |
| REV. BY | | | | |
| REVISED DESTROY ALL PRINTS BEARING EARLIER DATE | | | | |
| _ | | | | |
| DATE | | | | |
| REV. NO | | | | |



| DATE 3/11/2021 | SCALE 1" = 20' | CA JOB NO. 200614 | INSTRUMENTS OF SERVICE 7 OF CANNON. ALL DESIGNS THESE DRAWNGS ARE FOR PROJECT AND SHALL NOT REPRODUCED WITHOUT THE PERMISSION OF CANNON. |
|-------------------|----------------|----------------------|--|
| DRAWN BY AJS | снескер ву | | THESE DRAWINGS ARE INSTRUMENTS AND ARE THE PROPERTY OF CANNON, AND INFORMATION ON THESE DRAWN USE OF THE SPECIFIED PROJECT AND BE USED OTHERWISE OR REPRODUCED EXPRESSED WRITTEN PERMISSION ON |

PRELIMINARY NOT FOR CONSTRUCTION

NIPOMO COMMUNITY SERVICES DISTRICT SEWER SYSTEM CONSOLIDATION PROJECT CE200614LD0005 - LAYOUT9

SHEET

OF **45**

1 INCH = 20 FEET SHEET SIZE: 24" x 36"

APPENDIX C

Blacklake Sewer System Consolidation Project Southland WWTF Capacity Evaluation



DRAFT TECHNICAL MEMORANDUM

To: Peter Sevcik, PE

Director of Engineering and Operations Nipomo Community Services District

From: Jake Smith, EIT

Eileen Shields, PE

(Submitted Electronically)

Date: June 22, 2021

Re: Blacklake Sewer System Consolidation Project Southland WWTF Capacity Evaluation

1.0 Introduction

The Nipomo Community Services District (District) is developing the Blacklake Sewer System Consolidation Project to regionalize wastewater treatment at a single District facility. Existing influent wastewater from the Blacklake sewer collection system will be diverted from the Blacklake Water Reclamation Facility (WRF) to the Southland Wastewater Treatment Facility (WWTF) through the installation of a lift station at the existing Blacklake WRF site and construction of a force main to convey wastewater from the Blacklake system to the Town sewer system for conveyance and treatment at the Southland WWTF. The existing Blacklake WRF will be demolished.

The purpose of this technical memorandum is to evaluate the capacity of the existing Southland WWTF to handle the increased flow and loading from consolidation with the Blacklake Sewer System. This analysis includes a review of past flow and loading records since the Southland WWTF Phase I Improvements Project was completed; with review of flow and loading projections from the Southland WWTF Phase 1 Conceptual Design Report (AECOM, December 2010) and the Blacklake Sewer Master Plan (MKN, October 2017, "Blacklake SMP").

2.0 Background

Southland WWTF is a secondary wastewater treatment facility that uses an influent lift station, fine screens, grit removal, an in-pond extended aeration system (Parkson Biolac®), and secondary clarification. The WWTF also has an existing gravity belt thickener and concrete lined sludge drying beds for waste sludge dewatering. The District is in the process of installing a dewatering screw press to assist in waste sludge dewatering, particularly during wet weather. The process flow diagram and design parameters from the Southland WWTF Phase 1 Improvements plans are included as Appendix A.

3.0 Influent Flow and Loading Analysis

Several flow conditions were used in this analysis. Historical flow and water quality data was analyzed from both the Blacklake WRF and the Southland WWTF between June 2018 and June 2020. Average annual and max monthly flows were calculated from each year's data set, which were used to calculate influent water quality loading values for 5-day biological oxygen demand (BOD₅), total suspended solids (TSS) and total kjeldahl nitrogen (TKN). Additional flow and



load buildout projections from the Blacklake SMP were used. The flow conditions used throughout this memorandum are defined below.

- Average Daily Flow (ADF): The total wastewater flow received at the wastewater treatment facility averaged over the number of days per year.
- Average Daily Flow (ADF): The total wastewater flow received at the wastewater treatment facility averaged over the number of days per year.
- Maximum Month Flow (MMF): The average daily flow during the month with the maximum cumulative flow. MMF is often the basis for a facility's permitted flow limit.
- Peak Day Flow (PDF): The maximum daily flow rate experienced at the facility and used to design or evaluate hydraulic retention times for certain treatment processes.
- Peak Hour Flow (PHF): The maximum one-hour flow experienced by the facility is typically used for sizing piping, pump stations, flow meters and headworks systems. Peak hour flow is typically derived from facility influent records, flow monitoring, or empirical equations used to estimate PHF based on service area population.

4.0 Southland Historical Flows and Water Quality

MKN reviewed Southland WWTF influent flow and water quality records for July 2018 through June 2020. A summary of the data is provided in Table 4-1 below. While the actual influent flow rates are lower than the projected values from the Southland WWTF MP, the BOD_5 and TSS concentrations are higher than projected. This has a significant impact on the WWTF capacity.

MKN and District staff reviewed influent flow meter records. Over the past year, the PDF occurred on March 22, 2020. The highest hourly flow on this day was 1.3 MGD. This flow was compared to the current AAF for the Southland WWTF to calculate a peaking factor (PF) of 2.6.



| Table 4-1: Historical Southland WWTF Influent Flow and Loading | | | | |
|--|-----------|-------|--|--|
| (July 2018 – Ju | une 2020) | | | |
| Parameter | Unit | Value | | |
| AAF | MGD | 0.50 | | |
| MMF | MGD | 0.51 | | |
| PHF | MGD | 1.3 | | |
| Average BOD₅ concentration | mg/L | 391 | | |
| Average BOD₅ load | ppd | 1,630 | | |
| Max Month BOD₅ concentration | mg/L | 537 | | |
| Max Month BOD₅ load | ppd | 2240 | | |
| Average TSS concentration | mg/L | 299 | | |
| Average TSS load | ppd | 1,246 | | |
| Max Month TSS concentration | mg/L | 509 | | |
| Max Month TSS load | ppd | 2,123 | | |
| Average TKN concentration | mg/L | 56 | | |
| Average TKN load | ppd | 234 | | |
| Max Month TKN concentration | mg/L | 71 | | |
| Max Month TKN load | ppd | 296 | | |

| Table 4-2: Southland WWTF Improvements – Phase 1 Concept Design Report (AECOM, December 2010) Phase 1 Design Influent Flows and Loads | | | | |
|---|------|-------------------|--|--|
| Parameter | Unit | Phase 1 Design | | |
| AAF | MGD | 0.84 | | |
| MMF | MGD | 0.90 | | |
| PDF | MGD | 1.03 | | |
| PHF | MGD | 2.43 | | |
| Average Annual BOD₅ Loading | ppd | 1,750 | | |
| Average Annual TSS Loading | ppd | 1,750 | | |
| Maximum Monthly BOD₅ Loading | ppd | 2,100 | | |
| Maximum Monthly TSS Loading | ppd | 2,100 | | |

A comparison of the Phase 1 design values to the existing flow and loading at the Southland WWTF indicates the flows are at approximately 60% of the WWTF capacity (on an AAF basis), but the BOD_5 and TSS loads are at or slightly above the plant design capacity.



5.0 Blacklake WRF Historical Flows and Water Quality

In 2018, the District began measuring the BOD_5 and TSS for Blacklake WRF's influent. Data from June of 2018 to June of 2020 was evaluated and the average and maximum month BOD_5 and TSS concentrations were determined. These concentrations were multiplied by the corresponding flowrates to determine influent loading conditions in pounds per day (ppd). This data, in addition to flowrates taken from the 2017 Blacklake SMP, was used to analyze the Southland WWTF capacity to handle existing and projected flows and loading. The table below summarizes the existing and projected buildout flow and loading from Blacklake using current, measured influent water quality. The concentrations are higher than anticipated in the Blacklake SMP.

Hourly influent flows are not measured at the Blacklake WRF. The 2017 Blacklake SMP used a peaking factor of 4.0 to estimate existing and future PHF's at Blacklake WRF.

| Table 5-1: Blacklake WRF Existing and Projected Influent Flow and Load | | | | | | |
|--|------|----------|----------|--|--|--|
| Parameter | Unit | Existing | Buildout | | | |
| ADF | MGD | 0.055 | 0.058 | | | |
| MMF | MGD | 0.074 | 0.08 | | | |
| PHF | MGD | 0.221 | 0.230 | | | |
| Average Annual BOD ₅ Concentration | mg/L | 313 | 313 | | | |
| Average Annual BOD₅ Load | ppd | 144 | 152 | | | |
| Maximum Month BOD ₅ Concentration | mg/L | 511 | 511 | | | |
| Maximum Month BOD₅ Load | ppd | 234 | 247 | | | |
| Average Annual TSS Concentration | mg/L | 275 | 275 | | | |
| Average Annual TSS Load | ppd | 126 | 133 | | | |
| Maximum Month TSS Concentration | mg/L | 399 | 399 | | | |
| Maximum Month TSS Load | ppd | 183 | 193 | | | |
| Notes: Flows are based on the analysis in the Blacklake SMP. Influent concentrations are based on 2018 – 2020 sampling data. | | | | | | |

6.0 Result of Regionalization: Combined Existing and Projected Flows and Water Quality

Through the Blacklake Sewer System Consolidation Project, the Blacklake WRF will be replaced with a sewage lift station to transport influent to the Southland WWTF through a force main along Sundale/Camino Caballo. In order to determine whether the Southland WWTF has the capacity to handle the added influent from Blacklake, the combined existing and projected influent flows and loading rates were analyzed.

As a result of the influent from Blacklake being transmitted through a force main and then being conveyed through a gravity sewer main, the rate of flow from Blacklake will likely be dampened to some extent before reaching the Southland WWTF. As such, using the same peak hour flowrates that were assumed for the Blacklake WRF to estimate the increased inflow to the Southland WWTF is a conservative analysis.



The existing combined flow values were estimated by adding the influent flow data for the Southland WWTF from 2018 through 2020 with the existing flows for the Blacklake WRF as outlined in the Blacklake SMP. The future combined flow values were estimated by adding the existing Southland WWTF flows and the estimated buildout flows for the Blacklake WRF from the Blacklake SMP.

The anticipated combined loading rates in pounds per day (ppd) were calculated by adding the measured loads from the 2018 through 2020 influent data at Southland WWTF and Blacklake WRF. The combined influent constituent concentrations were estimated by dividing the loads in ppd by the respective flow rate.

The projected influent concentrations were assumed to remain the same as the existing concentrations. The estimated future loading rates in ppd were calculated using the respective projected flow rate.

| Table 6-1: Combined Existing and Projected Future Influent Flows and Loadings | | | | | | |
|---|------|----------|--------|--|--|--|
| Parameter | Unit | Existing | Future | | | |
| ADF | MGD | 0.555 | 0.629 | | | |
| MMF | MGD | 0.584 | 0.689 | | | |
| PHF | MGD | 1.521 | 1.53 | | | |
| Average Annual BOD₅ | mg/L | 380 | 380 | | | |
| Concentration | | | | | | |
| Average Annual BOD₅ Load | ppd | 1759 | 1991 | | | |
| Maximum Month BOD₅ | mg/L | 529 | 529 | | | |
| Concentration | | | | | | |
| Maximum Month BOD₅ Load | ppd | 2450 | 3040 | | | |
| Average Annual TSS Concentration | mg/L | 294 | 294 | | | |
| Average Annual TSS Load | ppd | 1361 | 1544 | | | |
| Maximum Month TSS | mg/L | 469 | 469 | | | |
| Concentration | | | | | | |
| Maximum Month TSS Load | ppd | 2170 | 2697 | | | |

7.0 Southland WWTF Process Capacity Analysis

The ability of each process to handle the anticipated combined existing and future flows and loads was reviewed. Results are summarized in the subsections below.

7.1 Influent Lift Station

The existing influent lift station at the Southland WWTF consists of two screw centrifugal pumps with 20 horsepower motors, each with a capacity of 1,700 GPM (2.45 MGD) at 30 feet of total dynamic head (TDH). The pumps alternate during operation to provide 100% redundancy.

The existing combined influent PHF is estimated to be 1.521 MGD, which leaves a capacity of 0.929 MGD while maintaining one pump for standby.



| Table 7-1: Influent Lift Station Capacity (One Pump Operating) | | | | | | |
|--|-------|-----------------|-------------------|-----------------|--|--|
| Flow Condition | Units | Design Capacity | Existing Combined | Future Combined | | |
| Peak Hour Flow | MGD | 2.45 | 1.521 | 1.53 | | |
| Available Capacity | MGD | - | 0.929 | 0.92 | | |

The influent flow rate should be monitored to determine the combined peak hour flow in order to confirm or revise the peaking factor. As noted earlier herein, it is possible that the flows from the new Blacklake lift station will be dampened in the Town collection system, reducing the overall peak flow to Southland WWTF. However, if hourly flows are anticipated to increase to more than 2.45 MGD, a third pump would be required.

The 2012 Conceptual Design Report (CDR) for Southland WWTF outlined the future installment of a third pump to handle increased flow in future phases. The wet well was sized for this anticipated upgrade and piping was installed to allow for the upgrade for a third similarly-sized pump to handle the increased influent PHF while maintaining one offline pump for standby. We recommend installing the third pump when peak hour flows reach 75 to 80% of the capacity of one pump, approximately 1,300 GPM (1.87 MGD).

7.2 Influent Screens

Southland's existing headworks screen system consists of two shaftless screw screens, designed for a peak flow of 4.83 MGD. With a rated equipment capacity of 5.5 MGD each, the headworks screens have the ability to handle anticipated combined existing and future Blacklake peak hour flow rates.

7.3 Grit Removal

Southland WWTF's existing grit removal system consists of one vortex-type grit tank with a single self-priming grit pump. One grit tank was installed during the Phase 1 Improvements, with provisions to add a second in the future. The grit tank was designed for a peak flow of 2.5 MGD. The combined existing influent PHF is estimated to be 1.521 MGD. This leaves approximately 0.98 MGD available capacity.

7.4 Extended Aeration System

7.4.1 Aeration Basin Capacity

Southland WWTF currently operates one extended aeration basin with a total volume of 1.41 million gallons (MG) and a design mixed liquor suspended solids (MLSS) concentration of 3,223 mg/L. Typical design criteria for volumetric loading for an extended aeration system is from 5 to 15 pounds BOD₅ per day (ppd) per 1000 cubic feet of basin volume¹. Given the volume of the designed aeration basin, the design and projected combined volumetric loads are compared with the design minimum and maximum capacity in the table below.

¹ Wastewater Engineering Treatment & Reuse, 4th Edition, Tchbanoglous, et. al.



| Table 7-2: Existing and Future Extended Aeration Basin Volumetric BOD Load | | | | | | | |
|--|----------------|---|-------------------------|----------|----------------------|--------------------|--|
| Condition | Units | Recommended Design Criteria (Min – Max) | Phase 1 Design Value | Existing | Existing Combined | Future Combined | |
| Average Annual BOD₅ Load | ppd/1000 CF | 5 - 15 | 9.3 | 8.6 | 9.3 | 11 | |
| Maximum Month BOD₅ Load | ppd/1000 CF | 5 - 15 | 11 | 12 | 13 | 16 | |

The current combined maximum month BOD_5 load is within the recommended range for volumetric loading. The volumetric load under future combined maximum month conditions is slightly higher than the maximum design criteria, at 16 ppd of BOD_5 per 1000 cubic feet of aeration basin volume, indicating a second aeration basin may be needed for future flows.

Another measure of aeration basin capacity is the food-to-microorganism ratio (F:M). This metric compares the influent BOD_5 load to the concentration of microorganisms in the basin and is measured in units of pounds of BOD_5 per pounds of mixed-liquor volatile suspended solids per day (Ib BOD/Ib MLVSS-day). The recommended range for F:M for an extended aeration system is 0.04 - 0.1 lb BOD/Ib MLVSS-day².

| Table 7-3: Existing and Future Extended Aeration Basin Food to Microorganism Ratio | | | | | | | |
|--|------------------------|---|-------------------------|----------|----------------------|--------------------|--|
| Condition | Units | Recommended Design Criteria (Min – Max) | Phase 1 Design Value | Existing | Existing Combined | Future Combined | |
| Average Annual BOD ₅ Load | lb BOD/lb MLVSS-day | 0.04 - 0.1 | 0.07 | 0.06 | 0.07 | 0.08 | |
| Maximum Month BOD₅ Load | lb BOD/lb MLVSS-day | 0.04 - 0.1 | 0.08 | 0.07 | 0.08 | 0.09 | |

The current and future combined F:M is within the recommended range for both average and maximum monthly conditions. However, the future combined F:M is high, at 0.09 lb BOD/lb MLVSS-day, indicating that a second aeration basin may be needed to provide operational flexibility and/or reliably meet permit requirements under future flows.

The Southland WWTF is maintaining a high level of treatment performance when considering BOD_5 and TSS effluent limits. These parameters are regulated on a 30-day average basis and a daily maximum basis. The District takes weekly samples. Table 7-4 summarizes the historical effluent quality for Southland WWTF.

2

² Wastewater Engineering Treatment & Reuse, 4th Edition, Tchbanoglous, et. al.



| Table 7-4: Historical Southland WWTF Effluent Quality (July 2018 – June 2020) | | | | | | |
|---|-------------|------------|------------|--|--|--|
| Condition | BOD₅ (mg/L) | TSS (mg/L) | TKN (mg/L) | | | |
| Average | 3.44 | 3.81 | 0.33 | | | |
| Maximum Month | 5.80 | 8.75 | 1.17 | | | |
| Maximum Day | 8.00 | 26.00 | 4.30 | | | |
| Permit Limit (30-day average) | 60 | 60 | NA | | | |
| Permit Limit (Daily Maximum) | 100 | 100 | NA | | | |

The historical maximum month and the maximum day BOD₅ and TSS concentrations are well within the permit limits. The Blacklake Sewer Consolidation Project is anticipated to increase the BOD₅ load to the WWTF by approximately 10 percent, equivalent to less than an additional 2 ppd per 1000 cubic feet. Regardless, initiation of planning and design for a second aeration basin is recommended.

7.4.2 Future Water Quality Requirements

The Central Coast Regional Water Quality Control Board (RWQCB) recently adopted General Waste Discharge requirements for Discharges from Domestic Wastewater Systems with Flows Greater than 100,000 gallons per day (Order No. R3-2020-0020). RWQCB staff have indicated that the Southland WWTF will likely be enrolled under this General Order. However, the schedule for this is not known. The General Order contains stricter effluent limits, including a total nitrogen limit of 10 mg/L and varying limits for salts, depending on the underlying groundwater basin. The General Order includes a provision allowing 24 months to come into compliance, for dischargers that are unable to meet the effluent requirements after enrollment under the Order. Additional time may be granted through a request for a time schedule order. The effluent limits parameters are summarized in the table below.



| Table 7-5: Genera | | 0-0020 Seconda and 6 of the O | | fluent Limits |
|---------------------------------|-----------------|----------------------------------|------------------|-------------------|
| Constituent | Units | 30-day Average | 7-day Average | Sample Maximum |
| BOD₅ | mg/L | 30 | 45 | NA |
| TSS | mg/L | 30 | 45 | NA |
| Settleable Solids | mg/L | 0.1 | 0.3 | 0.5 |
| рН | NA | 6.5 – 8.4 | NA | NA |
| Limits based on a 25 | 5-month rolling | median, for the | Lower Nipomo I | Mesa SubBasin |
| Total Nitrogen | mg/L | 10 | | |
| Total Dissolved Solids (TDS) | mg/L | 710 | | |
| Chloride | mg/L | 95 | | |
| Sulfate | mg/L | 250 | | |
| Boron | mg/L | 0.16 | | |
| Sodium | mg/L | 90 | | |

Notes: (1) The General Order indicates dischargers have two options for meeting requirements for Total Nitrogen, TDS and the other salt constituents. The discharger may comply with the effluent limitations specified, or the discharger will be required to implement a groundwater monitoring program to demonstrate compliance.

MKN reviewed historical effluent water quality to evaluate the existing WWTF performance regarding nitrogen reduction and ability to meet the future total nitrogen limit. The ability to meet the limits for TDS and other salts was not reviewed at this time.

Total nitrogen in wastewater includes ammonia, nitrate, nitrite, and organic nitrogen. The Parkson Biolac® system, when operated in the wave oxidation mode, has the ability to both nitrify (convert ammonia to nitrate) and denitrify (convert nitrate to nitrite and nitrogen gas). Between July 2018 and June 2020, the average effluent total nitrogen concentration was 20 mg/L, twice the 25-month rolling average limit in the new General Order. Average effluent nitrate concentration over the same period was also 20 mg/L and average ammonia concentration was 0.54 mg/L. These values indicate nitrification is occurring, but adequate denitrification is not. Additionally, based on discussions with District staff and field observations, the aeration system is being operated at the high end of the diffuser capacity in order to maintain the minimum dissolved oxygen concentration of 1 mg/L, required per the existing waste discharge requirements. Denitrification requires a low oxygen, or anoxic, environment. Adjusting the blower set points to reduce the amount of air supplied to the basin may increase denitrification potential.



The following steps are recommended to further evaluate the denitrification potential:

- Test for nitrate in the Southland WWTF influent to determine whether additional nitrogen loading is occurring.
- Reduce low dissolved oxygen set point from 0.5 mg/L to 0.4 or 0.3 mg/L.
- Investigate other ways to reduce the amount of air supplied to the basin, while maintaining minimum DO
 in the treated effluent, such as an aeration system at the effluent box downstream of the secondary
 clarifiers.

7.5 Secondary Clarifiers

There are two existing 55-foot diameter concrete circular secondary clarifiers operating at the Southland WWTF, each with a design overflow rate (OFR) of 240 gpd/ft² at ADF and 694 gpd/ft² at PHF. Industry standards³ recommend overflow rates of 200 – 400 gpd/ft² for average flow conditions and 600 – 800 gpd/ft² at peak flow conditions. Each clarifier is designed for a solids loading of 0.95 lbs/ft²/hr at average conditions and 1.67 lbs/ft²/hr at peak conditions. The design overflow rates and solids loading rates are compared with the anticipated existing combined flow and loading conditions in Table 7-6.

ARROYO GRANDE | BAKERSFIELD | FRESNO | IRVINE | SANTA CLARITA | VENTURA

³ Wastewater Engineering Treatment & Reuse, 4th Edition, Tchbanoglous, et. al.



| Table 7- | 6: Existing and | Future Seconda | ary Clarifier Load | ing |
|------------------------------------|-----------------------------|--------------------------|-----------------------------------|-----------------------------|
| | Average Overflow Rate | Peak Overflow Rate | Average Solids Loading Rate | Peak Solids Loading Rate |
| Units | gpd/ft² | gpd/ft² | lb/ft²/hr | lb/ft²/hr |
| Design Value | 240 | 694 | 0.95 | 1.67 |
| Recommended Range/Value | 200 - 400 | 600 - 800 | 0.2 - 1.0 | 1.4 |
| Existing Combined (1 Clarifier) | 234 | 640 | 0.65 | 1.69 |
| Future Combined (1 Clarifier) | 265 | 644 | 0.74 | 1.80 |
| Existing Combined (2 Clarifiers) | 117 | 320 | 0.33 | 0.90 |
| Future Combined (2 Clarifiers) | 132 | 322 | 0.37 | 0.90 |

With one clarifier operating, the existing combined average OFR falls well within the recommended range outlined by Tchbanoglous, et al, as does the combined peak OFR. The average solids loading rate falls within the recommended range for one clarifier, however the peak solids loading rate exceeds the recommended value by 0.29 lb/ft²/hr.

With two clarifiers operating the existing combined average OFR falls under the lower bound of the recommended range and the peak OFR falls under the lower bound of the recommended range by nearly 300 gpd/ft². However, this is not anticipated to be an issue as the District is successfully operating two clarifiers under existing conditions. The average solids loading rate falls within the recommended range for one clarifier as does the peak solids loading rate. Adding future anticipated flows from Blacklake do not substantially change the overflow rates or solids loading rates.

The existing clarifiers have Return Activated Sludge (RAS) pump stations, consisting of two pumps, each with a capacity of 875 GPM. The Phase 1 CDR assumed RAS flowrates at 150% of the ADF and designed the RAS pumps to meet 150% of 0.84 MGD. The current combined ADF is anticipated to be 0.55 MGD which is well under the design ADF. Therefore, the RAS pumps have sufficient capacity to handle increased flows from Blacklake under



current conditions. The RAS pumps may need to be upgraded in the future to maintain operational flexibility for required RAS rates as flows increase.

7.6 Sludge Thickener

Southland WWTF currently sends between 34,000 and 51,000 gallons of sludge per day to the existing gravity belt thickener. The waste sludge has a solids concentration between 0.35 and 0.5 percent total solids. The gravity belt thickener currently operates between 6 and 7 hours per day, summing approximately 35 hours per week. The Blacklake Sewer Consolidation Project will increase the average annual flow at the Southland WWTF by 11 percent, which is expected to have a nominal impact on the run time for the thickener. Since the current loading concentrations are similar between the Blacklake WRF and the Southland WWTF, it is assumed sludge waste rates under the combined flow will increase as a percentage based on average annual flow. This methodology yields an estimated sludge waste rate between 37,740 and 55,610 gallons per day for combined existing flow conditions. It is anticipated that the sludge thickener may need to run for an additional 4 hours per week, between 7 to 8 hours per day, for a total of approximately 39 hours per week.

7.7 Sludge Dewatering Screw Press

The District is currently installing a new sludge dewatering screw press at the Southland WWTF. The sludge dewatering screw press will have a hydraulic capacity of 15 to 90 GPM and a solids capacity of 250 pounds per hour (PPH). The design feed concentration ranges from 0.5 to 3% total solids and the dewatered sludge concentration is 15% total solids. During normal operation, the screw press will receive thickened sludge from the gravity belt thickener, and, thus, will operate for the same durations.

8.0 Conclusions and Recommendations

The current combined flowrate resulting from the Blacklake Sewer Consolidation Project would not exceed the current operating capacity of any individual process at the Southland WWTF. The future combined volumetric loading to the aeration basin, however, would exceed the maximum recommended design loading for the single extended aeration basin. The existing combined loading is within the recommended volumetric loading (13 ppd/1000 cubic feet of basin volume), and the current effluent quality greatly exceeds permit requirements. There may be sufficient capacity to handle the future loading from the Blacklake system and still meet existing effluent limits. However, initiation of planning and design for a second aeration basin is recommended to meet future system demands.

Based on the updated flows and loading and the anticipated enrollment under the new General Order, a phasing study is recommended to re-evaluate future requirements and revise the recommendations for the Phase 2 and 3 improvements at the Southland WWTF.

APPENDIX D CalEEMod Output Files

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Blacklake Sewer System Project

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|------------------------|------|----------|-------------|--------------------|------------|
| General Light Industry | 1.00 | 1000sqft | 32.49 | 1,000.00 | 0 |

1.2 Other Project Characteristics

UrbanizationRuralWind Speed (m/s)3.2Precipitation Freq (Days)44

Climate Zone 4 Operational Year 2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction emissions only

Land Use - Total project area: 32.49 acres

Construction Phase - Grading emissions only. Project-specific equipment/schedules not yet available; based on model defaults.

Grading - Import of 14,600 cy material to be transported. Transport distance is based on model defaults.

Trips and VMT - Worker trips/distances are based on model defaults

Construction Off-road Equipment Mitigation - Mitigation includes 50% CE for watering unpaved travelways, 61% CE for watering exposed surfaces, onsite travel speed limit 15 mph

| Table Name | Column Name | Default Value | New Value |
|-------------------------|------------------------------|---------------|-----------|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
|---------------------------|----------------------------|-----------|-----------|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | PhaseEndDate | 8/11/2022 | 6/2/2022 |
| tblConstructionPhase | PhaseStartDate | 6/10/2022 | 4/1/2022 |
| tblGrading | MaterialImported | 0.00 | 14,600.00 |
| tblLandUse | LotAcreage | 0.02 | 32.49 |
| tblProjectCharacteristics | UrbanizationLevel | Urban | Rural |

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 3 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------|
| Year | | | | | ton | s/yr | | | | | | | MT | /yr | | |
| | 0.0875 | 1.0605 | 0.6989 | 2.0300e- 003 | 0.2283 | 0.0384 | 0.2668 | 0.0879 | 0.0354 | 0.1233 | | | | | | 188.3078 |
| Maximum | 0.0875 | 1.0605 | 0.6989 | 2.0300e- 003 | 0.2283 | 0.0384 | 0.2668 | 0.0879 | 0.0354 | 0.1233 | | | | | | 188.3078 |

Mitigated Construction

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------|
| Year | | | | | ton | s/yr | | | | | | | MT | /yr | | |
| | 0.0402 | 0.8611 | 0.8717 | 2.0300e- 003 | 0.1012 | 0.0309 | 0.1321 | 0.0376 | 0.0308 | 0.0684 | | | | | | 188.3077 |
| Maximum | 0.0402 | 0.8611 | 0.8717 | 2.0300e- 003 | 0.1012 | 0.0309 | 0.1321 | 0.0376 | 0.0308 | 0.0684 | | | | | | 188.3077 |

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|----------------------|-------|-------|--------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 54.06 | 18.81 | -24.73 | 0.00 | 55.68 | 19.65 | 50.49 | 57.23 | 12.99 | 44.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|--|--|
| 1 | 4-1-2022 | 6-30-2022 | 1.1422 | 0.8954 |
| | | Highest | 1.1422 | 0.8954 |

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|---------------------|-----------------|
| Category | | ton | MT/yr | | | | | | | | | | | | | |
| 71100 | 5.0700e- 003 | 0.0000 | 2.0000e- 005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 3.0000e- 005 |
| • | 1.4000e- 004 | 1.2800e- 003 | 1.0800e- 003 | 1.0000e- 005 | | 1.0000e- 004 | 1.0000e- 004 | | 1.0000e- 004 | 1.0000e- 004 | | | | | | 2.1622 |
| Mobile | 3.4000e- 003 | 5.7500e- 003 | 0.0349 | 7.0000e- 005 | 7.5000e- 003 | 7.0000e- 005 | 7.5700e- 003 | 2.0000e- 003 | 7.0000e- 005 | 2.0700e- 003 | | | | | | 6.7628 |
| Waste | | | , | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.6236 |
| Water | | | , | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.4317 |
| Total | 8.6100e- 003 | 7.0300e- 003 | 0.0360 | 8.0000e- 005 | 7.5000e- 003 | 1.7000e- 004 | 7.6700e- 003 | 2.0000e- 003 | 1.7000e- 004 | 2.1700e- 003 | | | | | | 9.9804 |

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e | | | |
|-----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|-----------------|--|--|--|
| Category | tons/yr | | | | | | | | | | | | MT/yr | | | | | | |
| 1 | 5.0700e- 003 | 0.0000 | 2.0000e- 005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 3.0000e- 005 | | | |
| Energy | 1.4000e- 004 | 1.2800e- 003 | 1.0800e- 003 | 1.0000e- 005 | | 1.0000e- 004 | 1.0000e- 004 | | 1.0000e- 004 | 1.0000e- 004 | | | | | | 2.1622 | | | |
| I WIODIIC | 3.4000e- 003 | 5.7500e- 003 | 0.0349 | 7.0000e- 005 | 7.5000e- 003 | 7.0000e- 005 | 7.5700e- 003 | 2.0000e- 003 | 7.0000e- 005 | 2.0700e- 003 | | | | | | 6.7628 | | | |
| Waste | | | 1 1 1 | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.6236 | | | |
| Water | | | 1 1 1 | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.4317 | | | |
| Total | 8.6100e- 003 | 7.0300e- 003 | 0.0360 | 8.0000e- 005 | 7.5000e- 003 | 1.7000e- 004 | 7.6700e- 003 | 2.0000e- 003 | 1.7000e- 004 | 2.1700e- 003 | | | | | | 9.9804 | | | |

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail

Construction Phase

| Phase Numbe | | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|----------------|---------|------------|------------|----------|------------------|----------|-------------------|
| 1 | Grading | Grading | 4/1/2022 | 6/2/2022 | 5 | 45 | |

Acres of Grading (Site Preparation Phase): 0

Blacklake Sewer System Project - San Luis Obispo County, Annual

Date: 3/25/2022 4:40 PM

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural

Coating - sqft)

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|------------|---------------------------|--------|-------------|-------------|-------------|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |

Trips and VMT

| Phase Name | Offroad Equipment | Worker Trip | Vendor Trip | Hauling Trip | Worker Trip | Vendor Trip | Hauling Trip | Worker Vehicle | Vendor | Hauling |
|------------|-------------------|-------------|-------------|--------------|-------------|-------------|--------------|----------------|---------------|---------------|
| | Count | Number | Number | Number | Length | Length | Length | Class | Vehicle Class | Vehicle Class |
| Grading | 8 | 20.00 | 0.00 | 1,825.00 | 13.00 | 13.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Grading - 2022

Unmitigated Construction On-Site

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e | | | |
|---------------|---------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|---------------------|----------|--|--|--|
| Category | tons/yr | | | | | | | | | | | MT/yr | | | | | | | |
| Fugitive Dust | | | | | 0.2084 | 0.0000 | 0.2084 | 0.0824 | 0.0000 | 0.0824 | | | | | | 0.0000 | | | |
| | 0.0816 | 0.8740 | 0.6534 | 1.4000e- 003 | | 0.0368 | 0.0368 | | 0.0338 | 0.0338 | | | | | | 123.6950 | | | |
| Total | 0.0816 | 0.8740 | 0.6534 | 1.4000e- 003 | 0.2084 | 0.0368 | 0.2452 | 0.0824 | 0.0338 | 0.1163 | | | | | | 123.6950 | | | |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e | | | |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|---------|--|--|--|
| Category | tons/yr | | | | | | | | | | | MT/yr | | | | | | | |
| Hauling | 4.3900e- 003 | 0.1854 | 0.0326 | 5.9000e- 004 | 0.0156 | 1.6200e- 003 | 0.0172 | 4.2800e- 003 | 1.5500e- 003 | 5.8300e- 003 | | | | | | 61.1510 | | | |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | , | | | | 0.0000 | | | |
| Worker | 1.5300e- 003 | 1.1800e- 003 | 0.0129 | 4.0000e- 005 | 4.3300e- 003 | 2.0000e- 005 | 4.3500e- 003 | 1.1500e- 003 | 2.0000e- 005 | 1.1700e- 003 | | | | | | 3.4618 | | | |
| Total | 5.9200e- 003 | 0.1866 | 0.0454 | 6.3000e- 004 | 0.0199 | 1.6400e- 003 | 0.0216 | 5.4300e- 003 | 1.5700e- 003 | 7.0000e- 003 | | | | | | 64.6128 | | | |

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Grading - 2022

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|---------------------|----------|
| Category | | | | | ton | MT/yr | | | | | | | | | | |
| Fugitive Dust | | | | | 0.0813 | 0.0000 | 0.0813 | 0.0321 | 0.0000 | 0.0321 | | | | | | 0.0000 |
| Off-Road | 0.0343 | 0.6745 | 0.8263 | 1.4000e- 003 | | 0.0292 | 0.0292 | | 0.0292 | 0.0292 | | i i | | | | 123.6948 |
| Total | 0.0343 | 0.6745 | 0.8263 | 1.4000e- 003 | 0.0813 | 0.0292 | 0.1105 | 0.0321 | 0.0292 | 0.0614 | | | | | | 123.6948 |

Mitigated Construction Off-Site

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e | | | |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-------------|-----------|-----|-----|---------|--|--|--|
| Category | tons/yr | | | | | | | | | | | MT/yr | | | | | | | |
| Hauling | 4.3900e- 003 | 0.1854 | 0.0326 | 5.9000e- 004 | 0.0156 | 1.6200e- 003 | 0.0172 | 4.2800e- 003 | 1.5500e- 003 | 5.8300e- 003 | | | | | | 61.1510 | | | |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 1 1 1 | | | | 0.0000 | | | |
| Worker | 1.5300e- 003 | 1.1800e- 003 | 0.0129 | 4.0000e- 005 | 4.3300e- 003 | 2.0000e- 005 | 4.3500e- 003 | 1.1500e- 003 | 2.0000e- 005 | 1.1700e- 003 | | 1 | | | | 3.4618 | | | |
| Total | 5.9200e- 003 | 0.1866 | 0.0454 | 6.3000e- 004 | 0.0199 | 1.6400e- 003 | 0.0216 | 5.4300e- 003 | 1.5700e- 003 | 7.0000e- 003 | | | | | | 64.6128 | | | |

CalEEMod Version: CalEEMod.2020.4.0

Page 9 of 18

Blacklake Sewer System Project - San Luis Obispo County, Annual

Date: 3/25/2022 4:40 PM

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|--------|
| Category | | | | | ton | s/yr | | | | | | | MT | /yr | | |
| Mitigated | 3.4000e- 003 | 5.7500e- 003 | 0.0349 | 7.0000e- 005 | 7.5000e- 003 | 7.0000e- 005 | 7.5700e- 003 | 2.0000e- 003 | 7.0000e- 005 | 2.0700e- 003 | | | | | | 6.7628 |
| Unmitigated | 3.4000e- 003 | 5.7500e- 003 | 0.0349 | 7.0000e- 005 | 7.5000e- 003 | 7.0000e- 005 | 7.5700e- 003 | 2.0000e- 003 | 7.0000e- 005 | 2.0700e- 003 | | | | | | 6.7628 |

4.2 Trip Summary Information

| | Avei | age Daily Trip Ra | ite | Unmitigated | Mitigated |
|------------------------|---------|-------------------|--------|-------------|------------|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 4.96 | 1.99 | 5.00 | 20,044 | 20,044 |
| Total | 4.96 | 1.99 | 5.00 | 20,044 | 20,044 |

4.3 Trip Type Information

| | | Miles | | | Trip % | | | Trip Purpos | e % |
|------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| General Light Industry | 13.00 | 13.00 | 13.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| General Light Industry | 0.486418 | 0.056693 | 0.203223 | 0.148945 | 0.038507 | 0.009459 | 0.008260 | 0.005996 | 0.000952 | 0.000366 | 0.033245 | 0.001002 | 0.006934 |

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|---------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|--------|
| Category | | | | | ton | s/yr | | | | | | | MT | /yr | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.7569 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.7569 |
| NaturalGas Mitigated | 1.4000e- 004 | 1.2800e- 003 | 1.0800e- 003 | 1.0000e- 005 | | 1.0000e- 004 | 1.0000e- 004 | | 1.0000e- 004 | 1.0000e- 004 | | | | | | 1.4054 |
| | 1.4000e- 004 | 1.2800e- 003 | 1.0800e- 003 | 1.0000e- 005 | | 1.0000e- 004 | 1.0000e- 004 | | 1.0000e- 004 | 1.0000e- 004 | | | | | | 1.4054 |

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

| | NaturalGa s Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|--------|
| Land Use | kBTU/yr | | | | | ton | s/yr | | | | | | | MT | /yr | | |
| General Light Industry | 26180 | 1.4000e- 004 | 1.2800e- 003 | 1.0800e- 003 | 1.0000e- 005 | | 1.0000e- 004 | 1.0000e- 004 | | 1.0000e- 004 | 1.0000e- 004 | | | | | | 1.4054 |
| Total | | 1.4000e- 004 | 1.2800e- 003 | 1.0800e- 003 | 1.0000e- 005 | | 1.0000e- 004 | 1.0000e- 004 | | 1.0000e- 004 | 1.0000e- 004 | | | | | | 1.4054 |

Mitigated

| | NaturalGa s Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|------|-----|--------|
| Land Use | kBTU/yr | | | | | ton | s/yr | | | | | | | MT | -/yr | | |
| General Light Industry | 26180 | 1.4000e- 004 | 1.2800e- 003 | 1.0800e- 003 | 1.0000e- 005 | | 1.0000e- 004 | 1.0000e- 004 | | 1.0000e- 004 | 1.0000e- 004 | | i i | | | | 1.4054 |
| Total | | 1.4000e- 004 | 1.2800e- 003 | 1.0800e- 003 | 1.0000e- 005 | | 1.0000e- 004 | 1.0000e- 004 | | 1.0000e- 004 | 1.0000e- 004 | | | | | | 1.4054 |

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------------|-----------|-----|------|--------|
| Land Use | kWh/yr | | MT | -/yr | |
| General Light Industry | 8100 | | | | 0.7569 |
| Total | | | | | 0.7569 |

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------------|-----------|-----|-----|--------|
| Land Use | kWh/yr | | MT | /yr | |
| General Light Industry | 8100 | | | | 0.7569 |
| Total | | | | | 0.7569 |

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|--------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|
| Category | | | | | ton | s/yr | | | | | | | MT | /yr | | |
| Mitigated | 5.0700e- 003 | 0.0000 | 2.0000e- 005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 3.0000e- 005 |
| Unmitigated | 5.0700e- 003 | 0.0000 | 2.0000e- 005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 3.0000e- 005 |

6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|--------|-----------------|--------|------------------|-----------------|---------------|---------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|
| SubCategory | | | | | ton | s/yr | | | | | | | MT | /yr | | |
| Coating | 1.1600e- 003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Products | 3.9100e- 003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| aaccapg | 0.0000 | 0.0000 | 2.0000e- 005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 3.0000e- 005 |
| Total | 5.0700e- 003 | 0.0000 | 2.0000e- 005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 3.0000e- 005 |

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|--------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|
| SubCategory | | | | | ton | s/yr | | | | | | | MT | /yr | | |
| Coating | 1.1600e- 003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Products | 3.9100e- 003 | | 1 1 1 | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Landscaping | 0.0000 | 0.0000 | 2.0000e- 005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 3.0000e- 005 |
| Total | 5.0700e- 003 | 0.0000 | 2.0000e- 005 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 3.0000e- 005 |

7.0 Water Detail

7.1 Mitigation Measures Water

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|-----|------|--------|
| Category | | МТ | -/yr | |
| Winigated | | | | 0.4317 |
| Unmitigated | | | | 0.4317 |

7.2 Water by Land Use <u>Unmitigated</u>

| | Indoor/Out door Use | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|------------------------|-----------|-----|-----|--------|
| Land Use | Mgal | | МТ | /уг | |
| General Light Industry | 0.23125 / 0 | | | | 0.4317 |
| Total | | | | | 0.4317 |

of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

| | Indoor/Out door Use | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|------------------------|-----------|-----|-----|--------|
| Land Use | Mgal | | МТ | /yr | |
| General Light Industry | 0.23125 / 0 | | | | 0.4317 |
| Total | | | | | 0.4317 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|-----|-----|--------|
| | | MT | /yr | |
| Mitigated | | | | 0.6236 |
| Unmitigated | | | | 0.6236 |

Date: 3/25/2022 4:40 PM Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|-------------------|-----------|-----|-----|--------|
| Land Use | tons | | MT | /yr | |
| General Light Industry | 1.24 | | | | 0.6236 |
| Total | | | | | 0.6236 |

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|-------------------|-----------|-----|------|--------|
| Land Use | tons | | МТ | -/yr | |
| General Light Industry | 1.24 | | | | 0.6236 |
| Total | | | | | 0.6236 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

CalEEMod Version: CalEEMod.2020.4.0 Page 18 of 18 Date: 3/25/2022 4:40 PM

Blacklake Sewer System Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
| | | | | | | , |

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
| | | | | | 1 |

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
| ' ' ' ' ' | |

11.0 Vegetation

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Blacklake Sewer System Project

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|------------------------|------|----------|-------------|--------------------|------------|
| General Light Industry | 1.00 | 1000sqft | 32.49 | 1,000.00 | 0 |

1.2 Other Project Characteristics

UrbanizationRuralWind Speed (m/s)3.2Precipitation Freq (Days)44

Climate Zone 4 Operational Year 2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction emissions only

Land Use - Total project area: 32.49 acres

Construction Phase - Grading emissions only. Project-specific equipment/schedules not yet available; based on model defaults.

Grading - Import of 14,600 cy material to be transported. Transport distance is based on model defaults.

Trips and VMT - Worker trips/distances are based on model defaults

Construction Off-road Equipment Mitigation - Mitigation includes 50% CE for watering unpaved travelways, 61% CE for watering exposed surfaces, onsite travel speed limit 15 mph

| Table Name | Column Name | Default Value | New Value |
|-------------------------|------------------------------|---------------|-----------|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
|---------------------------|----------------------------|-----------|-----------|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | PhaseEndDate | 8/11/2022 | 6/2/2022 |
| tblConstructionPhase | PhaseStartDate | 6/10/2022 | 4/1/2022 |
| tblGrading | MaterialImported | 0.00 | 14,600.00 |
| tblLandUse | LotAcreage | 0.02 | 32.49 |
| tblProjectCharacteristics | UrbanizationLevel | Urban | Rural |

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 3 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Year | | | | | lb/d | day | | | | | | | lb/d | day | | |
| | 3.8892 | 46.8737 | 31.0683 | 0.0901 | 10.1699 | 1.7079 | 11.8778 | 3.9095 | 1.5739 | 5.4834 | | | | | | 9,231.118 2 |
| Maximum | 3.8892 | 46.8737 | 31.0683 | 0.0901 | 10.1699 | 1.7079 | 11.8778 | 3.9095 | 1.5739 | 5.4834 | | | | | | 9,231.118 2 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Year | | | | | lb/d | day | | | | | | | lb/c | lay | | |
| | 1.7875 | 38.0084 | 38.7493 | 0.0901 | 4.5193 | 1.3725 | 5.8918 | 1.6752 | 1.3693 | 3.0445 | | | | | | 9,231.118 2 |
| Maximum | 1.7875 | 38.0084 | 38.7493 | 0.0901 | 4.5193 | 1.3725 | 5.8918 | 1.6752 | 1.3693 | 3.0445 | | | | | | 9,231.118 2 |

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|----------------------|-------|-------|--------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 54.04 | 18.91 | -24.72 | 0.00 | 55.56 | 19.64 | 50.40 | 57.15 | 13.00 | 44.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|-----------------|
| Category | | | | | lb/ | day | | | | | | | lb/d | day | | |
| Area | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| " | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |
| Mobile | 0.0211 | 0.0327 | 0.2075 | 4.5000e- 004 | 0.0466 | 4.2000e- 004 | 0.0470 | 0.0124 | 3.9000e- 004 | 0.0128 | | | | | | 46.2895 |
| Total | 0.0496 | 0.0397 | 0.2135 | 4.9000e- 004 | 0.0466 | 9.5000e- 004 | 0.0475 | 0.0124 | 9.2000e- 004 | 0.0134 | | | | | | 54.7783 |

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|---------------------|-----------------|
| Category | | | | | lb/ | day | | | | | | | lb/d | day | | |
| Area | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| Energy | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |
| Mobile | 0.0211 | 0.0327 | 0.2075 | 4.5000e- 004 | 0.0466 | 4.2000e- 004 | 0.0470 | 0.0124 | 3.9000e- 004 | 0.0128 | | ! ! | | | | 46.2895 |
| Total | 0.0496 | 0.0397 | 0.2135 | 4.9000e- 004 | 0.0466 | 9.5000e- 004 | 0.0475 | 0.0124 | 9.2000e- 004 | 0.0134 | | | | | | 54.7783 |

Blacklake Sewer System Project - San Luis Obispo County, Summer

Date: 3/25/2022 4:38 PM

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail

Construction Phase

| Phase Numbe | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|----------------|------------|------------|------------|----------|------------------|----------|-------------------|
| 1 | Grading | Grading | 4/1/2022 | 6/2/2022 | 5 | 45 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|------------|---------------------------|--------|-------------|-------------|-------------|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |

Trips and VMT

| Phase Name | Offroad Equipment | Worker Trip | Vendor Trip | Hauling Trip | Worker Trip | Vendor Trip | Hauling Trip | Worker Vehicle | Vendor | Hauling |
|------------|-------------------|-------------|-------------|--------------|-------------|-------------|--------------|----------------|---------------|---------------|
| | Count | Number | Number | Number | Length | Length | Length | Class | Vehicle Class | Vehicle Class |
| Grading | 8 | 20.00 | 0.00 | 1,825.00 | 13.00 | 13.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Category | | | | | lb/d | day | | | | | | | lb/d | day | | |
| Fugitive Dust | | | | | 9.2633 | 0.0000 | 9.2633 | 3.6628 | 0.0000 | 3.6628 | | | | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | ! ! | | | | 6,060.015 8 |
| Total | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 9.2633 | 1.6349 | 10.8982 | 3.6628 | 1.5041 | 5.1669 | | | | | | 6,060.015 8 |

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Grading - 2022

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Category | | | | | lb/d | day | | | | | | | lb/d | lay | | |
| Hauling | 0.1970 | 7.9830 | 1.4363 | 0.0263 | 0.7089 | 0.0720 | 0.7809 | 0.1943 | 0.0689 | 0.2632 | | | | | | 2,995.502 7 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Worker | 0.0675 | 0.0472 | 0.5905 | 1.7200e- 003 | 0.1977 | 1.0000e- 003 | 0.1987 | 0.0524 | 9.2000e- 004 | 0.0534 | | ! ! | | | | 175.5998 |
| Total | 0.2644 | 8.0302 | 2.0267 | 0.0280 | 0.9066 | 0.0730 | 0.9796 | 0.2467 | 0.0698 | 0.3165 | | | | | | 3,171.102 4 |

Mitigated Construction On-Site

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|---------------------|----------------|
| Category | | | | | lb/d | day | | | | | | | lb/c | day | | |
| Fugitive Dust | | | | | 3.6127 | 0.0000 | 3.6127 | 1.4285 | 0.0000 | 1.4285 | | | | | | 0.0000 |
| Off-Road | 1.5231 | 29.9782 | 36.7226 | 0.0621 | | 1.2994 | 1.2994 | | 1.2994 | 1.2994 | | | | | | 6,060.015 8 |
| Total | 1.5231 | 29.9782 | 36.7226 | 0.0621 | 3.6127 | 1.2994 | 4.9121 | 1.4285 | 1.2994 | 2.7279 | | | | | | 6,060.015 8 |

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Grading - 2022

Mitigated Construction Off-Site

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Category | | | | | lb/d | day | | | | | | | lb/d | day | | |
| Hauling | 0.1970 | 7.9830 | 1.4363 | 0.0263 | 0.7089 | 0.0720 | 0.7809 | 0.1943 | 0.0689 | 0.2632 | | | | | | 2,995.502 7 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Worker | 0.0675 | 0.0472 | 0.5905 | 1.7200e- 003 | 0.1977 | 1.0000e- 003 | 0.1987 | 0.0524 | 9.2000e- 004 | 0.0534 | | | | | | 175.5998 |
| Total | 0.2644 | 8.0302 | 2.0267 | 0.0280 | 0.9066 | 0.0730 | 0.9796 | 0.2467 | 0.0698 | 0.3165 | | | | | | 3,171.102 4 |

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|--------|---------|
| Category | | | | | lb/d | day | | | | | | | lb/c | day | | |
| Mitigated | 0.0211 | 0.0327 | 0.2075 | 4.5000e- 004 | 0.0466 | 4.2000e- 004 | 0.0470 | 0.0124 | 3.9000e- 004 | 0.0128 | | | | | | 46.2895 |
| Unmitigated | 0.0211 | 0.0327 | 0.2075 | 4.5000e- 004 | 0.0466 | 4.2000e- 004 | 0.0470 | 0.0124 | 3.9000e- 004 | 0.0128 | | | | | i i | 46.2895 |

4.2 Trip Summary Information

| | Avei | age Daily Trip Ra | ate | Unmitigated | Mitigated |
|------------------------|---------|-------------------|--------|-------------|------------|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 4.96 | 1.99 | 5.00 | 20,044 | 20,044 |
| Total | 4.96 | 1.99 | 5.00 | 20,044 | 20,044 |

4.3 Trip Type Information

| | | Miles | | | Trip % | | | Trip Purpos | e % |
|------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| General Light Industry | 13.00 | 13.00 | 13.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| General Light Industry | 0.486418 | 0.056693 | 0.203223 | 0.148945 | 0.038507 | 0.009459 | 0.008260 | 0.005996 | 0.000952 | 0.000366 | 0.033245 | 0.001002 | 0.006934 |

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|---------|--------|--------|
| Category | | | | | lb/d | day | | | | | | | lb/d | lay | | |
| | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | ! ! | 8.4885 |
| Unmitigated | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |

5.2 Energy by Land Use - NaturalGas

Unmitigated

| | NaturalGa s Use | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|--------|
| Land Use | kBTU/yr | | | | | lb/d | day | | | | | | | lb/d | lay | | |
| General Light Industry | 71.726 | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |
| Total | | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGa s Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|--------|
| Land Use | kBTU/yr | | | | | lb/d | day | | | | | | | lb/c | lay | | |
| General Light Industry | 0.071726 | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |
| Total | | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |

6.0 Area Detail

6.1 Mitigation Measures Area

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|--------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|
| Category | | | | | lb/d | day | | | | | | | lb/c | lay | | |
| Mitigated | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| Unmitigated | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|--------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|
| SubCategory | | | | | lb/d | day | | | | | | | lb/c | lay | | |
| Coating | 6.3500e- 003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| | 0.0214 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Landscaping | 1.0000e- 005 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| Total | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|--------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|
| SubCategory | | | | | lb/d | day | | | | | | | lb/c | lay | | |
| Coating | 6.3500e- 003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Products | 0.0214 | | 1 1 1 | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Landocaping | 1.0000e- 005 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| Total | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 14 Date: 3/25/2022 4:38 PM

Blacklake Sewer System Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Blacklake Sewer System Project

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|------------------------|------|----------|-------------|--------------------|------------|
| General Light Industry | 1.00 | 1000sqft | 32.49 | 1,000.00 | 0 |

1.2 Other Project Characteristics

UrbanizationRuralWind Speed (m/s)3.2Precipitation Freq (Days)44

Climate Zone 4 Operational Year 2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction emissions only

Land Use - Total project area: 32.49 acres

Construction Phase - Grading emissions only. Project-specific equipment/schedules not yet available; based on model defaults.

Grading - Import of 14,600 cy material to be transported. Transport distance is based on model defaults.

Trips and VMT - Worker trips/distances are based on model defaults

Construction Off-road Equipment Mitigation - Mitigation includes 50% CE for watering unpaved travelways, 61% CE for watering exposed surfaces, onsite travel speed limit 15 mph

| Table Name | Column Name | Default Value | New Value |
|-------------------------|------------------------------|---------------|-----------|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
|---------------------------|----------------------------|-----------|-----------|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstEquipMitigation | Tier | No Change | Tier 3 |
| tblConstructionPhase | PhaseEndDate | 8/11/2022 | 6/2/2022 |
| tblConstructionPhase | PhaseStartDate | 6/10/2022 | 4/1/2022 |
| tblGrading | MaterialImported | 0.00 | 14,600.00 |
| tblLandUse | LotAcreage | 0.02 | 32.49 |
| tblProjectCharacteristics | UrbanizationLevel | Urban | Rural |

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 3 of 14 Date: 3/25/2022 4:37 PM

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Year | | | | | lb/d | day | | | | | | | lb/d | day | | |
| | 3.8917 | 47.0922 | 31.0784 | 0.0900 | 10.1699 | 1.7080 | 11.8780 | 3.9095 | 1.5741 | 5.4836 | | | | | | 9,224.851 9 |
| Maximum | 3.8917 | 47.0922 | 31.0784 | 0.0900 | 10.1699 | 1.7080 | 11.8780 | 3.9095 | 1.5741 | 5.4836 | | | | | | 9,224.851 9 |

Mitigated Construction

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Year | | | | | lb/d | day | | | | | | | lb/c | lay | | |
| 2022 | 1.7900 | 38.2270 | 38.7595 | 0.0900 | 4.5193 | 1.3726 | 5.8919 | 1.6752 | 1.3694 | 3.0446 | | | | | | 9,224.851 9 |
| Maximum | 1.7900 | 38.2270 | 38.7595 | 0.0900 | 4.5193 | 1.3726 | 5.8919 | 1.6752 | 1.3694 | 3.0446 | | | | | | 9,224.851 9 |

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|----------------------|-------|-------|--------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 54.01 | 18.83 | -24.72 | 0.00 | 55.56 | 19.64 | 50.40 | 57.15 | 13.00 | 44.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 14 Date: 3/25/2022 4:37 PM

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|-----------------|
| Category | | | | | lb/ | lb/day | | | | | | | | | | |
| Area | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| " | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |
| Mobile | 0.0210 | 0.0349 | 0.2160 | 4.3000e- 004 | 0.0466 | 4.2000e- 004 | 0.0470 | 0.0124 | 3.9000e- 004 | 0.0128 | | | | | | 44.9320 |
| Total | 0.0495 | 0.0420 | 0.2220 | 4.7000e- 004 | 0.0466 | 9.5000e- 004 | 0.0475 | 0.0124 | 9.2000e- 004 | 0.0134 | | | | | | 53.4208 |

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|-----------------|
| Category | | | | | lb/ | day | | | | | | | lb/d | day | | |
| Area | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| Energy | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |
| Mobile | 0.0210 | 0.0349 | 0.2160 | 4.3000e- 004 | 0.0466 | 4.2000e- 004 | 0.0470 | 0.0124 | 3.9000e- 004 | 0.0128 | | | | | | 44.9320 |
| Total | 0.0495 | 0.0420 | 0.2220 | 4.7000e- 004 | 0.0466 | 9.5000e- 004 | 0.0475 | 0.0124 | 9.2000e- 004 | 0.0134 | | | | | | 53.4208 |

Blacklake Sewer System Project - San Luis Obispo County, Winter

Date: 3/25/2022 4:37 PM

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|-----------------|------------|------------|------------|----------|------------------|----------|-------------------|
| 1 | Grading | Grading | 4/1/2022 | 6/2/2022 | 5 | 45 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|------------|---------------------------|--------|-------------|-------------|-------------|
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |

Trips and VMT

| Phase Name | Offroad Equipment | Worker Trip | Vendor Trip | Hauling Trip | Worker Trip | Vendor Trip | Hauling Trip | Worker Vehicle | Vendor | Hauling |
|------------|-------------------|-------------|-------------|--------------|-------------|-------------|--------------|----------------|---------------|---------------|
| | Count | Number | Number | Number | Length | Length | Length | Class | Vehicle Class | Vehicle Class |
| Grading | 8 | 20.00 | 0.00 | 1,825.00 | 13.00 | 13.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Category | | | | | lb/d | day | | | | | | | lb/d | day | | |
| Fugitive Dust | | | | | 9.2633 | 0.0000 | 9.2633 | 3.6628 | 0.0000 | 3.6628 | | | | | | 0.0000 |
| Off-Road | 3.6248 | 38.8435 | 29.0415 | 0.0621 | | 1.6349 | 1.6349 | | 1.5041 | 1.5041 | | | | | | 6,060.015 8 |
| Total | 3.6248 | 38.8435 | 29.0415 | 0.0621 | 9.2633 | 1.6349 | 10.8982 | 3.6628 | 1.5041 | 5.1669 | | | | | | 6,060.015 8 |

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 14 Date: 3/25/2022 4:37 PM

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Grading - 2022

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Category | | | | | lb/d | day | | | | | | | lb/d | lay | | |
| Hauling | 0.1926 | 8.1952 | 1.4617 | 0.0263 | 0.7089 | 0.0722 | 0.7810 | 0.1943 | 0.0690 | 0.2633 | | | | | | 2,996.414 3 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Worker | 0.0742 | 0.0536 | 0.5752 | 1.6500e- 003 | 0.1977 | 1.0000e- 003 | 0.1987 | 0.0524 | 9.2000e- 004 | 0.0534 | | ! ! | | | | 168.4217 |
| Total | 0.2669 | 8.2488 | 2.0369 | 0.0280 | 0.9066 | 0.0732 | 0.9798 | 0.2467 | 0.0700 | 0.3167 | | | | | | 3,164.836 0 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|------|----------------|
| Category | | | | | lb/d | day | | | | | | | lb/d | day | | |
| Fugitive Dust | | | | | 3.6127 | 0.0000 | 3.6127 | 1.4285 | 0.0000 | 1.4285 | | | | | | 0.0000 |
| Off-Road | 1.5231 | 29.9782 | 36.7226 | 0.0621 | | 1.2994 | 1.2994 | | 1.2994 | 1.2994 | | | | | | 6,060.015 8 |
| Total | 1.5231 | 29.9782 | 36.7226 | 0.0621 | 3.6127 | 1.2994 | 4.9121 | 1.4285 | 1.2994 | 2.7279 | | | | | | 6,060.015 8 |

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 14 Date: 3/25/2022 4:37 PM

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Grading - 2022

Mitigated Construction Off-Site

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|----------------|
| Category | | | | | lb/d | day | | | | | | | lb/d | day | | |
| Hauling | 0.1926 | 8.1952 | 1.4617 | 0.0263 | 0.7089 | 0.0722 | 0.7810 | 0.1943 | 0.0690 | 0.2633 | | | | | | 2,996.414 3 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Worker | 0.0742 | 0.0536 | 0.5752 | 1.6500e- 003 | 0.1977 | 1.0000e- 003 | 0.1987 | 0.0524 | 9.2000e- 004 | 0.0534 | | | | | | 168.4217 |
| Total | 0.2669 | 8.2488 | 2.0369 | 0.0280 | 0.9066 | 0.0732 | 0.9798 | 0.2467 | 0.0700 | 0.3167 | | | | | | 3,164.836 0 |

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 14

Blacklake Sewer System Project - San Luis Obispo County, Winter

Date: 3/25/2022 4:37 PM

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|---------|
| Category | | | | | lb/d | day | | | | | | | lb/c | day | | |
| Mitigated | 0.0210 | 0.0349 | 0.2160 | 4.3000e- 004 | 0.0466 | 4.2000e- 004 | 0.0470 | 0.0124 | 3.9000e- 004 | 0.0128 | | | | | | 44.9320 |
| Unmitigated | 0.0210 | 0.0349 | 0.2160 | 4.3000e- 004 | 0.0466 | 4.2000e- 004 | 0.0470 | 0.0124 | 3.9000e- 004 | 0.0128 | | | | | | 44.9320 |

4.2 Trip Summary Information

| | Avei | age Daily Trip Ra | ite | Unmitigated | Mitigated |
|------------------------|---------|-------------------|--------|-------------|------------|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 4.96 | 1.99 | 5.00 | 20,044 | 20,044 |
| Total | 4.96 | 1.99 | 5.00 | 20,044 | 20,044 |

4.3 Trip Type Information

| | | Miles | | | Trip % | | | Trip Purpos | e % |
|------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| General Light Industry | 13.00 | 13.00 | 13.00 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| General Light Industry | 0.486418 | 0.056693 | 0.203223 | 0.148945 | 0.038507 | 0.009459 | 0.008260 | 0.005996 | 0.000952 | 0.000366 | 0.033245 | 0.001002 | 0.006934 |

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 14 Date: 3/25/2022 4:37 PM

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|---------------------|------------------|-----------------|----------|-----------|-----------|---------|--------|--------|
| Category | | | | | lb/d | day | | | | | | | lb/d | lay | | |
| | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | ! ! | 8.4885 |
| Unmitigated | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |

5.2 Energy by Land Use - NaturalGas

Unmitigated

| | NaturalGa s Use | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e | | | |
|---------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|--------|--|--|--|
| Land Use | kBTU/yr | | lb/day | | | | | | | | | | | lb/day | | | | | | |
| General Light Industry | 71.726 | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 | | | |
| Total | | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 | | | |

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 14 Date: 3/25/2022 4:37 PM

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGa s Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----|-----|--------|
| Land Use | kBTU/yr | | | | | lb/d | lb/day | | | | | | | | | | |
| General Light Industry | 0.071726 | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |
| Total | | 7.7000e- 004 | 7.0300e- 003 | 5.9100e- 003 | 4.0000e- 005 | | 5.3000e- 004 | 5.3000e- 004 | | 5.3000e- 004 | 5.3000e- 004 | | | | | | 8.4885 |

6.0 Area Detail

6.1 Mitigation Measures Area

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e | | |
|-------------|--------|--------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|--|--|
| Category | lb/day | | | | | | | | | | | lb/day | | | | | | |
| Mitigated | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 | | |
| Unmitigated | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 | | |

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|--------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|
| SubCategory | | | | | lb/d | lb/day | | | | | | | | | | |
| Coating | 6.3500e- 003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Products | 0.0214 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| aaccapg | 1.0000e- 005 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| Total | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 14 Date: 3/25/2022 4:37 PM

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

| | ROG | NOx | СО | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------------|--------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----|-----|-----------------|
| SubCategory | | | | | lb/d | day | | | | | | | lb/d | lay | | |
| Coating | 6.3500e- 003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| | 0.0214 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 0.0000 |
| Landocaping | 1.0000e- 005 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |
| Total | 0.0278 | 0.0000 | 1.0000e- 004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | | | | 2.3000e- 004 |

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 14 Date: 3/25/2022 4:37 PM

Blacklake Sewer System Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
| | |

11.0 Vegetation

APPENDIX E

Biological Resources Species Lists

Table E-1. Special-Status Plant Species Investigated for Potential Occurrence

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|--|---|-----------------------|--|--|
| Hoover's bent grass Agrostis hooveri | Annual grass that occurs in wet areas among valley and foothill grassland and vernal pools. Elevation: 70–305 meters. | April–June | //3.2 | Suitable Conditions Absent: BSA does not contain suitable grassland or vernal pools. Species not observed during surveys conducted in the appropriate season. |
| Santa Lucia manzanita Arctostaphylos luciana | Evergreen shrub that occurs on Chaparral with shale outcrops. Elevation: 350–850 meters. | February– March | //1B.2 | Suitable Conditions Absent: The BSA is at a lower elevation than this species documented range. No Arctostaphylos species were observed in the BSA. |
| Santa Margarita manzanita Arctostaphylos pilosula | Evergreen shrub that occurs in closed coniferous forest, chaparral, and cismontane woodland on shale soils. Elevation: 170–1,100 meters. | December– March | //1B.2 | Suitable Conditions Absent: The BSA is at a lower elevation than this species documented range and does not contain shale soils or the appropriated community. No Arctostaphylos species were observed in the study area. |
| La Purisima manzanita Arctostaphylos purissima | Perennial evergreen shrub that occurs in sandy soil among chaparral and coastal scrub. Elevation: 60–390 meters. | November– May | //1B.1 | Suitable Conditions Absent: The BSA does not contain chaparral or coastal scrub, No Arctostaphylos species were observed in the BSA. |
| sand mesa manzanita Arctostaphylos rudis | Evergreen shrub that occurs in maritime chaparral and coastal scrub with sandy soils. Elevation: 25–322 meters. | November– February | //1B.2 | Suitable Conditions Absent: The BSA does not contain chaparral or coastal scrub, No Arctostaphylos species were observed in the BSA. |
| marsh sandwort Arenaria paludicola | Occurs in marshes and swamps. Grows through dense mats of <i>Typha</i> , <i>Juncus</i> , <i>Scirpus</i> , etc. in freshwater marsh. Elevation: 10–170 meters. | May–August | FE/SE/1B.1 | Suitable Conditions Present: The man-made golf course pond may provide marginally suitable habitat; however, the species has been heavily studied and only two populations are known to remain in California. Species not observed during surveys conducted in the appropriate season. |
| Davidson's saltscale Atriplex serenana var. davidsonii | Occurs in coastal bluff scrub, coastal scrub /alkaline. Elevation: 10–200 meters. | April–October | //1B.2 | Suitable Conditions Absent: The BSA does not coastal scrub, No Arctostaphylos species were observed in the BSA. |
| San Luis mariposa-lily Calochortus obispoensis | Occurs in chaparral, coastal scrub, valley and foothill grassland. Often in serpentine grassland. Elevation: 75–665 meters. | May–July | //1B.2 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|---|---|-------------------|--|--|
| Cambria morning-glory Calystegia subacaulis ssp. episcopalis | Occurs in grassland and rocky areas associated with chaparral and cismontane woodland. Elevation: 60–500 meters. | April–May | //4.2 | Suitable Conditions Absent: BSA does not contain chaparral, coastal cismontane woodland, or suitable grassland. Species not observed during surveys conducted in the appropriate season. |
| San Luis Obispo owls clover Castilleja densiflora ssp. obispoensis | Occurs in valley and foothill grassland. Elevation: 10–215 meters. | April | //1B.2 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |
| California jewelflower Caulanthus californicus | Annual herb that occurs in nonnative grassland, upper Sonoran subshrub scrub, and cismontane juniper woodland and scrub communities in subalkaline and sandy loam soils. Current known naturally occurring populations are in: (1) Santa Barbara Canyon, (2) the Carrizo Plain, and (3) the Kreyenhagen Hills in Fresno County. Elevation: 61–1,000 meters. | February–May | FE/SE/1B.1 | Suitable Conditions Present: BSA contains marginally suitable grassland; however, the project site is out of the known range of this species. Species not expected to occur at the site. Species not observed during survey conducted in the appropriate season. |
| Santa Barbara ceanothus Ceanothus impressus var. impressus | Perennial shrub that occurs in chaparral on sandy soils. Elevation: 40–470 meters. | February–April | //1B.2 | Suitable Conditions Absent: BSA does not contain chaparral. Species not observed during surveys conducted in the appropriate season. |
| Nipomo Mesa ceanothus Ceanothus impressus var. nipomensis | Perennial shrub that occurs in chaparral on sandy soils. Elevation: 30–245 meters. | February–April | //1B.2 | Suitable Conditions Absent: BSA does not contain chaparral. Species not observed during surveys conducted in the appropriate season. |
| Congdon's tarplant Centromadia parryi ssp. congdonii | Occurs in depressional areas within valley and foothill grassland. Elevation: 1–230 meters. | June– November | //1B.1 | Suitable Conditions Present: Species known to occur in ruderal areas similar to what is found in the BSA. Species not observed during surveys conducted in the appropriate season. |
| Coastal goosefoot Chenopodium littoreum | Annual herb that occurs on coastal dunes. Elevation: 10–30 meters. | April–August | //1B.2 | Suitable Conditions Absent: BSA does not contain coastal dunes and is at a higher elevation than the species documented range Species not observed during surveys conducted in the appropriate season. |
| Brewer's spineflower Chorizanthe breweri | Occurs in chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest; rocky or gravelly serpentine sites; usually in barren areas. Elevation: 45–800 meters. | May–August | //1B.3 | Suitable Conditions Absent: The BSA does not contain chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest or serpentine soils. Species not observed during surveys conducted in the appropriate season. |

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|---|---|--------------------|--|--|
| straight-awned spineflower Chorizanthe rectispina | Occurs in chaparral, cismontane woodland, coastal scrub. Often on granite in chaparral. Elevation: 355–1035 meters. | April–July | //1B.3 | Suitable Conditions Absent: The BSA does not contain chaparral, cismontane woodland, coastal scrub, or granite soils. The BSA is at a lower elevation than this species documented range Species not observed during surveys conducted in the appropriate season |
| surf thistle Cirsium rhothophilum | Occurs in coastal dunes, coastal bluff scrub. Open areas in central dune scrub; usually in coastal dunes. Elevation: 3–60 meters. | April–June | /ST/1B.2 | Suitable Conditions Absent: BSA does not contain coastal dunes or coastal bluff scrub and is at a higher elevation than this species documented range Species not observed during surveys conducted in the appropriate season. |
| La Graciosa thistle Cirsium scariosum var. loncholepsis (Cirsium loncholepis) | Occurs in cismontane woodland, coastal dunes, coastal scrub, marshes and swamps (brackish), valley and foothill grassland; usually in mesic, sandy soils. 4-220 meters. | May–August | FE/ST/1B.1 | Suitable Conditions Present: BSA contains marginally suitable marsh and grassland habitat. Species not observed during surveys conducted in the appropriate season. |
| California saw-grass Cladium californicum | Rhizomatous herb that occurs in meadows and seeps, and marshes and swamps (alkaline or freshwater). Elevation: 60–600 meters. | June– September | //2B.2 | Suitable Conditions Present: The man-made golf course pond may provide suitable habitat; Species not observed during surveys conducted in the appropriate season. |
| Pismo clarkia Clarkia speciosa ssp. immaculata | Occurs in sandy soils, openings in chaparral, cismontane woodland, valley and foothill grassland. On ancient sand dunes not far from the coast. Elevation: 25–185 meters. | May–July | FE/SR/1B.1 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |
| salt marsh bird's-beak Cordylanthus maritimus ssp. maritimus | Annual herb that occurs in marshes and swamps on coastal dunes. Elevation: 0–30 meters. | May–October | FE/SE/1B.2 | Suitable Conditions Present: The man-made golf course pond may provide marginally suitable habitat; however, the species is highly unlikely to occur in the BSA. Species not observed during surveys conducted in the appropriate season. |
| Gaviota tarplant Deinandra increscens ssp. villosa | Annual herb in Asteraceae family that occurs in coastal bluff scrub, coastal scrub, and valley and foothill grassland. Typically associated with sandy soils. Elevation: 35–430 meters. | May–October | FE/SE/1B.1 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |
| dune larkspur Delphinium parryi ssp. blochmaniae | Perennial herb that occurs in maritime chaparral and coastal dunes with sandy or rocky soils. Elevation: 0–200 meters. | April–May | //1B.2 | Suitable Conditions Absent: BSA does not contain maritime chaparral or coastal dunes. Species not observed during surveys conducted in the appropriate season. |

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|---|--|------------------------|--|---|
| Eastwood's larkspur Delphinium parryi ssp. Eastwoodiae | Perennial herb that occurs in coastal areas with serpentinite soil. Often associated with openings in chaparral and valley and foothill grassland. Elevation: 75–500 meters. | February– March | //1B.2 | Suitable Conditions Absent: While the BSA does contain marginally suitable grassland, suitable soils do not occur. Species not observed during surveys conducted in the appropriate season. |
| beach spectaclepod Dithyrea maritima | Occurs in coastal dunes and coastal scrub on sea shores, sand dunes, and sandy places near shore. Elevation: 3–50 meters. | March-May | /ST/1B.1 | Suitable Conditions Absent: BSA does not contain coastal dunes or coastal scrub and is at a higher elevation than the species documented range Species not observed during surveys conducted in the appropriate season. |
| mouse-gray dudleya Dudleya abramsii ssp. murina | Occurs in serpentine outcrops in chaparral, cismontane woodland. Elevation: 90–300 meters. | May–June | //1B.3 | Suitable Conditions Absent: BSA does not contain serpentine outcrops, chaparral, or cismontane woodland. Species not observed during surveys conducted in the appropriate season. |
| Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> | Occurs in coastal scrub, chaparral, and valley and foothill grassland habitats on rocky outcrops in clay or serpentine soils. Elevation: 5–450 meters. | April–June | //1B.1 | Suitable Conditions Absent: While the BSA does contain marginally suitable grassland, suitable soils do not occur. Species not observed during surveys conducted in the appropriate season. |
| Blochman's leafy daisy Erigeron blochmaniae | Perennial rhizomatous herb that occurs in coastal dunes and coastal scrub on sandy soils. Elevation: 3–45 meters. | July–August | //1B.2 | Suitable Conditions Absent: BSA does not contain coastal dunes or coastal scrub and is at a higher elevation than the species documented range Species not observed during surveys conducted in the appropriate season. |
| mesa horkelia Horkelia cuneata ssp. puberula | Perennial herb that occurs in chaparral, cismontane woodlands, and coastal scrub in sandy or gravelly sites. Elevation: 70–810 meters. | February– September | //1B.1 | Suitable Conditions Present: Species known to occur in ruderal areas similar to what is found in the BSA. Species not observed during surveys conducted in the appropriate season. |
| Kellogg's horkelia Horkelia cuneata ssp. sericea | Perennial herb that occurs in closed-cone coniferous forest, maritime chaparral, and coastal scrub with sandy or gravelly openings. Elevation: 10–200 meters. | April– September | //1B.1 | Suitable Conditions Present: Species known to occur in ruderal areas similar to what is found in the BSA. Species not observed during surveys conducted in the appropriate season. |
| San Luis Obispo County lupine Lupinus ludovicianus | Occurs in chaparral and cismontane woodland in open areas in sandy soils of Santa Margarita formation. Elevation: 50–525 meters. | April–July | //1B.2 | Suitable Conditions Absent: The BSA does not contain chaparral or cismontane woodland. Species not observed during surveys conducted in the appropriate season |

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|---|--|----------------------|--|--|
| Nipomo Mesa Lupine Lupinus nipomensis | Annual herb that occurs in coastal dunes. Elevation: 10–50 meters. | December– May | FE/SE/1B.1 | Suitable Conditions Absent: BSA does not contain coastal dunes and is at a higher elevation than the species documented range Species not observed during surveys conducted in the appropriate season. |
| Slender bush-mallow Malacothamnus gracilis | Perennial deciduous shrub that occurs in chaparral on rocky soil. Elevation: 190–575 meters. | May–October | //1B.1 | Suitable Conditions Absent: The BSA does not contain chaparral or suitable soils. Species not observed during surveys conducted in the appropriate season |
| southern curly-leaved monardella Monardella sinuata ssp. sinuata | Annual herb that occurs in sandy soil among chaparral, cismontane woodland, coastal dunes, and coastal scrub with openings. Elevation: 0–300 meters. | April– September | //1B.2 | Suitable Conditions Absent: The BSA does not contain chaparral or cismontane woodland, coastal dunes, or coastal scrub. Species not observed during surveys conducted in the appropriate season |
| crisp monardella Monardella undulata ssp. crispa | Perennial and rhizomatous herb that occurs in coastal dunes among coast scrub and maritime chaparral. Elevation: 10–120 meters. | April–August | //1B.2 | Suitable Conditions Absent: The BSA does not contain coastal dunes, coastal scrub, or maritime chaparral. Species not observed during surveys conducted in the appropriate season |
| San Luis Obispo monardella Monardella undulata ssp. undulata | Perennial and rhizomatous herb that occurs in coastal dunes among coast scrub and maritime chaparral on sandy substrates. Elevation: 10–200 meters. | May– September | //1B.2 | Suitable Conditions Absent: The BSA does not contain coastal dunes, coastal scrub, or maritime chaparral. Species not observed during surveys conducted in the appropriate season |
| Gambel's watercress Nasturtium gambelii (Rorippa gambellii) | Rhizomatous herb that occurs in marshes and swamps (freshwater or brackish). Elevation: 5–330 meters. | April–October | FE/ST/1B.1 | Suitable Conditions Present: The man-made golf course pond may provide marginally suitable habitat. Species not observed during surveys conducted in the appropriate season. |
| coast woolly-heads Nemacaulis denudata var. denudata | Annual herb that occurs on coastal dunes. Elevation: 0–100 meters. | April – September | //1B.2 | Suitable Conditions Absent: The BSA does not contain coastal dunes. Species not observed during surveys conducted in the appropriate season. |
| spreading navarretia Navarretia fossalis | Annual herb that occurs in chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and verbal pools. Elevation: 30–655 meters. | April–June | FT//1B.1 | Suitable Conditions Present: The man-made golf course pond may provide marginally suitable habitat; however, the species is highly unlikely to occur there. Species not observed during surveys conducted in the appropriate season. |
| shinning navarretia Navarretia nigelliformis ssp. radians | Annual herb that occurs in vernal pools within cismontane woodland and valley and foothill grassland. Elevation: 76–1,000 meters. | April–July | //1B.2 | Suitable Conditions Absent: While the BSA does contain marginally suitable grassland, vernal pools do not occur. Species not observed during surveys conducted in the appropriate season. |

| Species Name | Habitat and Distribution | Flower Season | Legal Status Federal/ State/CNPS | Rationale for Expecting Presence or Absence |
|---|---|------------------|--|---|
| short-lobed broomrape Orobanche parishii ssp. brachyloba | Parasitic perennial herb that occurs in coastal bluff scrub, coastal dunes, and coastal scrub in sandy soil. Elevation: 3–305 meters. | April–October | //4.2 | Suitable Conditions Absent: The BSA does not contain coastal dunes, coastal bluff scrub, or coastal scrub. Species not observed during surveys conducted in the appropriate season. |
| black-flowered figwort Scrophularia atrata | Occurs in closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, and riparian scrub around swales and in sand dunes in sand, diatomaceous shale, and soils derived from other parent material. Elevation: 10–250 meters. | March–April | //1B.2 | Suitable Conditions Absent: The BSA does not contain coniferous forest, chaparral, coastal dunes, or riparian scrub. Species not observed during surveys conducted in the appropriate season. |
| rayless (chaparral) ragwort Senecio aphanactis | Occurs in chaparral and cismontane woodlands in coastal scrub/alkaline. Elevation: 15–800 meters. | January–April | //2B.2 | Suitable Conditions Absent: The BSA does not contain chaparral, cismontane woodlands, or coastal scrub. Species not observed during surveys conducted in the appropriate season. |
| San Bernardino aster Symphyotrichum defoliatum | Rhizomatous herb that occurs in cismontane woodland, coastal scrub, and foothill grassland near ditches and springs. Elevation: 2–2,040 meters. | July–November | //1B.2 | Suitable Conditions Present: BSA contains marginally suitable grassland. Species not observed during surveys conducted in the appropriate season. |

General references: Baldwin et al. 2012; all plant descriptions paraphrased from CNPS 2019.

Status Codes:

--= No status

Federal: FE = Federal Endangered; FT=Federal Threatened

State: SE=State Endangered; ST= State Threatened; SR= State Rare

California Native Plant Society (CNPS):

Rank 1B = rare, threatened, or endangered in California and elsewhere.

Rank 2 = rare, threatened, or endangered in California, but more common elsewhere.

Rank 3 = plants that about which more information is needed.

Rank 4 = a watch list plants of limited distribution.

CBR = Considered but Rejected

Threat Code:

- _.1 = Seriously endangered I California (over 80% of occurrences threatened / high degree and immediacy of threat)
- _____2 = Fairly endangered in California (20-80% occurrences threatened) __3 = Not very endangered I California (<20% of occurrences threatened or no current threats known)

Species Present: Species was or has been observed in the survey area.

Suitable Conditions Present: The appropriate habitat, soils, and elevation are present in the survey area.

Marginal Conditions Present: The appropriate habitat and/or soils are present but other factors (past disturbances, elevation range) may preclude species occurrence.

Suitable Conditions Absent: The survey area did not support the appropriate habitat, soils, and/or elevation for the species.

Table E-2. Special-Status Animal Species Investigated for Potential Occurrence

| Species Name | Species Name Habitat and Distribution | | Rationale for Expecting Presence or Absence |
|--|---|----------|---|
| Gastropods | | | |
| mimic tryonia (California brackishwater snail) <i>Tryonia imitator</i> | Medium- to large-sized aquatic snail that inhabits fresh and brackish waters in estuarine habitats. | /SA/ | Suitable Conditions Absent: The nan-made golf course pond in the BSA does not have confluence with estuarine habitats. This species was not observed within the BSA. |
| Insects | | | |
| Oso flaco robber fly Ablautus schlingeri | Occurs in sandy coastal backdune habitat. Found in San Luis Obispo County. | //G1, S1 | Suitable Conditions Absent: Backdune habitat necessary to support this species was not observed within the BSA. |
| Oso Flaco flightless moth Areniscythris brachypteris | Occurs in open, coastal sand dune slopes in San Luis Obispo County. | //S1 | Suitable Conditions Absent: Coastal sand dune habitat necessary to support this species was not observed within the BSA. |
| obscure bumble bee Bombus caliginosus | Inhabits open grassy coastal prairies and Coast Range meadows. Nest underground and above ground in abandoned bird nests. | //SA | Suitable Conditions Absent: Majority of BSA consists of eucalyptus groves, landscaped and ruderal vegetation along road-side right-of-ways. No open grassland habitat present that could provide suitable conditions for obscure bumble bee. Species not observed during surveys. |
| sandy beach tiger beetle Cicindela hirticollis gravida | Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Clean, dry, light-colored sand in the upper zone. Burrow in soil in sand dunes. Subterranean larvae prefer moist sand not affected by wave action. | //SA | Suitable Conditions Absent: Sand dune habitat necessary to support this species was not observed within the BSA. |
| Oso Flaco patch butterfly Chlosyne leanira elegans | Occurs in sand dune habitat around Oso Flaco Lake, San Luis Obispo County. Larval food plant is Indian paintbrush (Castilleja affinis). | //SA | Suitable Conditions Absent: Sand dune habitat and food plant necessary to support this species was not observed within the BSA. |
| globose dune beetle Coelus globosus | Occurs in fore dunes, sand hummocks, and back dunes along immediate coast in sand and under vegetation or debris. Found in Los Angeles, Marin, Mendocino, Monterey, Orange, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, Sonoma, and Ventura Counties. | //SA | Suitable Conditions Absent: Dune and foredune habitat along the immediate coast necessary to support this species does not occur within the BSA. |

| Species Name | Habitat and Distribution | Habitat and Distribution Legal Status Federal/ State/CDFW | |
|---|---|---|---|
| monarch butterfly Danaus plexippus | Occurs along coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind-protected tree groves (eucalyptus, Monterey pine and cypress), with nectar and water sources nearby. | FC/SA/ | Suitable Conditions Present: Eucalyptus trees in the BSA may provide suitable conditions for Monarch butterfly and presence cannot be ruled out. Species not observed during surveys. Species unlikely to be affected by the project as no Eucalyptus trees are to be removed and butterflies can simply fly away if disturbed. |
| Kern primrose sphinx moth Euproserpinus euterpe | Found in Walker Basin, Kern County, and several other scattered locations (Carrizo Plain, Pinnacles National Monument). Occupies sandy washes consisting of coarse- to fine-textured, decomposed granite soil. Host plant is contorted sun cup (Camissonia contorta). | FT// | Suitable Conditions Absent: BSA is well outside the documented range for the species and host plant necessary to support this species does not occur within the BSA. |
| white sand bear scarab beetle Lichnanthe albipilosa | Only occurs in tidal salt marsh in heavily grown pickleweed and in freshwater and brackish marshes near coast. Found in San Luis Obispo County. | // | Suitable Conditions Absent: Tidal salt marsh and pickleweed necessary to support this species does not occur within the BSA. |
| Morro Bay blue butterfly Plebejus icarioides moroensis | Locally common from March to July, flies only along immediate coast of San Luis Obispo and western Santa Barbara Counties. Feeds on dune bush lupine (<i>Lupinus chamissonis</i>). Restricted to dunes at Vandenberg Space Force Base, Pismo/Guadalupe dune system, and dunes of Morro Bay. | /SA/ | Suitable Conditions Absent: Dune habitat along the immediate coast necessary to support this species does not occur within the BSA. |
| Branchiopods | | | |
| vernal pool fairy shrimp Branchinecta lynchi | Occurs in vernal pool habitats including depressions in sandstone, to small swale, earth slump, or basalt-flow depressions with grassy or occasionally muddy bottom in grassland. | | Suitable Conditions Absent: Vernal pools necessary to support this species do not occur within the BSA. |
| Fish | | | |
| tidewater goby Eucyclogobius newberryi | Occurs in brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant. | FE//SSC | Suitable Conditions Absent: The nan-made golf course pond in the BSA does not have confluence with estuarine habitats. |
| Small freshwater fish that occurs in coastal waters of southern California. Typically occurs on sandy and muddy bottoms of flowing pools, creeks, intermittent streams, and small to medium rivers. Known populations occur in Malibu Creek, Santa Clara, San Luis Rey, and Santa Margarita Rivers. | | //SSC | Suitable Conditions Absent: Flowing water necessary to support this species does not occur within the BSA. |

| Species Name | Habitat and Distribution | Legal Status Federal/ State/CDFW | Rationale for Expecting Presence or Absence | |
|--|--|--|---|--|
| south-central California coast steelhead DPS Oncorhynchus mykiss irideus | Occurs in clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and 1:1 pool-to-riffle ratio. | FT, PCH//SSC | Suitable Conditions Absent : Flowing water necessary to support this species does not occur within the BSA. | |
| Amphibians | | | | |
| California tiger salamander Ambystoma californiense | Occurs in grasslands or oak woodlands that support natural ephemeral pools or ponds that mimic them. Requires seasonal water for breeding and small mammal burrows, crevices in logs, piles of lumber, and shrinkswell cracks in ground for refuges. To be suitable, aquatic sites must retain at least 30 centimeters of water for minimum of 10 weeks in winter. | FT/ST/SSC | Suitable Conditions Absent: Site does not support any ephemeral pools or seasonal water suitable for breeding. Due to ongoing maintenance at the golf course, very few small mammal burrows occur in the area. | |
| foothill yellow-legged frog Rana boylii | Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Range in California includes north and central coasts and western Sierras. | | Suitable Conditions Absent: The site lacks flowing water or shoreline with sandy substrate. | |
| California red-legged frog Rana draytonii | Occurs in aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Presence of fairly sturdy underwater supports such as cattails. | FT//SSC | Suitable Conditions Present: Aquatic and upland habitat in, and within proximity to the BSA may provide suitable conditions for California red-legged frog and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. | |
| western spadefoot Spea hammondii | Inhabits vernal pools in primarily grassland, but also in valley and foothill hardwood woodlands. | //SSC | Suitable Conditions Absent: Vernal pools necessary to support this species do not occur within the BSA. | |
| Reptiles | | | | |
| northern California legless lizard Anniella pulchra | Occurs from southern edge of San Joaquin River in northern Contra Costa County south to Ventura County. Occurs in scattered locations in San Joaquin Valley, along southern Sierra Nevada mountains, and on desert side of Tehachapi Mountains and part of San Gabriel Mountains. Prefers sandy or loose loamy soils with high moisture content under sparse vegetation. | //SSC | Suitable Conditions Present: Soil and habitats in the BSA may provide suitable conditions for Northern California legless lizard and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. | |

| Species Name | Habitat and Distribution | Legal Status Federal/ State/CDFW | Rationale for Expecting Presence or Absence |
|--|---|--|---|
| western pond turtle Emys marmorata | Found in quiet waters of ponds, lakes, streams, and marshes, typically in deepest parts with abundance of basking sites. | //SSC | Suitable Conditions Present: Golf course pond the BSA may provide suitable conditions for western pond turtle and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. |
| blunt-nosed leopard lizard Gambelia silus | Inhabits open, sparsely vegetated areas of low relief on San Joaquin Valley floor and in surrounding foothills. On valley floor, most commonly found in nonnative grassland, saltbrush scrub, and valley sink scrub. | FE/SE/FP | Suitable Conditions Absent: BSA is well outside the documented range for the species and sparse vegetated habitat necessary to support this species does not occur within the BSA. |
| coast horned lizard Phrynosoma coronatum (blainvillii population) | Frequents wide variety of habitats, commonly occurring in lowlands along sandy washes, coastal sage scrub, and chaparral in arid and semi-arid climate conditions. Species prefers friable, rocky or shallow sandy soils. | //SSC | Suitable Conditions Present: Soils and habitats in the BSA may support this species and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. |
| Birds | | | |
| Cooper's hawk Accipiter cooperii | Occurs in deciduous riparian woodland habitat MB throughout California. Nests in deciduous, mixed-deciduous, and evergreen forests, as well as in suburban and urban environments. Tends to nest in more open areas that have older and larger trees. | | Suitable Conditions Present: Eucalyptus and other trees in the BSA may provide suitable nest conditions for Cooper's hawk and presence cannot be ruled out. Species not observed during surveys; however, predisturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| sharp-shinned hawk Accipiter striatus | Short distance migrant that nests in mixed forests and wooded area. Prefers tall trees for nest building. Prey base includes small birds and mammals. | MBTA//WL | Suitable Conditions Present: Eucalyptus and other trees in the BSA may provide suitable nest conditions for sharp-shinned hawk and presence cannot be ruled out. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| tricolored blackbird Agelaius tricolor | (Nesting colony); requires open water, protected nesting substrate such as cattails or tall rushes, and foraging area with insect prey. | MBTA//SSC | Suitable Conditions Present: Golf course pond the BSA may provide suitable nesting conditions for tricolored blackbird and presence cannot be ruled out. Species not observed during surveys; however, predisturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |

| Species Name | Species Name Habitat and Distribution | | Rationale for Expecting Presence or Absence |
|--|--|---------------|--|
| burrowing owl Athene cunicularia | Occurs in open, dry grasslands, deserts, and scrublands. Subterranean nester dependent on burrowing mammals. | MBTA//SSC | Suitable Conditions Present: Grassland habitats in the BSA may support this species and presence cannot be ruled out. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| marbled murrelet Brachyramphus marmoratus | Predominantly found in Pacific Northwest, but small population occurs on Central California coast. Nests in old-growth coniferous forests of Santa Cruz County, generally approximately 150 feet high in Douglas fir and coastal redwood forests; areas characterized by large trees, multiple canopy layers, and moderate to high canopy closure. Winters at sea. | FT, MBTA/SE/ | Suitable Conditions Absent: BSA is well outside the documented range for the species and old-growth conifers necessary to support nesting habitat for this species does not occur within the BSA. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| Swainson's hawk Buteo swainsoni | Occurs in open desert, grassland, or cropland containing scattered, large trees or small groves. Roosts in large trees, but will roost on ground if none available. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in Central Valley. | MBTA/ST/ | Suitable Conditions Present: Eucalyptus and other trees in the BSA may provide suitable nest conditions for Swainson's hawk and presence cannot be ruled out. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| western snowy plover Charadrius alexandrinus nivosus | Occurs on sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting. | MBTA, FT//SSC | Suitable Conditions Absent: The BSA does not support sandy dune or gravely habitat on the edge of a water body that would be suitable for snowy plover nesting. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| southwestern willow flycatcher Empidonax traillii extimus | Forages and nests in densely wooded riparian areas of southern California. Nests are near water and low, especially in crotch of trees or bushes. Habitat patches of 0.25 acre and 30-foot minimum width. | MBTA, FE/SE/ | Suitable Conditions Absent: The BSA does not support densely wooded riparian areas that would be suitable for nesting. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |
| California condor Gymnogyps californianus | Occurs in open savannahs, grasslands, and foothill chaparral, in mountain ranges with moderate altitudes. Nest in deep canyons on rock walls with clefts or in cavities of large coastal redwoods. | MBTA, FE/SE/ | Suitable Conditions Absent: The BSA does not support nesting habitat that would be suitable for California condor. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. |

| Species Name | Species Name Habitat and Distribution | | Rationale for Expecting Presence or Absence | |
|--|---|----------------|---|--|
| California black rail Laterallus jamaicensis coturniculus | Inhabits saltwater, brackish, and freshwater marshes; wet meadows; and margins of saltwater bays. Needs water depths of about 1 inch that do not fluctuate during year and dense vegetation for nesting habitat. | MBTA/ST/FP | Suitable Conditions Absent: Although the golf course pond in the BSA may appear to provide marginally suitable nesting conditions, the constant fluctuations in water levels from discharges from the Blackake WRF would preclude any successful nesting. While highly unlikely, their presence cannot be ruled out. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. | |
| California Ridgway's rail Rallus obsoletus obsoletus | Previously known as California clapper rail (<i>R. longirostris obsoletus</i>). Occurs within salt and brackish marshes dominated by pickleweed and Pacific cordgrass. Currently restricted to marsh areas within vicinity of San Francisco Bay. Last sighting in Morro Bay was documented in 1939 (documented as California clapper rail). | MBTA, FE/SE/FP | Suitable Conditions Absent: BSA is outside the documented range for the species and salt and brackish marshes necessary to support nesting habitat for this species does not occur within the BSA. Species not observed during surveys; however, predisturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. | |
| California least tern Sternula antillarum browni | Largely coastal species that feeds on fish and nest on sandy dunes or beaches. Once common in California; currently nesting colonies are isolated to southern California and scattered Bay Area beaches. | MBTA, FE/SE/ | Suitable Conditions Absent: The BSA does not support sandy dune or beach habitat that would be suitable for snowy plover nesting. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. | |
| Least Bell's Vireo Vireo bellii pusillus | Summer resident of southern California that occurs in low riparian areas in vicinity of water or in dry river bottoms below 2,000 feet. Nests along margins of dense bushes or twigs of willow, <i>Baccharis</i> , or mesquite. | MBTA, FE/SE/ | Suitable Conditions Absent: The BSA does not support densely vegetated riparian areas that would be suitable for nesting. Species not observed during surveys; however, pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. | |
| Class Aves Other migratory bird species (nesting) | Annual grasslands, coastal scrub, chaparral, and oak woodlands may provide nesting habitat. | MBTA// | Suitable Conditions Present: Potential nesting habitat occurs throughout the site. Pre-disturbance nesting bird surveys shall be implemented with the project to reduce any potential for take. | |
| Mammals | | | | |
| Giant Kangaroo Rat Dipodomys ingens | Occupies dry, sandy grasslands and digs burrows in loose soil. Lives in colonies in isolated areas west of San Joaquin Valley, including Carrizo Plain, Elkhorn Plain, and Kettleman Hills. | FE/SE/ | Suitable Conditions Absent: BSA is well outside the documented range for the species and the dry, sparsely vegetated habitat necessary to support this species does not occur within the BSA. | |

| Species Name | Habitat and Distribution | Legal Status Federal/ State/CDFW | Rationale for Expecting Presence or Absence |
|-------------------------------|--|--|--|
| American badger Taxidea taxus | Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils. | //SSC | Suitable Conditions Present: Soils and habitats in the BSA may support this species and presence cannot be ruled out. Species not observed during surveys; however, avoidance measures shall be implemented with the project to reduce any potential for take. |

General references: Unless otherwise noted all habitat and distribution data provided by California Natural Diversity Database

Status Codes:

--= No status

Federal: FE = Federal Endangered; FT= Federal Threatened; FC= Federal Candidate; CH= Federal Critical Habitat; PCH= Proposed Federal Critical Habitat; MBTA= Protected by Federal Migratory Bird Treaty Act

State: SE= State Endangered; ST= State Threatened; SCT= State Candidate Threatened

California Department of Fish and Game: SSC= CDFW Species of Special Concern; FP= Fully Protected Species; SA= Not formally listed but included in CDFW "Special Animal" List; WL= Watch List

Rationale Terms:

Species Present: Species was or has been observed in the survey area.

Suitable Conditions Present: The survey area is within the species range and supports the appropriate habitat, soils, elevation, and other habitat requirements.

Marginal Conditions Present: The survey area is in the species range and supports the appropriate habitat but other factors (past disturbances, presence of predators, etc.) may preclude species occurrence. Suitable Conditions Absent: The survey area is not in the species range and/or does not support the appropriate habitat, soils, elevation, and/or other habitat requirements.

Table E-3. Plant Species Observed

| Scientific Name | Common Name | Family | Origin / Status ¹ |
|--------------------------------------|-------------------------------|----------------|------------------------------|
| Acmispon glaber | deerweed | Fabaceae | native |
| Arbutus unedo | strawberry tree | Ericaceae | exotic |
| Artemisia douglasiana | California mugwort | Asteraceae | native |
| Avena barbata | slender wild oat | Poaceae | exotic / Cal-IPC moderate |
| Baccharis pilularis | coyote brush | Asteraceae | native |
| Bellis perennis | English lawn daisy | Asteraceae | exotic |
| Betula nigra | river birch | Betulaceae | exotic |
| Brachypodium distachyon | false brome | Poaceae | exotic / Cal-IPC moderate |
| Brassica nigra | black mustard | Brassicaceae | exotic / Cal-IPC moderate |
| Bromus carinatus | California brome grass | Poaceae | native |
| Bromus diandrus | ripgut brome | Poaceae | exotic / Cal-IPC moderate |
| Capsella bursa-pastoris | shepherd's purse | Brassicaceae | exotic |
| Carduus pycnocephalus | Italian thistle | Asteraceae | exotic / Cal-IPC moderate |
| Carpobrotus edulis | iceplant | Aizoaceae | exotic / Cal-IPC high |
| Cedrus deodara | Deodar cedar | Pinaceae | exotic |
| Centaurea melitensis | tocalote | Asteraceae | exotic/ Cal-IPC moderate |
| Chenopodium album | lambs quarters | Chenopodiaceae | exotic |
| Chenopodium murale | nettle leaf goosefoot | Chenopodiaceae | exotic |
| Cistus ladanifer | purple spot rockrose | Cistaceae | exotic |
| Clarkia purpurea ssp. viminea | large godetia | Onagraceae | native |
| Claytonia parviflora ssp. parviflora | narrow leaved miner's lettuce | Portulacaceae | native |
| Croton californicus | California croton | Euphorbiaceae | native |
| Cynodon dactylon | Bermuda grass | Poaceae | exotic / Cal-IPC moderate |
| Cyperus eragrostis | tall flatsedge | Cyperaceae | native |
| Ehrharta calycina | perennial veldt grass | Poaceae | exotic/ Cal-IPC high |
| Epilobium ciliatum | willow herb | Onagraceae | native |
| Erigeron canadensis | Canadian horseweed | Asteraceae | native |
| Erodium botrys | long beaked filaree | Geraniaceae | exotic |
| Erodium cicutarium | redstem filaree | Geraniaceae | exotic / Cal-IPC limited |
| Escallonia rubra | red claws | Grossulariacea | exotic |
| Eucalyptus globulus | blue gum | Myrtaceae | exotic |
| Festuca arundinacea | tall fescue | Poaceae | exotic / Cal-IPC moderate |
| Festuca myuros | rattail fescue | Poaceae | exotic / Cal-IPC moderate |
| Festuca perennis | Italian ryegrass | Poaceae | exotic / Cal-IPC moderate |
| Galium aparine | common bedstraw | Rubiaceae | native |
| Gamochaeta ustulata | featherweed | Asteraceae | native |
| Geranium dissectum | cutleaf geranium | Geraniaceae | exotic / Cal-IPC limited |
| Helminthotheca echioides | bristly oxtongue | Asteraceae | exotic / Cal-IPC limited |
| Hesperocyparis macrocarpa | Monterey cypress | Cupressaceae | native |

| Scientific Name | Common Name | Family | Origin / Status ¹ |
|----------------------------------|---|------------------|------------------------------|
| Heteromeles arbutifolia | toyon | Rosaceae | native |
| Heterotheca grandiflora | telegraph weed | Asteraceae | native |
| Hordeum murinum | foxtail barley | Poaceae | exotic / Cal-IPC moderate |
| Horkelia cuneata var. cuneata | wedge-leaved horkelia | Rosaceae | native |
| Hypochaeris glabra | smooth cat's ear | Asteraceae | exotic / Cal-IPC limited |
| Jaumea carnosa | marsh jaumea | Asteraceae | native |
| Juncus bufonius var. bufonius | common toad rush | Juncaceae | native |
| Lactuca serriola | prickly lettuce | Asteraceae | exotic |
| Lemna sp. | duckweed | Lemnaceae | native |
| Logfia filaginoides | California cottonrose | Asteraceae | native |
| Lupinus arboreus | coastal bush lupine | Fabaceae | native |
| Lupinus nanus | sky lupine | Fabaceae | native |
| Lupinus truncatus | chaparral lupine | Fabaceae | native |
| Lysimachia arvensis | scarlet pimpernel | Primulaceae | exotic |
| Malva nicaeensis | bull mallow | Malvaceae | exotic |
| Malva parviflora | cheeseweed | Malvaceae | exotic |
| Medicago lupulina | Black medick | Fabaceae | exotic |
| Medicago polymorpha | burclover | Fabaceae | exotic / Cal-IPC limited |
| Melilotus indicus | yellow sweetclover | Fabaceae | exotic |
| Myoporum laetum | Ngaio tree | Scrophulariaceae | exotic / Cal-IPC moderate |
| Oxalis pes-caprae | Bermuda butercup | Oxidalaceae | exotic / Cal-IPC moderate |
| Pinus radiata | Monterey pine | Pinaceae | native |
| Plantago coronopus | cutleaf plantain | Plantaginaceae | exotic |
| Plantago lanceolata | English plantain | Plantaginaceae | exotic / Cal-IPC limited |
| Polygonum aviculare | prostrate knotweed | Polygonaceae | exotic |
| Portulaca oleracea | common purslane | Portulacaceae | exotic |
| Potentilla anserina | silverweed | Rosaceae | native |
| Pseudognaphalium californicum | ladies' tobacco, California everlasting | Asteraceae | native |
| Pseudognaphalium ramosissimum | pink cudweed | Asteraceae | native |
| Pseudognaphalium stramineum | cottonbatting plant | Asteraceae | native |
| Quercus agrifolia var. agrifolia | coast live oak | Fagaceae | native |
| Raphanus sativus | wild radish | Brassicaceae | exotic / Cal-IPC limited |
| Rumex acetosella | sheep sorrel | Polygonaceae | exotic / Cal-IPC moderate |
| Salix lasiolepis | arroyo willow | Salicaceae | native |
| Salsola tragus | Russian thistle | Chenopodiaceae | exotic / Cal-IPC limited |
| Schoenoplectus californicus | California bulrush | Cyperaceae | native |
| Sequoia sempervirens | coast redwood | Cupressaceae | native |
| Silene gallica | windmill pink | Caryophyllaceae | exotic |
| Silybum marianum | milk thistle | Asteraceae | exotic / Cal-IPC limited |
| Sisymbrium orientale | Oriental hedge mustard | Brassicaceae | exotic |

| Scientific Name | Common Name | Family | Origin / Status ¹ |
|--------------------------------------|---------------------|-----------------|------------------------------|
| Solanum douglasii | Douglas' nightshade | Solanaceae | native |
| Sonchus asper ssp. asper | prickly sow thistle | Asteraceae | exotic |
| Sonchus oleraceus | common sow thistle | Asteraceae | exotic |
| Spergula arvensis | corn spurry | Caryophyllaceae | exotic |
| Stellaria media | chickweed | Caryophyllaceae | exotic |
| Taraxacum officinale ssp. officinale | common dandelion | Asteraceae | exotic |
| Toxicodendron diversilobum | poison oak | Anacardiaceae | native |

¹ Status: California Invasive Plant Council (Cal-IPC)

High: These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed

reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate: These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited: These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

APPENDIX F

California Red-Legged Frog Habitat Assessment for the Blacklake Sewer System Consolidation Project



1422 Monterey Street, B-C200 San Luis Obispo, California 93401 Tel 805.543.7095 Fax 805.543.2367 www.swca.com

TECHNICAL MEMORANDUM

To: Nipomo Community Services District

Attn: Peter Sevcik, Director of Engineering and Operations

148 South Wilson Street Nipomo, CA 93444

From: John Moule, Senior Biologist

Date: May 21, 2021

Re: California Red-Legged Frog Habitat Assessment for the Blacklake Sewer System

Consolidation Project, Nipomo, San Luis Obispo County, California / SWCA Project

No. 063924

INTRODUCTION

This California Red-Legged Frog Site Assessment has been prepared by biologist John Moule, SWCA Environmental Consultants (SWCA), for the Blacklake Sewer System Consolidation Project (project) located in the unincorporated community of Nipomo, San Luis Obispo County, California. This assessment has been prepared for the Nipomo Community Services District to assess the site for a potential to support California red-legged frog (*Rana draytonii*, CRLF), which is known to occur in the region. This report assesses the suitability of on- and off-site aquatic and upland habitats to support various CRLF life history stages, describes the habitats located within a 1-mile radius of the project site, and identifies known CRLF occurrences within a 5-mile radius of the project site. This Site Assessment has been prepared in conformance with the guidance found in Section III (1-4) and Appendix D of the USFWS *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005) and is considered valid by the USFWS for 2 years.

BACKGROUND

The Nipomo Community Services District (NCSD) currently operates two separate wastewater treatment facilities in its service area, the Southland Wastewater Treatment Facility (WWTF) and the Blacklake Water Reclamation Facility (WRF). The Southland WWTF was recently upgraded, has a larger capacity, and was designed to expand as Nipomo continues to grow. The Blacklake WRF needs upgrades that would result in substantial additional costs (Attachment A- Photo 1). A feasibility study determined that along with the limited capacity and the need for upgrades at the Blacklake WRF, the sludge removal process there is very energy and cost intensive. It was determined that a consolidation project would be the best solution, where the Blacklake WRF would be decommissioned and a pipeline would be installed to deliver wastewater and connect with an existing Southland WWTF pipeline, saving both energy and costs.

PROJECT DESCRIPTION

The NCSD proposes the construction of a new 160-gallon-per-minute lift station and associated facilities at the existing Blacklake WRF, installation of approximately 4.15 miles (21,930 linear feet) of new 6-inch force main pipeline from the proposed lift station to the existing Southland WWTF, and the decommissioning and demolition of the existing Blacklake WRF after the new lift station is completed and operating.

The Project includes construction and installation of a new lift station consisting of an 8-foot diameter, 15-foot deep wet-well (a chamber for receiving and storing sewage until it can be pumped out), an 8-foot by 12-foot dry-pit, a pump vault, a 6-foot by 6-foot valve vault, electrical and instrumentation equipment, a wet/dry well canopy shade structure, and a supervisory control and data acquisition (SCADA) tower. Additional site features would include lighting and permanent security fencing. Construction of the lift station at this location would require the draining and filling of treatment Pond 3 and the Blacklake WRF would operate using two of the three treatment ponds during project construction. Pond 3 would be taken out of service and used as a staging area while the new lift station is constructed.

All trees and the existing berm located south of the proposed site would be left in place to provide visual screening from Willow Road. All paved areas within the fenced area would have an aggregate base course surface. The new lift station components would be predominately sub-surface.

The proposed 4.15-mile wastewater pipeline would begin at the new lift station and would be installed under NCSD easements, under existing County of San Luis Obispo roadways, and connect with an existing Southland WWTF pipeline. Staging areas for the force-main pipeline have yet to be determined: however, one staging area will be located on the 5-acre NCSD property located at northeast corner of Sundale/Camino Caballo intersection.

Upon completion and activation of the new pipeline, decommissioning of the Blacklake WRF would include: 1) Draining and removing sludge from each of the remaining effluent treatment ponds, 2) removing and disposing of the High-Density Polyethylene pond liners, 3) Filling ponds and existing depressions with engineered fill and grading the area to a smooth finish matching adjacent surfaces, 4) Demolishing and removing all buried structures, conduits, and piping on-site, 5) Demolishing and removing the WRF Control building, 6) Removing and disposing of all surface improvements, paving, walkways, and fencing, and 7) Completion of final site paving and fencing of new lift station site.

SITE LOCATION AND DESCRIPTION

The proposed project is in the unincorporated community of Nipomo, San Luis Obispo County, California, within the United States Geologic Survey (USGS) Oceano 7.5-minute topographic quadrangle (refer to Figures 1 and 2). The geographic coordinates are Lat. 35.047798 / Long. -120.544597. The new lift station would be installed on the eastern side of the existing Blacklake WRF site, located within an approximately 10,000-square-foot area within and to the east of treatment Pond 3 (the easternmost treatment pond). Installation of the new 4.15-mile force main pipeline, would be located within the NCSD easements and under County of San Luis Obispo right-of-way in Willow Road, Sundale Way, Camino Caballo, Pomeroy, and Juniper Street.

The Blacklake WRF site is composed of a developed wastewater treatment facility with three concrete and plastic-lined sewage aeration ponds, bordered by the Blacklake golf course to the east, north, and west, and Willow Road to the south. Suburban residential development occurs north and east of the golf



Figure 1. Project Vicinity Map

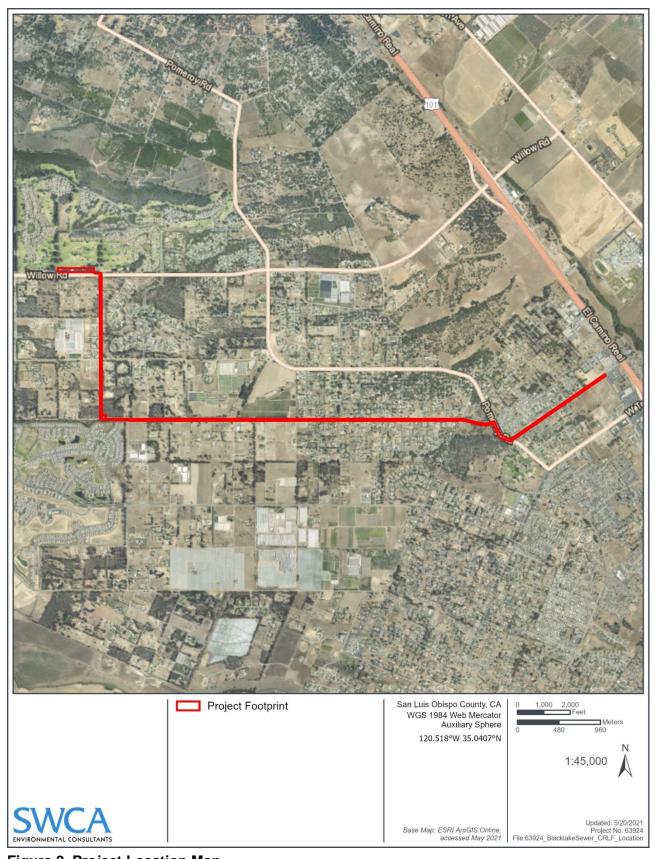


Figure 2. Project Location Map

course. Rural agriculture, ranch homes, and eucalyptus groves occur south and west of willow road. The site ranges in elevation from approximately 300-322 feet above mean sea level (msl). The project site is located within the Blacklake Canyon Watershed approximately 0.49 mile south of the Blacklake Canyon corridor.

CALIFORNIA RED-LEGGED FROG SPECIES BACKGROUND

CRLF is a federally threatened amphibian species. It is a large (2–5 inches), brown, grayish, red frog with black flecks, a red lower abdomen, and red on the underside of the hind legs. A characteristic feature of the CRLF is its prominent dorsolateral folds, visible on both sides of the frog (Stebbins 2003). CRLF is primarily aquatic but uses a variety of habitats such as backwater areas in streams, ponds, marshes, riparian and upland habitat with small mammal burrows, moist leaf litter, or structures that provide shade (USFWS 2002). Breeding habitat typically includes ponds, slow-flowing stream reaches, or deep pools within streams that contain vegetation to which egg masses may be attached. These habitats must contain enough water to last through metamorphosis and into the development of juvenile frogs (USFWS 2010). During periods of wet weather, some individuals may make overland excursions through upland habitats. CRLFs are rarely encountered far from water, but may use upland shelter habitat under logs, in small mammal burrows, or in soil cracks, provided ample moisture is available in the shelter area (USFWS 2002)

CRLF is the largest native frog species in California and was once abundant throughout the California coast range and southern California foothills. The species is also known to have occurred in the Central Valley and western Sierra Nevada, but the number of historical locations and population sizes in these regions is obscure (Barry and Fellers 2013). The species has been extirpated from 70% of its former range primarily due to urban encroachment, construction of reservoirs and water diversions, contaminants, agriculture, disease, and other factors. The introduction of non-native predators and competitors also continues to threaten the viability of many CRLF populations (USFWS 2002).

USFWS originally designated critical habitat for CRLF on April 13, 2006 (Federal Register [FR] Volume 71, 19244–19346). The most recent revised designation of critical habitat for CRLF was finalized on March 17, 2010 (75 FR 12816 12959; USFWS 2010). Critical habitat is selected based upon presence of specific habitats necessary for the conservation of the species. No USFWS designated CLRF critical habitat occurs within 5 miles of the project site.

DOCUMENTED RANGE

CRLFs occur that ranges from Northern California to Baja California, Mexico and is found from sea level to approximately 5,200 feet above msl (USFWS 2010; Stebbins 2003), with almost all the Central Valley, Sierra Nevada foothill, and southern California populations now extirpated (USFWS 2002). Based on relevant literature and personal observations, the project study area is known to be within the documented range of the CRLF.

PRIMARY CONSTITUENT ELEMENTS

The CRLF life cycle requires the presence of specific habitat elements, Primary Constituent Elements, necessary for the conservation of the species. Presence of Primary Constituent Elements can indicate suitable habitat for the species. As defined in the USFWS critical habitat designation (USFWS 2010), the Primary Constituent Elements for CRLF include aquatic breeding habitat, non-breeding aquatic habitat, upland habitat, and dispersal habitat. Each of these Primary Constituent Elements are discussed in further detail below.

Aquatic Breeding Habitat

Suitable aquatic breeding habitat for CRLF is typically composed of low-gradient freshwater habitats such as pools and backwaters of streams, natural or artificial ponds, marshes, and lagoons. Ideal aquatic breeding habitat should hold water for a minimum of 20 weeks in most years and is typically associated with some amount of emergent, submerged, floating, or edge vegetation to provide cover from predators. Emergent or submerged vegetation is also important in providing structure for attachment of eggs. (Jennings and Hayes 1994).

Non-Breeding Aquatic Habitat

Freshwater pond and stream habitats, as described above, that may not hold water long enough for the species to complete its aquatic life cycle, but which provide for shelter, foraging, predator avoidance, and aquatic dispersal for juvenile and adult California red-legged frogs may provide non-breeding habitat to CRLF. Other wetland habitats considered to meet these criteria include but are not limited to plunge pools within intermittent creeks, seeps, quiet water refugia within streams during high water flows, and springs of sufficient flow to withstand short-term dry periods.

Upland Habitat

Upland habitat is generally defined as the terrestrial habitat located adjacent to or surrounding breeding and non-breeding aquatic habitat up to 1.0 mile (1.6 km) in most cases (i.e., depending on surrounding landscape and dispersal barriers). This may include riparian, grassland, or woodland habitat types. Suitable upland habitat for CRLF typically includes features that may provide refuge for CRLF such as dense riparian vegetation, active mammal burrows, or any other element that could provide shade, shelter, moisture, or cooler temperatures. Suitable upland habitat for CRLF is described as dense riparian vegetation, wet leaf litter, logs, root wads, and overhanging banks, as well as ground squirrel and gopher burrows. These burrows may be especially important where wetter refuges are lacking (Ford et al. 2013).

Dispersal Habitat

Suitable dispersal habitat for CRLF is similar to what has been described as suitable upland habitat above, provided that it is free of barriers. USFWS considers 1.0 mile an appropriate dispersal distance that, in most cases, will facilitate connectivity between suitable aquatic breeding habitats and non-breeding aquatic and upland habitats. However, dispersal movement is considered highly site-specific (USFWS 2010). For example, dispersal barriers such as moderate to high-density urban development, heavily traveled roads such as highways or freeways, fast-flowing rivers and streams, and lakes or reservoirs greater than 50 acres could prohibit dispersal movement by CRLF.

METHODS

Prior to conducting the field investigation, the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) was reviewed for reported occurrences of CRLF within a 5-mile radius of the project site (CNDDB 2021).

SWCA Senior Biologist John Moule conducted a field survey on the property on March 31, 2021 at approximately 2:00 p.m. Weather conditions were clear and approximately 68 degrees Fahrenheit. All aquatic and upland features in the project study area and vicinity were evaluated for habitat characteristics suitable for CRLF. Potentially suitable habitats within the project study area and along the pipeline route were visited and assessed for quality, including presence of aquatic habitat, upland habitat, dispersal corridors and barriers, and predators. No protocol day or nighttime surveys were conducted in support of this site assessment; however, the freshwater pond directly adjacent to the sewage treatment plant was thoroughly scanned with binoculars for the presence of amphibians. Site photographs are included in Appendix B. A California Red-legged Frog Habitat Site Assessment Data Sheet has been prepared for habitat present within the project site and is included in Attachment B.

The NCSD provided a mapped Project Footprint of the project's direct impact areas. For the Project Study Area, SWCA added a 200-foot buffer around the sewage treatment plant's project footprint to account for adjacent aquatic and upland habitats. This buffer, combined with the road path of the pipeline, are considered the Project Study Area (refer to Figure 3).

HABITATS IN THE PROJECT STUDY AREA

Habitat types present within the Project Study Area include developed wastewater treatment ponds, asphalt concrete walkways, a facilities maintenance building, a stormwater basin, a freshwater pond, non-native grassland, Eucalyptus grove, and veldt grass grassland (refer to Figure 3).

Developed Area and Sewage Ponds

The sewage treatment plant facility consists of three concrete and plastic-lined sewage aeration ponds, a facilities control building, paving, walkways, and fencing (Attachment A- Photos 1 and 5). The sewage ponds do not provide suitable aquatic breeding or non-breeding habitat for CRLF as they support no vegetation or refuge, and the aerators provide constant agitation. The District treats the plant ponds with copper sulfate to control algae growth and the ponds are dewatered on a regular basis to remove accumulated sludge.

Mallards (*Anas platyrhynchos*) and American coots (*Fulica americana*) were observed foraging in the ponds and a predator to CRLF, a great blue heron (*Ardea herodias*) was observed above one of the sewage ponds. While the facility is directly adjacent to a freshwater pond on the golf course that could provide aquatic habitat to CRLF, the facility is unlikely to provide much suitable upland habitat as very few potential refuge locations occur. The facility cannot be ruled out as potential dispersal corridor since there are no barriers to preclude CRLF movement on to the facility and suitable aquatic habitat occurs within the 1-mile known dispersal range (USFWS 2010).

Eucalyptus Grove

Large groves of blue gum (*Eucalyptus globulus*) trees occur within and around the Project Study Area and adjacent to the proposed pipeline route (Attachment A- Photo 7). This habitat is consistent with the *Eucalyptus* spp. Woodland Semi-Natural Alliance as described by Sawyer et al. (2009). The Eucalyptus groves at the site do not provide aquatic habitat and are unlikely to support suitable upland or dispersal habitat due to the allelopathic chemicals in the leaves and bark that drop from the trees. These volatile organic chemicals maybe a deterrent to CRLF and are known to prevent other plants (that could provide moist refuge) from growing under eucalyptus trees (Zhange and Fu 2009); however, the presence of CRLF in Eucalyptus groves cannot be ruled out as small mammal burrows in this habitat may provide refuge and the groves occur within 1 mile of suitable aquatic habitat.

Ornamental Vegetation

Ornamental vegetation does not fit the description of any of the vegetation alliances described by Sawyer et al. (2009) or Holland (1986). These are landscape plantings that consist of trees and shrubs that may or may not be native to the area and were established around the treatment facility as a visual buffer. Species include Deodar cedar (*Cedrus deodara*), Layland cypress (*Cupressus* × *leylandii*), paper birch (*Betula papyrifera*), coast redwood (*Sequoia sempervirens*), coast live oak (*Quercus agrifolia*), and ngaio (*Myoporum laetum*).

Ornamental vegetation does not provide aquatic habitat but may provide suitable upland and dispersal habitat with the vegetation below and these trees occur within 1 mile of suitable aquatic habitat.

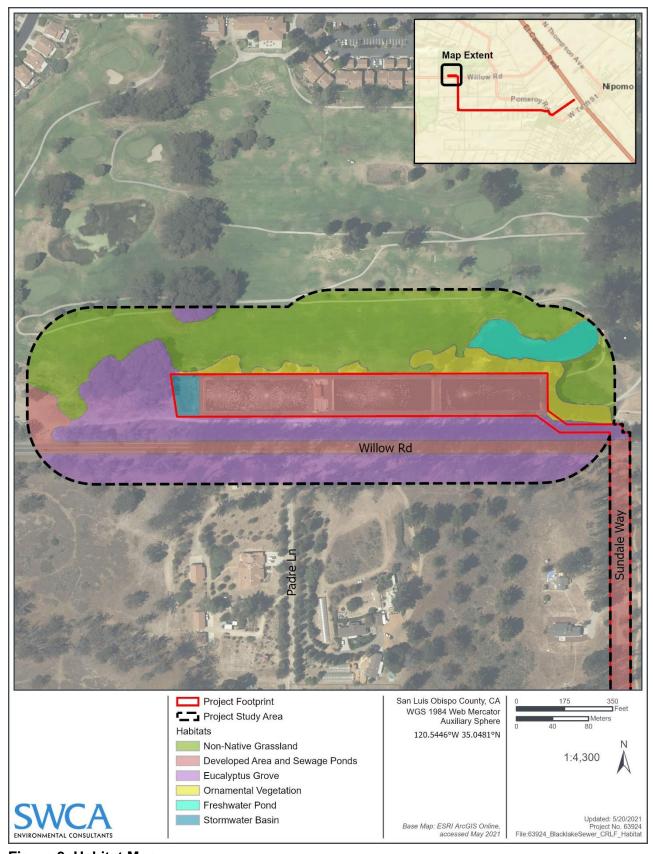


Figure 3. Habitat Map

Stormwater Basin

There is a man-made stormwater basin in the project footprint directly adjacent to the treatment facility (Attachment A- Photo 4). It contains non-native grasses and some intermittent tall flatsedge (*Cyperus eragrostis*) in the lowest portions. This basin does not hold water long enough to be suitable aquatic breeding habitat and is unlikely to provide suitable non-breeding aquatic habitat or upland habitat as it provides no refuge from predators. This area may provide potential dispersal habitat since there are no barriers to preclude CRLF movement and it occur within 1 mile of suitable aquatic habitat.

Maintained Non-native Grassland

The fairways of the golf course may be loosely considered non-native grassland. This area is regularly disturbed by mowing (Attachment A- Photo 6) and appears to be planted with perennial fescue (*Festuca* sp.) and Bermudagrass (*Cynodon dactylon*). The golf course actively deters small mammal populations from burrowing on or near the course, so small mammal burrows can be ruled out as providing upland habitat in this area. The golf course only provides potential dispersal habitat since there are no barriers to preclude CRLF movement and it occurs within 1 mile of suitable aquatic habitat.

Freshwater Pond

Within the study area, but as a part of the golf course, there is a small man-made freshwater pond directly adjacent to the sewage treatment facility (Attachment A- Photos 2 and 3). It contains approximately 0.53 acre of surface water and is mostly surrounded with tall stands of emergent California bulrush (*Schoenoplectus californicus*). Mallards and American coots were observed foraging here. While the depth of the pond is unknown, it appears to be suitable aquatic breeding and non-breeding aquatic habitat for CRLF. The entire pond was scanned with binoculars during the field visit. No amphibians were observed; however, more than one Pacific chorus frog (*Pseudacris regilla*) could be heard vocalizing. There was a great blue heron nearby (a potential predator to any frogs occurring in the pond). Golf course ponds can contain centrarchid fishes (a predator to CRLF). The water of this pond was not clear enough to detect fish.

Veldt Grass Grassland

Along the margins of the proposed pipeline route perennial veldt grass (*Ehrharta calycina*) can be found dominating the sandy soil of the roadsides (Attachment A- Photo 7). Perennial veldt grass is a perennial bunchgrass that is not native to California. It is rated by the California Invasive Plant Council as highly invasive. This plant only grows in well drained soils, crowds out other plants, and does not provide suitable upland refuge for CRLF. Small animal burrows in this habitat cannot be ruled out as potentially providing suitable upland habitat where aquatic habitat may occur within 1 mile (see Figure 4).

OTHER HABITATS WITHIN ONE MILE

SWCA evaluated habitat suitability within a 1-mile radius of the Project Footprint where public access was allowed. For those areas that were not physically accessible, aerial photo interpretation was utilized.

Terrestrial habitats not already described include:

Coast Live Oak Woodland

This habitat is consistent with coast live oak woodland as described by Holland (1986) and the *Quercus agrifolia* Forest and Woodland Alliance as described by Sawyer et al. (2009). It contains coast live oak (*Quercus agrifolia*) as greater than 50% in the tree canopy. Oak woodlands can be found on the slopes of Blacklake Canyon to the north of the Project Study Area. This habitat may provide upland habitat and dispersal habitat for CRLF.

Arroyo Willow Thickets

This habitat is consistent with Central Coast Riparian Scrub as described by Holland (1986) and the *Salix lasiolepis* Shrubland Alliance as characterized by Sawyer et al. (2009) where arroyo willow (*Salix lasiolepis*) is greater than 50% relative cover in the shrub or tree canopy. Willow thickets can be found in Blacklake Canyon to the north of the Project Study Area. This habitat may provide upland habitat and dispersal habitat for CRLF.

Central Coastal Scrub

This habitat corresponds with Central (Lucian) coastal scrub habitat, as defined by Holland (1986). Central coastal scrub habitat is present on the slopes of Blacklake Canyon to the north of the Project Study Area and is dominated by coyote brush (*Baccharis pilularis*). This habitat may provide upland habitat and dispersal habitat for CRLF.

Ruderal/Disturbed

Ruderal/disturbed vegetation occurs in areas subjected to frequent disturbance and does not fit the description of any vegetation alliances described by Sawyer et al. (2009) or Holland (1986). Ruderal/disturbed vegetation occurs from the edges of pavement where vehicle impacts have compacted the soil. This habitat may provide only dispersal habitat for CRLF.

Agricultural Fields

This habitat does not fit the description of any vegetation alliances described by Sawyer et al. (2009) or Holland (1986). These areas are regularly disturbed row crow fields and may provide (though unlikely) dispersal habitat for CRLF.

Avocado Groves

This habitat does not fit the description of any vegetation alliances described by Sawyer et al. (2009) or Holland (1986). These are agricultural groves of cultivated avocado trees (*Persea americana*). This habitat may provide upland habitat and dispersal habitat for CRLF.

Residential Development

Large tracts of residential homes (mostly around golf courses) and some rural homes occur within 1 mile of the Project Study Area. These areas may provide upland habitat and possibly dispersal habitat for CRLF; however, fences walls and other anthropomorphic features may preclude dispersal movements of CRLF.

Aquatic habitats present within 1 mile of the project site are shown on Figure 4 and include:

Freshwater Emergent Wetlands

According to the USFWS National Wetlands Inventory (USFWS 2021) Freshwater Emergent Wetlands are described as herbaceous marsh, fen, swale, or wet meadow. These are historically natural/native habitats that can be found to the north of the Project Study Area in Blacklake Canyon, in tributaries to Nipomo Creek, and in some agricultural retention sites. Based on aerial imagery collected over multiple years from 2002-2019 (Google Earth 2021) in most cases, these areas are not expected to support water for the minimum 20 weeks required to constitute suitable aquatic breeding habitat for CRLF in most years, but it cannot be ruled out in wet years.

Freshwater Forested/Shrub Wetlands

According to the USFWS National Wetlands Inventory (USFWS 2021) Freshwater Forested/Shrub Wetlands are described as woody wetlands, forested swamp, and shrub bogs. These are historically natural/native habitats that can be found to the north of the Project Study Area in Blacklake Canyon and Nipomo Creek. These areas have a greater chance to support water for the minimum 20 weeks required to

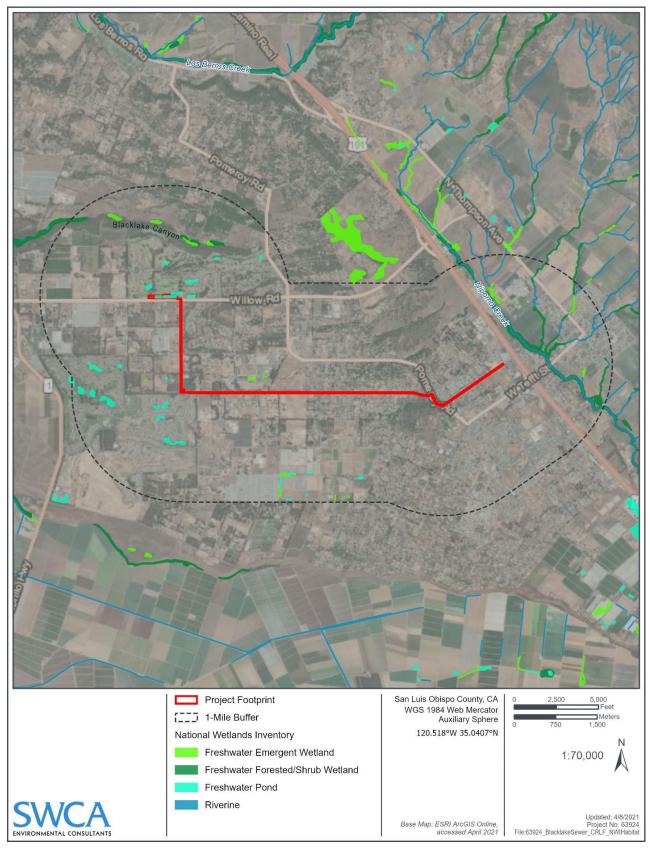


Figure 4. 1-Mile Radius Aquatic Habitat Map

constitute suitable aquatic breeding habitat for CRLF than Freshwater Emergent Wetlands due to the shade provided by forest/shrub cover; however, it is questionable if this would occur in most years.

Freshwater Ponds

There are several man-made freshwater ponds within 1 mile of the Project Study Area (see Figure 4). Almost all these ponds are engineered golf courses features on Blacklake, Monarch Dunes, and Cypress Ridge golf courses. There are also a few are agricultural retention ponds. These golf course and agricultural ponds are mostly perennial ponds that support water for the minimum 20 weeks required to constitute suitable aquatic breeding habitat and non-breading aquatic habitat for CRLF and these ponds mostly contain emergent vegetation and vegetative cover.

Riverine

According to the USFWS National Wetlands Inventory (USFWS 2021) Riverine is described as river or stream channel. These areas occur in Nipomo Creek. Based on onsite observations and USGS quadrangle maps these are ephemeral and intermittent portions of Nipomo creek that do not provide perennial water but may support water for the minimum 20 weeks required to constitute suitable aquatic breeding habitat for CRLF; however, it is questionable if this would occur in most years.

KNOWN OCCURENCES WITHIN ONE AND FIVE MILES

Based on the results of the CNDDB query, there are no known CRLF occurrences located within a 1-mile radius of the Project Footprint. Twenty-two CRLF occurrences are located within a 5-mile radius of the project site; all are presumed extant. Each occurrence is described in Table 1 below and mapped on Figure 5.

Table 1. CRLF Occurrences within 5 Miles of the Project Site

| CNDDB Occurrence | Date of Occurrence | Location | Details of Occurrence |
|---------------------|--------------------|--|---|
| 572 | 20081010 | OSO FLACO CREEK, 3.5 MILES NORTH OF GUADALUPE. | 28 ADULTS & 15 JUVENILES OBSERVED BETWEEN 30 MAY-4 JUN 2002. 12 ADULTS AND SUBADULTS OBSERVED & 5 SPLASHES HEARD DURING A NIGHT SURVEY CONDUCTED 500-700' DOWNCHANNEL OF HIGHWAY 1, ON 21 OCT 2003. 3 JUVENILES WERE OBSERVED ON 10 OCT 2008. |
| 1356 | 2001XXXX | LOS BERROS CREEK, IN THE VICINITY OF UPPER LOS BERROS RD BETWEEN N DANA FOOTHILLS RD AND SPRING CANYON LN. | DUGAN AND DUGAN (2001) ARE CITED AS HAVING OBSERVED 2 CALIFORNIA RED- LEGGED FROGS IN THIS AREA IN 2001. |

| ### ADOW CREEK, AND ARROYO GRANDE CREEK, FROM THE LAGOON TO ABOUT 1.4 MILES UPSTREAM (E). ### 20070206 GRANDE CREEK FROM THE LAGOON TO ABOUT 1.4 MILES UPSTREAM (E). ### 20070206 GOVERNAME AND ARROYO GRANDE CREEK GROWSING THE HIGHWAY 101 RIVER CROSSING, NW OF SANTA MARIA. ### 20070206 GOVERNAME AND ARROYO GRANDE CREEK, JUST EAST OF THE JUNCTION AREA. ### 34 | | | | |
|---|------|----------|--|---|
| 139 20070206 RIVER, APPROXIMATELY 3 MILES WEST (DOWNSTREAM) OF THE HIGHWAY 101 RIVER CROSSING, NW OF SANTA MARIA. SW END OF LITTLE OSO FLACO LAKE, PISMO DUNES STATE VEHICULAR RECREATION AREA. ARROYO GRANDE CREEK, JUST EAST OF THE JUNCTION OF CIENAGA ST & S. HALCYON RD, OCEANO. A.5 MILES SE OF NIPOMO, 0.6 MILE NORTH ALONG WINEMAN RD (FROM HWY 166) AT CROSSING OF UNNAMED TRIBUTARY TO NIPOMO CREEK. WEST SIDE OF WEST SIDE OF WEST SIDE OF | 496 | 20170906 | LAGOON, MEADOW CREEK, AND ARROYO GRANDE CREEK FROM THE LAGOON TO ABOUT 1.4 MILES | LARVAE OBSERVED ON 7 AUG 2011. 1 ADULT OBS ON 30 MAY & 1 ON 1 AUG 2012. 2-3 JUVENILES OBS 27 AUG 2013. OBS, 2015. 5 JUVS, 1 LARVA & 1 UNKNOWN OBS IN |
| 299 19980530 FLACO LAKE, PISMO DUNES STATE VEHICULAR RECREATION AREA. ARROYO GRANDE CREEK, JUST EAST OF THE JUNCTION OF CIENAGA ST & S. HALCYON RD, OCEANO. 2 JUVENILES OBSERVED ON 11 SEPT 2009 THE CREEK WAS MOSTLY DRY, AGAIN, TH YEAR. THE FLOW DID NOT COME UP LATE IN THE SUMMER AS IT USUALLY DOES. ANNUAL ZONE 1/1A ARROYO GRANDE CREEK WILLOW CLEARING PROJECT. 20020701 FROM HWY 166) AT CROSSING OF UNNAMED TRIBUTARY TO NIPOMO CREEK. WEST SIDE OF | 139 | 20070206 | RIVER, APPROXIMATELY 3 MILES WEST (DOWNSTREAM) OF THE HIGHWAY 101 RIVER CROSSING, NW | 3 ADULTS OBSERVED ON 1 APR 1995. 3 EGG MASSES OBSERVED ON 6 FEB 2007. |
| 1339 20090911 GRANDE CREEK, JUST EAST OF THE JUNCTION OF CIENAGA ST & S. HALCYON RD, OCEANO. 4.5 MILES SE OF NIPOMO, 0.6 MILE NORTH ALONG WINEMAN RD (FROM HWY 166) AT CROSSING OF UNNAMED TRIBUTARY TO NIPOMO CREEK. WEST SIDE OF | 299 | 19980530 | LITTLE OSO FLACO LAKE, PISMO DUNES STATE VEHICULAR RECREATION | 1 ADULT OBSERVED ON 30 MAY 1998. |
| 527 20020701 NIPOMO, 0.6 MILE NORTH ALONG WINEMAN RD (FROM HWY 166) AT CROSSING OF UNNAMED TRIBUTARY TO NIPOMO CREEK. WEST SIDE OF | 1339 | 20090911 | GRANDE CREEK, JUST EAST OF THE JUNCTION OF CIENAGA ST & S. HALCYON RD, | ANNUAL ZONE 1/1A ARROYO GRANDE |
| | 527 | 20020701 | NIPOMO, 0.6 MILE NORTH ALONG WINEMAN RD (FROM HWY 166) AT CROSSING OF UNNAMED TRIBUTARY TO | 1 ADULT (SVL 4-5 INCHES) OBSERVED ON 1 JUL 2002. |
| | 462 | 20000208 | BLOSSER ROAD, 0.3 MILE NORTH OF DONOVAN ROAD, NW EDGE | 3 ADULTS HEARD MAKING BREEDING CALLS ON 8 FEB 2000. |

| 664 | 20030727 | EAST SIDE OF BONITA SCHOOL ROAD, 0.6 MILE SOUTH OF THE SLO/SBA COUNTY LINE, 3.5 MILES EAST OF GUADALUPE. | 14 ADULTS OBSERVED ON 27 JUL 2003. |
|-----|----------|--|--|
| 954 | 20070206 | WEST SIDE AND NEAR THE NORTH END OF NORTH BLOSSER ROAD, JUST SOUTH OF THE SANTA MARIA RIVER, SANTA MARIA. | 1 ADULT OBSERVED ON 6 FEB 2007. |
| 955 | 20060727 | 0.6 MILE SW OF THE INTERSECTION OF HUTTON ROAD AND MOSS LANE, ON NIPOMO MESA JUST NORTH OF THE SANTA MARIA RIVER. | 5 ADULTS AND 3 JUVENILES OBSERVED ON 27 JUL 2006. |
| 629 | 20020612 | MIDDLE TRIBUTARY TO LOS BERROS CREEK, ON THE WEST SIDE OF HIGHWAY 101, 0.8 MILE WEST OF PICACHO HILL. | 1 SUBADULT FROG OBSERVED ON 12 JUN 2002. |
| 630 | 20020612 | SOUTHERN TRIBUTARY TO LOS BERROS CREEK, ON THE WEST SIDE OF HIGHWAY 101, 0.7 MILE WSW OF PICACHO HILL. | 15+ ADULT FROGS OBSERVED ON 12 JUN 2002. |
| 669 | 20030930 | 2 MILES NW OF THE INTERSECTION OF BLOSSER ROAD AND DONOVAN ROAD, NW OF SANTA MARIA. | 4 ADULTS OBSERVED ON 26, 29, AND 30 SEP 2003. |

| 744 | 20040422 | BLACK LAKE CANYON CREEK, AT THE ZENON WAY CROSSING, 1.75 MILES EAST OF HIGHWAY 1, NORTH OF NIPOMO MESA. | 4 SUBADULTS OBSERVED ON 22 APR 2004. |
|-----|----------|--|--|
| 936 | 20060323 | JACK LAKE, OCEANO DUNES STATE VEHICULAR RECREATION AREA, 4.5 MILES SOUTH OF OCEANO. | 1 ADULT OBSERVED ON 23 MAR 2006. |
| 144 | 19950328 | OLD GRAVEL PIT, JUST EAST OF HWY 101 AND WEST OF PICACHO, 2 MILES SE OF ARROYO GRANDE. | 1 ADULT OBSERVED ON 28 MARCH 1995. |
| 143 | 19950227 | UNNAMED DRAINAGE, 0.5 MILE EAST OF HWY 101, 2 MILES SE OF ARROYO GRANDE. | 3 JUVENILE FROGS OBSERVED ON 27 FEBRUARY 1995. |
| 145 | 19950727 | UNNAMED DRAINAGE JUST SOUTH OF PICACHO, 0.6 MILE EAST OF HWY 101, SE OF ARROYO GRANDE. | 6 ADULTS AND 4 JUVENILES WERE OBSERVED ON 27 JULY 1995. |
| 146 | 19950227 | JUST EAST OF HWY 101, 1 MILE NW OF THE INTERSECTION OF HWY 101 AND LOS BERROS CANYON, SE OF ARROYO GRANDE. | 1 JUVENILE OBSERVED ON 27 FEBRUARY 1995. |

| 147 | 19950712 | LOS BERROS CANYON CREEK, 0.3 MILE NE OF HWY 101, 4 MILES SE OF ARROYO GRANDE. | 1 JUVENILE OBSERVED ON 12 JULY 1995. |
|-------------|----------|---|--------------------------------------|
| 140 | 19950727 | 0.5 MILE NORTH OF THE SANTA MARIA RIVER CHANNEL AND 2.7 MILES WEST OF HWY 101, NW OF SANTA MARIA. | 1 ADULT OBSERVED ON 27 JULY 1995. |
| Source: CND | DB 2021. | | |

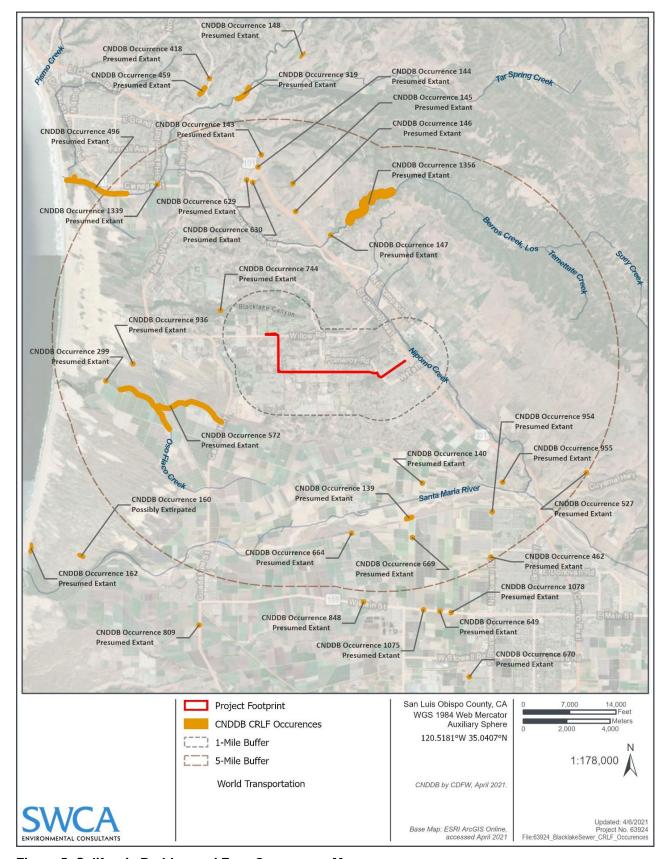


Figure 5. California Red-Legged Frog Occurrence Map

CONCLUSIONS

There are no recorded occurrences of CRLF within a 1-mile range from the proposed Project Footprint (CNDDB 2021; Figure 5). The closest record of a CRLF to the Project Footprint and Project Study Area is 1.22 miles to the northwest of the project. It is CNDDB occurrence #744 in Blacklake Canyon, at the Zenon Way crossing, 1.75 miles east of highway 1, north Nipomo mesa, where four sub-adults were observed on April 22, 2004. It could not be determined if the path between Blacklake Canyon and the project site has any complete barriers to CRLF dispersal, but there are many impedances to CRLF movement such as several avocado groves, eucalyptus groves, roads, agricultural fields, rural homes, and the residential development around Blacklake Golf Course.

Within a 5-mile range of the Project Footprint CRLFs are known occur and likely breed in creeks, agricultural ponds, and ditches in the Santa Maria Valley to the south, and Los Berros and Arroyo Grande Creeks to the north. CRLFs are highly unlikely to disperse this distance and would face many impedances and likely complete barriers to movement, such as concrete walls around residential development (Attachment A- Photo 8).

There is one man-made freshwater pond that occurs in the Project Study Area and several others that occur within 1 mile of the Project Footprint. While these are potentially suitable aquatic breeding and non-breeding aquatic habitats, these are golf course ponds and agricultural retention ponds that did not occur historically. No documented occurrence of CRLF could be found for golf course ponds on the Nipomo Mesa.

There is one creek within a mile of the project (Nipomo Creek); however, it is completely isolated from the project site by State Route 101, a very busy 4-lane freeway with no undercrossings or culverts within over a mile of the project. This would be considered a complete barrier to CRLF movement.

Based on a review of aerial imagery (Google Earth 2021; Esri 2021), the results of the field investigation, the presence of marginally suitable aquatic and upland habitats, existing levels of disturbance surrounding the project site, potential barriers to CRLF movement, and lack of CNDDB occurrence records of CRLF within 1 mile of the Project Footprint, it is anticipated that CRLFs do not occur within the project impact areas. While marginally suitable aquatic and upland habitat does occur within CRLF dispersal range of the project, no evidence suggests CRLFs occur in these areas. As such, it is unlikely that CRLF would enter the project limits and be affected by construction; however, avoidance measures are provided.

Protocol-level surveys are not recommended as they would likely be inconclusive. If project activities would result in impacts to the freshwater (golf course) pond in the Project Study Area (Figure 3) additional coordination with the USFWS should occur.

AVOIDANCE MEASURES

To reduce any potential for take of CRLF, this project shall implement the following avoidance measures: 1) A qualified biologist shall thoroughly inspect and survey the area between the sewage treatment ponds and the adjacent freshwater (golf course) pond for CRLF no more than 48 hours prior to ground or vegetation disturbing activities. If any life stage CRLF is found present, work will stop immediately and the USFWS will be contacted on how to proceed. 2) Prior to construction, an exclusion/silt fence shall be erected around the full perimeter of the existing Blacklake WRF fence and remain in place for the duration of construction and decommissioning activities.. The exclusion fence shall be no less than 3.5 feet tall and make a complete seal with ground

REFERENCES

- Barry, S.J., and G.M. Fellers. 2013. *History and Status of the California Red-Legged Frog (Rana draytonii) in the Sierra Nevada, California, USA*. Herpetological Conservation and Biology 8(2):456–502. Published: 15 September 2013.
- California Natural Diversity Database (CNDDB). 2021. RareFind5. California Department of Fish and Wildlife. Biogeographic Data Branch. Information dated: March 2021.
- ESRI. 2021. Several Basemaps. Scale Not Given. ESRI ArcGIS Online. Accessed April, 2021. http://www.arcgis.com
- Ford, L.D., P.A. Van Hoorn, D.R. Rao, N.J. Scott, P.C. Trenham, and J.W. Bartolome. 2013. *Managing Rangelands to Benefit California Red-legged Frogs and California Tiger Salamanders*. Livermore, California: Alameda County Resource Conservation District.
- Google Earth. 2021. Nipomo, California. Images from USDA Farm Service and Maxar Technologies. http://www.earth.google.com [April 7, 2021].
- Holland, R.F. 1986. *Preliminary Description of Terrestrial Natural Communities of California*. State of California, The Resources Agency, Department of Fish and Game.
- Holland, V.L., and D.J. Keil. 1995. California Vegetation. Iowa: Kendall/Hunt Publishing.
- Jennings, M.R., and M.P. Hayes. 1994. *Amphibian and reptile species of special concern in California*. California Department of Fish and Game, Rancho Cordova, California.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. Second Edition. California Native Plant Society, Sacramento.
- Stebbins, R.C. 2003. *A field guide to western reptiles and amphibians*. Third edition. Houghton Mifflin Company, New York, New York. 533 pp.
- United States Fish and Wildlife Service (USFWS). 2002. *Recovery Plan for the California Red-legged Frog* (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, Oregon. viii + 173 pp.
- ———. 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. U.S. Fish and Wildlife Service. Sacramento, California.
- ———. 2010. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for California Red-Legged Frog; Final Rule. Federal Register 75(51):12816-12959.
- ——. 2021. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. http://www.fws.gov/wetlands/
- Zhang, C., Fu, S., *Allelopathic effects of eucalyptus and the establishment of mixed stands of eucalyptus and native species*. Forest Ecol. Manage. September 15.

ATTACHMENT A

Photo Documentation



PHOTO 1.

View facing west of the Blacklake Water Reclamation Facility and sewage treatment ponds.

Photo taken on March 31, 2021.



PHOTO 2.

View facing west showing the Project Study Area with the sewage treatment ponds to the left, adjacent to a man-made freshwater pond on the golf course to the right.



PHOTO 3.

View facing south of the man-made freshwater pond on the golf course. The sewage treatment ponds are behind the first row of trees.

Photo taken on March 31, 2021.



PHOTO 4.

View of facing north of the the Stormwater Basin directly adjacent to the sewage treatment facility on the right.

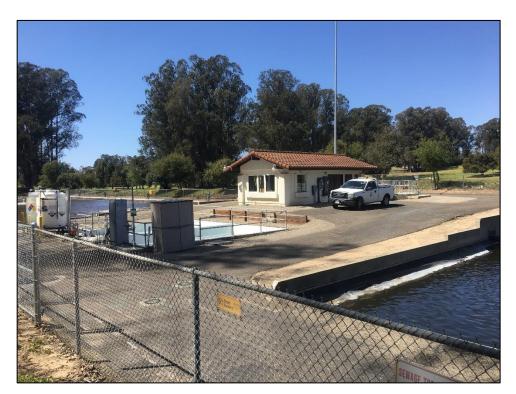


PHOTO 5.

View facing northwest of the Blacklake Water Reclamation Facility control building.

Photo taken on March 31, 2021.



PHOTO 6.

View facing east of the Project Study Area with the golf course on the left and the sewage treatment ponds on the right.



PHOTO 7.

View facing southeast of the NCSD-owned parcel located at the northeast corner of the intersection of Sundale Way and Camino Caballo. Veldt grass bunchgrass in the foreground and eucalyptus groves in the background.

Photo taken on March 31, 2021.



PHOTO 8.

View facing south from the intersection of Sundale Way and Camino Caballo showing a concrete wall surrounding residential golf course properties that are likely barriers to CRLF dispersal.

| rog Habitat Asse | | | | |
|----------------------|--------|------------|----------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | ATTACI | HMENT B | | |
| Habita | | ssment Dat | a Sheet | |
| 110.0110 | | | u 011001 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Appendix D. <u>California Red-legged Frog Habitat Site Assessment Data Sheet</u>

| Oate of Site Assessment: O3/31/2021 (mm/dd/yyyy) John (Last name) (first name) | | | | | | |
|--|--------------------------|--|---|--|--|----------------------|
| (Last name) (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (County, General location name, UTM Coordinates or Lat/Long, or T-R-S). (Proposed project name: (Blacklake Sewer Cousolidation Project Brief description of proposed action Project Proposed project name: (Blacklake Sewer Cousolidation Project Proposed project name: (Blacklake Wastewas, and species locations)** Proposed project name: (Blacklake Wastewas, Infloring of T-R-S). (Infloring name) (Instrume) (Instrume) | ite Assessm | nent reviewed by | (FWS Field Office) | (date) | (biologist) | |
| Site Location: San Luis Obispo, Black lake Waste water 5, te (County, General location name, UTM Coordinates or Lat./Long, or T-R-S). Lat, 35.047798 Long120.544 **ATTACH A MAP (include habitat types, important features, and species locations)** Proposed project name: Black lake Sewer Cousolidation Project Brief description of proposed action: Pecommission an againg wastewater treatment facility and build a pipeling to a newer facility 1) Is this site within the current or historic range of the CRF (circle one)? YES NO 2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES NO 1) If yes, attach a list of all known CRF records with a map showing all locations. GENERAL AQUATIC HABITAT CHARACTERIZATION (if multiple ponds or streams are within the proposed action area, fill out one data sheet for each) POND: Size: 1.8 acres Sewage Ponds Maximum depth: ~ 20 feet Vegetation: emergent, overhanging, dominant species: None | Date of Si Site Asses | te Assessment: _ | 03/31/202 (mm/dd/yyyy) : Moule (Last name) | John (first name) | (Last name) | (first name) |
| 2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES (NO) If yes, attach a list of all known CRF records with a map showing all locations. GENERAL AQUATIC HABITAT CHARACTERIZATION (if multiple ponds or streams are within the proposed action area, fill out one data sheet for each) POND: Size: 1.8 acres Sewage Ponds Maximum depth: ~ 20 feet Vegetation: emergent, overhanging, dominant species: | *: | *ATTACH A | eneral location name, MAP (include habita | UTM Coordinate Lat, 35 at types, important wer Couso | aste water site es or Lat./Long. or T-R-S 047798 Long features, and species locat |)120.544; ions)** |
| POND: Size: 1.8 acres Sewage ponds Maximum depth: ~20 feet Vegetation: emergent, overhanging, dominant species: None Substrate: HDPE plastic pond liner | | there known recorf yes, attach a list of | ds of CRF within 1 all known CRF records | 1.6 km (1 mi) or s with a map show | f the site (circle one)? ing all locations. | YES NO |
| Vegetation: emergent, overhanging, dominant species: None Substrate: HDPE plastic pand liker | | (if multiple ponds | or streams are within the | e proposea action ar | eu, jiii oui one uum s | |
| | | | | | | J CU teet |
| | | Substrate: HD | PE plastic | = pond l | iher | |

Appendix D. <u>California Red-legged Frog Habitat Site Assessment Data Sheet</u>

| STREAM: |
|---|
| Bank full width: Depth at bank full: |
| Stream gradient: |
| |
| Are there pools (circle one)? YES NO |
| If yes, |
| Size of stream pools: Maximum depth of stream pools: |
| Maximum depth of stream pools. |
| Characterize non-pool habitat: run, riffle, glide, other: |
| Vegetation: emergent, overhanging, dominant species: |
| Substrate: |
| Bank description: |
| Bunk desemption |
| |
| Perennial or Ephemeral (circle one). If ephemeral, date it goes dry: |
| Other aquatic habitat characteristics, species observations, drawings, or comments: |
| See CRLF Site Assessment |
| |
| |
| |
| |
| |
| |
| |
| |

Necessary Attachments:

- 1. All field notes and other supporting documents
- 2. Site photographs
- 3. Maps with important habitat features and species location

APPENDIX G Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program for the Blacklake Sewer System Consolidation Project

| Mitigation Measure | | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|--|---|--|--|--|----------------------|
| Air Quality | | | | | | |
| AQ-1 | During all site preparation and ground-disturbing activities, the applicant shall implement the following particulate matter control measures and detail each measure on the project grading and building plans: | | All measures shall be listed on project construction plans. | Phase 1: Force main pipeline Phase 2: Lift station | During all site preparation and ground-disturbing activities. | NCSD |
| | 1. 2. | Reduce the amount of disturbed area where possible. Use water trucks or sprinkler systems in sufficient quantities and, at times necessary, to prevent airborne dust from leaving the site and from exceeding San Luis Obispo County Air Pollution Control District's limit of 20% opacity for no greater than 3 minutes in any 60-minute period. Increased watering frequency shall be required whenever wind speeds exceed 15 miles per hour during construction and grading activities shall be ceased during periods of winds over 25 miles per hour. Reclaimed (non-potable) water is to be used in all construction and dust-control work when feasible. | concustion, pane. | and WRF decommissioning | asavaise. | |
| | 3. | All dirt stockpile areas (if any) shall be sprayed at least daily and covered with tarps or other dust barriers as needed. | | | | |
| | 4. | Permanent dust control measures identified in the approved project revegetation and landscape plans shall be implemented as soon as possible, following completion of any soil-disturbing activities. | | | | |
| | 5. | Exposed grounds that are planned to be reworked at dates greater than 1 month after initial grading shall be sown with a fast-germinating, non-invasive, grass seed and watered until vegetation is established. | | | | |
| | 6. | All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical binders, jute netting, or other methods approved in advance by the San Luis Obispo County Air Pollution Control District. | | | | |
| | 7. | All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. | | | | |
| | 8. | Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. | | | | |
| | 9. | All trucks hauling dirt, sand, soil, or other loose materials, are to be covered or shall maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114. | | | | |

| Mitigation Measure | | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|----------------------|--|--|---|--|----------------------|
| | 10. | Install wheel washers where vehicles enter and exit unpaved roads onto streets or wash off trucks and equipment leaving the site. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. | | | | |
| | 11. | Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible. | | | | |
| | 12. | All particulate matter 10 micrometers or less in diameter (PM10) mitigation measures required shall be shown on grading and building plans. | | | | |
| | 13. | The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints and reduce visible emissions below the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for no greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Nipomo Community Services District and San Luis Obispo County Air Pollution Control District Compliance Division prior to the start of any grading, earthwork, or demolition. | | | | |
| AQ-2 | recomme construct | wing San Luis Obispo County Air Pollution Control District- ended Standard Mitigation Measures shall be implemented to reduce tion-generated nitrogen oxides, reactive organic gases, and diesel te matter. | Measures shall be noted on project construction plans. | Phase 1: Force main pipeline Phase 2: Lift station and WRF | During all site preparation and construction activities. | NCSD |
| | 1. | Maintain all construction equipment in proper tune according to manufacturer's specifications; | | decommissioning | | |
| | 2. | Fuel all off-road and portable diesel-powered equipment with California Air Resources Board-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road); | | | | |
| | 3. | Diesel-fueled construction equipment shall meet, at a minimum, California Air Resources Board's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines and comply with the State Off-Road Regulation. Off-road equipment meeting California Air Resources Board's Tier 3 and Tier 4 emission standards shall be used to the extent locally available; | | | | |
| | 4. | Use on-road heavy-duty trucks that meet the California Air Resources Board's 2007 or cleaner certification standard for onroad heavy-duty diesel engines, and comply with the State On-Road Regulation; | | | | |
| | 5. | Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g., captive or nitrogen oxide-exempt area fleets) may be eligible by proving alternative compliance; | | | | |

| Mitigation Measure | | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party | |
|-----------------------|---|--|------------------------------------|--------------------------------|--|----------------------|--|
| | 6. | All on- and off-road diesel equipment shall not idle when equipment is not in use. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the idling restrictions; | | | | | |
| | 7. | Equipment staging and queuing areas shall be located at the maximum distance feasible from sensitive receptor locations. Signs shall be posted identifying these areas; | | | | | |
| | 8. | Electrify equipment when possible; | | | | | |
| | 9. | Substitute gasoline-powered in place of diesel-powered equipment, where possible; | | | | | |
| | 10. | Use alternative-fueled construction equipment on-site where possible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel; and | | | | | |
| | 11. | The contractor or builder shall designate a person or persons to monitor the implementation of the measures detailed above. Signage on-site shall be provided near project site entrances that detail the name and telephone number of the on-site monitor. The monitor shall be responsible for fielding questions and addressing concerns received from the public on an as-needed basis. Significant concerns shall be relayed to the Nipomo Community Services District. | | | | | |
| AQ-3 | During all construction activities and use of diesel vehicles, the applicant shall implement the following idling control techniques: | | Measures shall be noted on project | Phase 1: Force main pipeline | During all construction | NCSD | |
| | 1. | Idling Restrictions Near Sensitive Receptors for Both On- and Off-Road Equipment | construction plans. | Phase 2: Lift station and WRF | activities and use of diesel vehicles. | | |
| | | Staging and queuing areas shall be located at the greatest distance from sensitive receptor locations as feasible; | | decommissioning | | | |
| | | Diesel idling when equipment is not in use is not permitted; | | | | | |
| | | Use of alternative-fueled equipment shall be used whenever possible; and | | | | | |
| | | Signs that specify the no-idling requirements shall be posted and the requirements shall be enforced at the construction site. | | | | | |
| | 2. | California Diesel Idling Regulations. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles: | | | | | |

| Mitigation Measure | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|---|--|--|---|----------------------|
| | Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation. | | | | |
| | b. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation. | | | | |
| | Signs must be posted in the designated queuing areas and job sites to remind drivers of the idling limits. The specific requirements and exceptions in the regulation can be reviewed at the following website: www.arb.ca.gov/msprog/truck-idling/2485.pdf. These requirements shall be detailed on all project plan sets. | | | | |
| Biological I | Resources | | | | |
| BIO-1 | Environmental Monitor. Prior to ground disturbance, the Nipomo Community Services District shall retain a qualified biologist to act as an environmental monitor for all measures requiring environmental mitigation to ensure compliance with the project's required mitigation measures. The monitor shall be responsible for 1) ensuring that procedures for verifying compliance with environmental mitigations are implemented; 2) establishing lines of communication with Nipomo Community Services District staff and their contractors; 3) conducting biological surveys prior to disturbance of vegetation; 4) conducting weekly compliance monitoring; 5) conducting construction crew training regarding environmentally sensitive areas; 6) maintaining authority to stop work if a sensitive resource could be impacted by the work; and 7) outlining actions to be taken in the event of non-compliance. | Retention of monitor. | Phase 1: Force main pipeline Phase 2: Lift station and WRF decommissioning | Prior to and during ground disturbance and construction activities. | NCSD |
| BIO-2 | Environmental Awareness Training. Prior to ground disturbance, the environmental monitor shall conduct an environmental awareness training for all construction personnel. The environmental awareness training shall include discussions of monarch butterflies, California red-legged frogs, western pond turtles, silvery legless lizard, and nesting birds. Topics of discussion shall include: 1) description of the species' habitats; 2) general provisions and protections afforded by the Federal Endangered Species Act, California Endangered Species Act, and California Environmental Quality Act; 3) measures implemented to protect special-status species; 4) review of the project boundaries and conditions; 5) the monitor's role in project activities; 6) lines of communication; and 7) procedures to be implemented in the event a special-status species is observed in the work area. All construction contracts shall include clauses that require grading and construction personnel to attend environmental awareness training. | Conduct environmental awareness training; clauses shall be included in all construction contracts. | Phase 1: Force main pipeline Phase 2: Lift station and WRF decommissioning | Prior to ground disturbance activities. | NCSD |

| Mitigation Measure | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|---|---|--|---|----------------------|
| BIO-3 | Monarch Butterfly Preconstruction Survey. Tree removal and site disturbance for the installation of the pipeline shall be avoided during the monarch butterflies' fall and winter migration (late October through February) to the greatest extent feasible. If tree or vegetation removal or site disturbance is necessary during the monarch butterflies' fall and winter migration, a qualified biologist shall conduct a preconstruction survey for monarch butterflies that could utilize trees on the site for overwintering. If monarch butterflies are detected, development will be postponed until after the overwintering period or until a qualified biologist determines monarch butterflies are no longer utilizing the trees on site for overwintering. | Monarch butterfly surveys and survey report (if applicable). | Phase 1: Force main pipeline Phase 2: Lift station and WRF decommissioning | Prior to start of construction activities if work must be conducted during the monarch butterflies' fall and winter migration season (late October through February). | NCSD |
| BIO-4 | Incidental Take Permit. The Nipomo Community Services District shall procure an incidental take permit from the U.S. Fish and Wildlife Service for impacts to California red-legged frog for all work conducted within the Blacklake Water Reclamation Facility. | Obtain an incidental take permit from the U.S. Fish and Wildlife Service. | Phase 2 – Lift station and WRF decommissioning | Prior to start of site preparation and construction activities. | NCSD |
| BIO-5 | Habitat Mitigation. To offset unavoidable impacts to California red-legged frog, the Nipomo Community Services District will provide compensatory mitigation in the form of a one-time payment (currently estimated to be in the amount of \$307,260) to the U.S. Fish and Wildlife Service California Red-Legged Frog Mitigation and Conservation Account, prior to the start of construction activities within the Blacklake Water Reclamation Facility. The California Red-Legged Frog Mitigation and Conservation Account held by the National Fish and Wildlife Foundation (NFWF), is a congressionally chartered foundation, specifically charged with the administration of monies to further the conservation and management of fish, wildlife, plants, and other natural resources of the United States. Conservation account funds will be used for off-site mitigation projects that will benefit California red-legged frogs within recovery unit 24 – Santa Maria River – Santa Ynez River (i.e., the recovery unit the impacts occur in). | A one-time payment to the U.S. Fish and Wildlife Service California Red- Legged Frog Mitigation and Conservation Account. | Phase 2 – Lift station and WRF decommissioning | Prior to the start of site preparation activities within the Blacklake Water Reclamation Facility. | NCSD |
| BIO-6 | CRLF Preconstruction Surveys. A biologist approved by the U.S. Fish and Wildlife Service to handle California red-legged frog shall survey the treatment basins at the Blacklake Water Reclamation Facility, no more than 48 hours before the basins are drained, and work activities begin. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the treatment basins to a U.S. Fish and Wildlife Service-approved location, where construction activities will not occur. Nipomo Community Services District will coordinate with the U.S. Fish and Wildlife Service if frogs need to be captured and relocated. | California red- legged frog surveys and survey report (if applicable). | Phase 2 – Lift station and WRF decommissioning | 48 hours or less before the dewatering of the Blacklake Water Reclamation Facility treatment basins, and work activities begin. | NCSD |

| Mitigation Measure | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|--|---|--|--|----------------------|
| BIO-7 | Wildlife Exclusion Fencing. After the initial preconstruction surveys at the Blacklake Water Reclamation Facility, a wildlife exclusion fence shall be installed around the entirety of the facility to prevent California red-legged frog from reentering the construction area from the adjacent pond. No construction work (including storage of materials) shall occur outside of the specified project limits. The fencing shall remain in place during the entire construction period and be maintained as needed by the contractor. Upon completion of construction activities, all temporary exclusion fencing shall be removed from the project site. | Installation of wildlife exclusion fencing. | Phase 2 – Lift station and WRF decommissioning | After the initial preconstruction surveys at the Blacklake Water Reclamation Facility. | NCSD |
| BIO-8 | Construction Monitoring. A U.S. Fish and Wildlife Service-approved biological monitor shall be present during the dewatering and decommissioning of the treatment basins at the Blacklake Water Reclamation Facility. After the basins have been decommissioned and the wildlife exclusion fencing is in place, regular spot checks shall be conducted once a week during construction of the new lift station to assess the effectiveness of the exclusion measures and compliance with any other conditions outlined in the Federal Incidental Take Permit. If any life stage of the California redlegged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to move them from the treatment basins to a U.S. Fish and Wildlife Service-designated location, where construction activities will not occur. Nipomo Community Services District will coordinate with the U.S. Fish and Wildlife Service if frogs need to be captured and relocated. | Construction monitoring and monitoring reports. | Phase 2 – Lift station and WRF decommissioning | During the dewatering and decommissioning of the treatment basins at the Blacklake Water Reclamation Facility and during construction. | NCSD |
| BIO-9 | Northern California Legless Lizard Preconstruction Surveys. Within 30 days prior to and during disturbance of vegetation, a qualified biologist shall conduct surveys for Northern California legless lizards within suitable habitat areas along the right-of-way and within the staging area. The biologist shall utilize hand search or cover board methods in areas of disturbance where legless lizards are expected to be found (e.g., under shrubs, other vegetation, or debris). If cover board methods are used, they shall commence at least 30 days prior to the start of construction. Hand search surveys should be completed immediately prior to and during disturbances to the vegetated areas. During vegetation disturbing activities, the qualified biologist shall walk behind the equipment to capture silvery legless lizards that are unearthed by the equipment. The biologist shall capture and relocate any legless lizards or other reptiles observed during the survey effort. The captured individuals shall be relocated from the construction area and placed in suitable habitat on the site but outside of the work area. | Northern California legless lizard surveys and survey report (if applicable). | Phase 1: Force main pipeline | Within 30 days prior to and during disturbance of vegetation. | NCSD |
| BIO-10 | Fencing. The construction staging area and the area designated for the stockpiling of excavated materials on the Nipomo Community Services District-owed parcel shall be located outside of the eucalyptus woodland. Prior to the utilization of the staging area and initiation of ground-disturbing activities, a sturdy high-visibility fencing will be installed to clearly delineate the boundaries of any staging or stockpiling areas. This fencing will be placed so that unnecessary adverse impacts to the adjacent habitats are avoided. No | Installation of high-visibility fencing. | Phase 1: Force main pipeline | Prior to the utilization of the staging area on the NCSD-owned parcel and initiation | NCSD |

| Mitigation Measure | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|--|--|--|---|----------------------|
| | construction work (including storage of materials) will occur outside of the specified boundaries. The fencing will remain in place during the entire construction period, be monitored periodically by a qualified biologist, and be maintained as needed by the contractor. After construction, the temporarily disturbed areas shall be hydroseeded with an appropriate native plant mix, preferably with nectar-rich plant species to benefit adult monarch butterflies. | | | of ground- disturbing activities. | |
| BIO-11 | Nesting Bird Surveys. Prior to tree removal or any site preparation, ground disturbance, and related construction activities a qualified biologist shall conduct a nesting bird survey and verify that migratory birds are not nesting in the site. If nesting activity is detected, the following measures shall be implemented: 1. The project shall be modified via the use of protective buffers, delaying construction activities, or other methods designated by the qualified biologist to avoid direct take of identified nests, eggs, and/or young protected under the Migratory Bird Treaty Act and/or California Fish and Game Code; 2. The qualified biologist shall document all active nests and submit a letter report to Nipomo Community Services District documenting | Nesting bird surveys and survey report (if applicable). | Phase 1: Force main pipeline Phase 2: Lift station and WRF decommissioning | Prior to tree removal or any site preparation, ground disturbance, and related construction activities. | NCSD |
| | project compliance with the Migratory Bird Treaty Act, California Fish and Game Code, and applicable project mitigation measures. | | | | |
| BIO-12 | Oak Tree Monitoring. Impacts to oak trees shall be avoided where feasible within the Nipomo Community Park Master Plan area. Impacts include any ground disturbance or soil compaction within the dripline or Critical Root Zone of the trees (whichever distance is greater). A qualified arborist shall determine the Critical Root Zone for each oak tree within the project area that passes through the Nipomo Community Park Master Plan area. Ground disturbance within this stretch shall be supervised by a licensed arborist if excavation is proposed within the Critical Root Zone of an oak tree. The arborist shall supervise all trenching within the critical root zone. The arborist shall provide guidance such as temporary damaged root protection, use of air spades, timing between impact and root treatment by arborist, appropriate use of air spade or hand tools to minimize tree damage specific to the action proposed, and to treat root zone and branch damage. During construction and upon completion of construction the licensed arborist shall provide treatment, as the licensed arborist determines is appropriate, to maintain and improve the health of the tree, including pruning of the broken main stem, and soil supplement and watering programs. All root pruning shall be completed with sharpened hand pruners. Pruned roots shall be immediately covered with soil or moist fabric. Damaged roots shall be treated within 24 hours by a qualified tree specialist to inhibit fungus, insects, or other disease damage. | Oak tree monitoring and monitoring reports. | Phase 1: Force main pipeline | During construction activities. | NCSD |

| Mitigation Measure | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|--|--|--|---|----------------------|
| Cultural Re | sources | | | | |
| CR-1 | Prior to construction activities, a qualified archaeologist shall conduct cultural resource awareness training for all construction personnel, which will include the following: 1. Review the types of archaeological artifacts that may be uncovered; 2. Provide examples of common archaeological artifacts to examine; 3. Review what makes an archaeological resource significant to archaeologists and local native Americans; 4. Describe procedures for notifying involved or interested parties in case of a new discovery; 5. Describe reporting requirements and responsibilities of construction personnel; 6. Review procedures that shall be used to record, evaluate, and mitigate new discoveries; and 7. Describe procedures that must be followed in the case of discovery of disturbed as well as intact human burials and burial-associated artifacts. All construction contracts shall include clauses that require all grading and | Retain archeologist, review training sign-in sheets and weekly monitoring reports, regular site inspections throughout construction. | Phase 1: Force main pipeline Phase 2: Lift station and WRF decommissioning | Prior to construction activities and throughout construction. | NCSD |
| CR-2 | If cultural resources are encountered during subsurface earthwork activities, all ground-disturbing activities within a 25-foot radius of the find shall cease immediately upon such discovery and the Nipomo Community Services District shall be notified immediately. Work shall not continue until a qualified archaeologist assesses the find and determines the need for further study. If the find includes Native American affiliated materials, a local Native American tribal representative will be contacted to work in conjunction with the archaeologist to determine the need for further study. A standard inadvertent discovery clause shall be included in every grading and construction contract to inform contractors of this requirement. Any previously unidentified resources found during construction shall be recorded on appropriate California Department of Parks and Recreation forms and evaluated for significance in terms of the California Environmental Quality Act criteria by a qualified archaeologist. If the resource is determined significant under California Environmental Quality Act, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan, in conjunction with locally affiliated Native American representative(s) as necessary, that will capture those categories of data for which the site is significant. The archaeologist shall also perform appropriate technical analysis, prepare a comprehensive report, and file it with the Central Coast Information Center, | Review monitoring reports and document compliance through regular site inspections throughout construction. | Phase 1: Force main pipeline Phase 2: Lift station and WRF decommissioning | During ground-disturbing activities. | NCSD |

| Mitigation Measure | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|---|---|---|--|----------------------|
| | located at the Santa Barbara Museum of Natural History, and provide for the permanent curation of the recovered materials. | | | | |
| Geology an | nd Soils | | | | |
| GS-1 | Prior to any ground-disturbing activities of native material, the Nipomo Community Services District shall retain a qualified paleontologist to conduct a paleontological awareness training for all construction personnel conducting earthwork activities. Training shall inform all applicable personnel on recognition of possible subsurface paleontological resources and the procedures to be followed upon the discovery of paleontological materials. | review training sign-in sheets and weekly monitoring reports, regular site inspections throughout construction. | paleontologist, station and WRF disturbing activities. review training decommissioning gn-in sheets and eekly monitoring reports, regular site inspections throughout | Prior to ground- disturbing activities. | NCSD |
| | All personnel shall be instructed that unauthorized collection, theft, or disturbance of protected fossils on or off-site by the applicant, its representatives, or employees is prohibited. Violators shall be subject to prosecution under the appropriate federal, state, and local laws. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. The following issues shall also be addressed in training or in preparation for construction: | | | | |
| | All construction contracts shall include clauses that require grading personnel to attend training so that they are aware of the potential for inadvertently exposing subsurface paleontological resources, their responsibility to avoid and protect all such resources, and the penalties for collection, vandalism, or inadvertent destruction of paleontological resources. | | | | |
| | The Nipomo Community Services District-retained paleontologist shall provide a background briefing for supervisory personnel describing the potential for exposing paleontological resources and procedures and notifications required in the event of discoveries by project personnel or paleontological monitors. Supervisory personnel shall enforce restrictions on collection or disturbance of fossils. | | | | |
| GS-2 | During ground-disturbing activities of native material, if any paleontological resources are encountered, activities in the immediate area of the find shall be halted and the Nipomo Community Services District shall be notified immediately. A qualified paleontologist shall be retained to evaluate the discovery and recommend appropriate treatment options pursuant to guidelines developed by the Society of Vertebrate Paleontology. A paleontological resource impact mitigation program for treatment of the resources shall be developed and implemented if paleontological resources are encountered. If deemed significant, the paleontological resource(s) shall be salvaged and deposited in an accredited and permanent scientific institution where they will be properly curated and preserved. Prior to final inspection/occupancy of construction permit, the paleontologist shall submit to the Nipomo Community Services District a final post-construction report from the paleontologist summarizing construction compliance and protection. | Cessation of work, paleontological resource impact mitigation program, post-construction report. | Phase 2 – Lift station and WRF decommissioning | During ground- disturbance activities. | NCSD |

| Mitigation Measure | Requirements of Measure | Compliance Method | Applicable Project Phase(s) | Verification Timing | Responsible Party |
|-----------------------|---|---|--|---|----------------------|
| Hazards ar | nd Hazardous Materials | | | | |
| HAZ-1 | At least 2 weeks prior to any planned road closure, the Nipomo Community Services District shall provide notice to all residents, business owners, public facilities located within 500 feet of proposed road/lane closures and emergency response providers likely to be affected by the closure and detours, including, but not limited to, the California Department of Forestry and Fire Protection, County of San Luis Obispo Public Works Department, and San Luis Obispo County Sheriff's Office. The notice shall include the following information: dates of construction, temporary lane/road closures and detours, and contact information, including the phone number and email address of the Nipomo Community Services District staff person responsible for responding to and addressing public complaints regarding access. | Notice of road closures. | Phase 1: Force main pipeline | At least 2 weeks prior to any planned road closure. | NCSD |
| Noise | | | | | |
| N-1 | Construction activities shall be limited to the daytime hours of 7:00 a.m. to 9:00 p.m. Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturday or Sunday when possible. Some nighttime work may be required but shall be minimized. | Regular site inspections throughout construction. | Phase 1: Force main pipeline Phase 2: Lift station and WRF decommissioning | During all construction activities. | NCSD |
| N-2 | Internal combustion engines shall be equipped with the muffler recommended by the manufacturer. Internal combustion engines shall not be operated on the job site without the appropriate muffler. | Regular site inspections throughout construction. | Phase 1: Force main pipeline Phase 2: Lift station and WRF decommissioning | During all construction activities. | NCSD |