General Plan Update

Draft Environmental Impact Report

Appendices

January 2024

Carnegie
STATE VEHICULAR RECREATION AREA

Prepared for:

California State Parks
Off-Highway Motor Vehicle Recreation Division
715 P Street, Sacramento, CA 95814

Prepared by:

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APPENDIX A

NOP and Comment Letters

State of California – The Resources Agency

DEPARTMENT OF PARKS AND RECREATION

Notice of Preparation of an Environmental Impact Report

Carnegie State Vehicular Recreation Area General Plan Update

Scoping Period: March 31 – April 30, 2022

Date: March 31, 2022

To: State Clearinghouse, Responsible and Trustee Agencies, and Interested Individuals and Organizations

Subject: Notice of Preparation of an Environmental Impact Report

Carnegie State Vehicular Recreation Area General Plan Update

Lead Agency: California Department of Parks and Recreation

NOTICE IS HEREBY GIVEN that the California Department of Parks and Recreation (State Parks) Off-Highway Motor Vehicle Recreation (OHMVR) Division is the lead agency for the preparation of a General Plan Update and associated environmental impact report (EIR) for the Carnegie State Vehicular Recreation Area (SVRA). The decision-making body for the General Plan Update and EIR is the OHMVR Commission, a body of appointees that advises the OHMVR Division and has final authority of approval of General Plans and certification of associated EIRs for SVRAs.

The OHMVR Division has prepared this Notice of Preparation (NOP) pursuant to Section 15082 of the California Environmental Quality Act (CEQA) Guidelines. This NOP informs agencies and the public that an EIR is being prepared to address potential impacts resulting from approval and implementation of the *Carnegie State Vehicular Recreation Area General Plan Update*. Agencies should comment on the elements of potential environmental effects that are relevant to their statutory responsibilities in connection with the proposed project.

SCOPING PERIOD

Comments on the scope of the General Plan Update and EIR will be accepted until 5:00 PM, April 30, 2022. Please include “Carnegie SVRA General Plan Update" in the title and submit comments to:

By email: planning@parks.ca.gov

By mail:

C/O Katie Metraux, OHMVR Division, California State Parks,

P.O. Box 942896, Sacramento, CA 94296-0001

SCOPING MEETING

A virtual EIR scoping meeting has been scheduled to provide additional information about the General Plan Update and EIR process and give interested parties an opportunity to comment on the scope and potential environmental effects of the project to be analyzed in the EIR.

The scoping meeting will be a **virtual meeting** using the Zoom platform held on the following date: Tuesday, April 19, 2022, Time: 4:30-6:00 PM

Please contact Katie.Metraux@parks.ca.gov to obtain information for logging into the meeting. The meeting link also is posted on the project website at https://www.parks.ca.gov/?page_id=30807.

PROJECT TITLE

Carnegie State Vehicular Recreation Area General Plan Update

PROJECT LOCATION

The regional location of the Carnegie SVRA is shown in Figure 1. The Carnegie SVRA is a 1,575-acre off-highway vehicle (OHV) park overseen by the OHMVR Division and operated by the Diablo Range District of State Parks. Carnegie SVRA is located within unincorporated Alameda and San Joaquin Counties, approximately 15 miles east of Livermore and 12 miles west of Tracy, as shown in Figure 2. To the north is the Lawrence Livermore Laboratory property. Open space and rural residential areas (i.e., ranchland) are located to the east, west, and south. Carnegie SVRA is largely located on a northern hillside and has been operated as an SVRA since around 1980, when the Department of Parks and Recreation purchased the site when it became a unit of the State Parks System. The original 1,575-acre site had been used by OHVs since the 1940s and was operated as a private motorcycle park from 1970 to 1979 before the Department purchased it. The first General Plan was approved for Carnegie SVRA in 1981. Substantial improvements have been made to Carnegie SVRA since that time.

The OHMVR Division previously prepared a General Plan Revision and associated Program EIR for the original Carnegie SVRA and the adjacent 3,100-acre Alameda and Tesla Expansion Area. While the General Plan Revision was approved and the EIR certified by the OHMVR Commission in 2016, the Commission rescinded these decisions in 2021 as the result of several lawsuits. The lawsuits, along with subsequent legislation requiring that the Alameda and Tesla Expansion Area not be designated as an SVRA, resulted in the Department and the Division electing to prepare a standalone General Plan Update for the Carnegie SVRA. The Department will conduct a separate planning effort for the Alameda and Tesla Expansion Area to determine a suitable classification and future use of these properties.

Therefore, this proposed General Plan Update and EIR are limited to the 1,575-acre original Carnegie SVRA (Figure 2) and specifically exclude the Expansion Area. The classification of and planning for the Expansion Area will be addressed in the future under a separate effort.

PROJECT DESCRIPTION

A General Plan is the primary management document for each park unit within the State Park System, including SVRAs. The General Plan establishes the park unit's primary purpose and management direction. An approved General Plan is generally required before State Parks can move forward with site-specific improvements that are beyond minor capital outlay projects. The OHMVR Division is preparing a General Plan Update and associated EIR for Carnegie SVRA to update the long-term management framework set in the 1981 General Plan and establish the foundation for future park improvements. As part of this framework, the General Plan Update will describe appropriate recreational opportunities and management strategies for the Carnegie SVRA.

The General Plan Update preparation will be based on extensive resource and user information developed during the prior planning effort and through ongoing management and operations. The General Plan Update will document existing conditions and include a proposed land use plan, including specific use areas. Use areas will be based on geographic relationships, resource values, management issues, and goals, and desired visitor uses and experiences while recognizing this is an existing OHV park with existing uses. The General Plan Update will also contain goals and guidelines that guide Carnegie SVRA management and provide long-term direction for the development of future facilities. Given that a previous General Plan/EIR is in place, adopted in 1981, this General Plan Update may be more specific than other similar SVRA General Plans where no prior General Plan exists. Where appropriate, the location and extent of future facilities will be disclosed, and associated impacts analyzed in the General Plan Update EIR. If approved, the General Plan Update will supersede the 1981 General Plan and guide long-term and day-to-day management at the Carnegie SVRA.

GENERAL PLAN TOPICS

Topics being considered as part of the General Plan Update process include:

- Physical, biological, aesthetic, and cultural resources
- Land use and facilities
- Visitor use and experiences
- Operation and maintenance functions
- Planning influences, such as regional population projections and public input
- Recreational trends, opportunities, and constraints
- Access and circulation
- Law enforcement and public safety
- Education and interpretation opportunities

POTENTIAL ENVIRONMENTAL EFFECTS

The planning team identified the types of environmental impacts that may result from the implementation of the Carnegie SVRA General Plan Update, including any proposed new facilities and continued recreational use and maintenance of the property. The potential environmental effects that are anticipated to be addressed in the EIR include impacts on the following resource areas:

- Aesthetics
- Air quality
- Biological resources
- Cultural resources
- Energy
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality
- Land use/planning
- Noise
- Public services
- Transportation
- Tribal cultural resources
- Utilities/service systems
- Wildfire
- Mandatory findings of significance

Implementation of the General Plan Update is not expected to result in impacts on the following resource areas:

- Forestry resources
- Mineral resources

- Population and housing
- Recreation

The EIR will include a brief discussion of these resource topics, including reasons for their dismissal from detailed analysis.

INTENDED USES OF THE EIR

The OHMVR Commission will consider the EIR in conjunction with determining whether to certify it as adequate under CEQA and whether to approve the General Plan Update and make any necessary related decisions under CEQA (e.g., adopting CEQA findings of fact, statement of overriding considerations, mitigation monitoring, and reporting program).

If the OHMVR Commission certifies the EIR and approves the General Plan Update, the OHMVR Diablo Range District staff will use the EIR to assess whether future park improvements or actions are adequately evaluated, or whether additional environmental review may be required. The OHMVR Diablo Range District staff will also use any mitigation monitoring and reporting program that may be adopted by the Commission for the long-term term and day-to-day management of the SVRA.

Subsequent projects identified in the General Plan Update for which sufficient information is not currently available to enable a detailed impact analysis in the EIR will be examined at a later date in light of the EIR analysis to determine whether an additional environmental document must be prepared before the project approval and implementation).

By: Alexandra Stehl

Signature: DocuSigned by: Alex Stehl 3FC5A70BC738425...

Title: Deputy Director of Strategic Planning, State Parks

Date: March 31, 2022

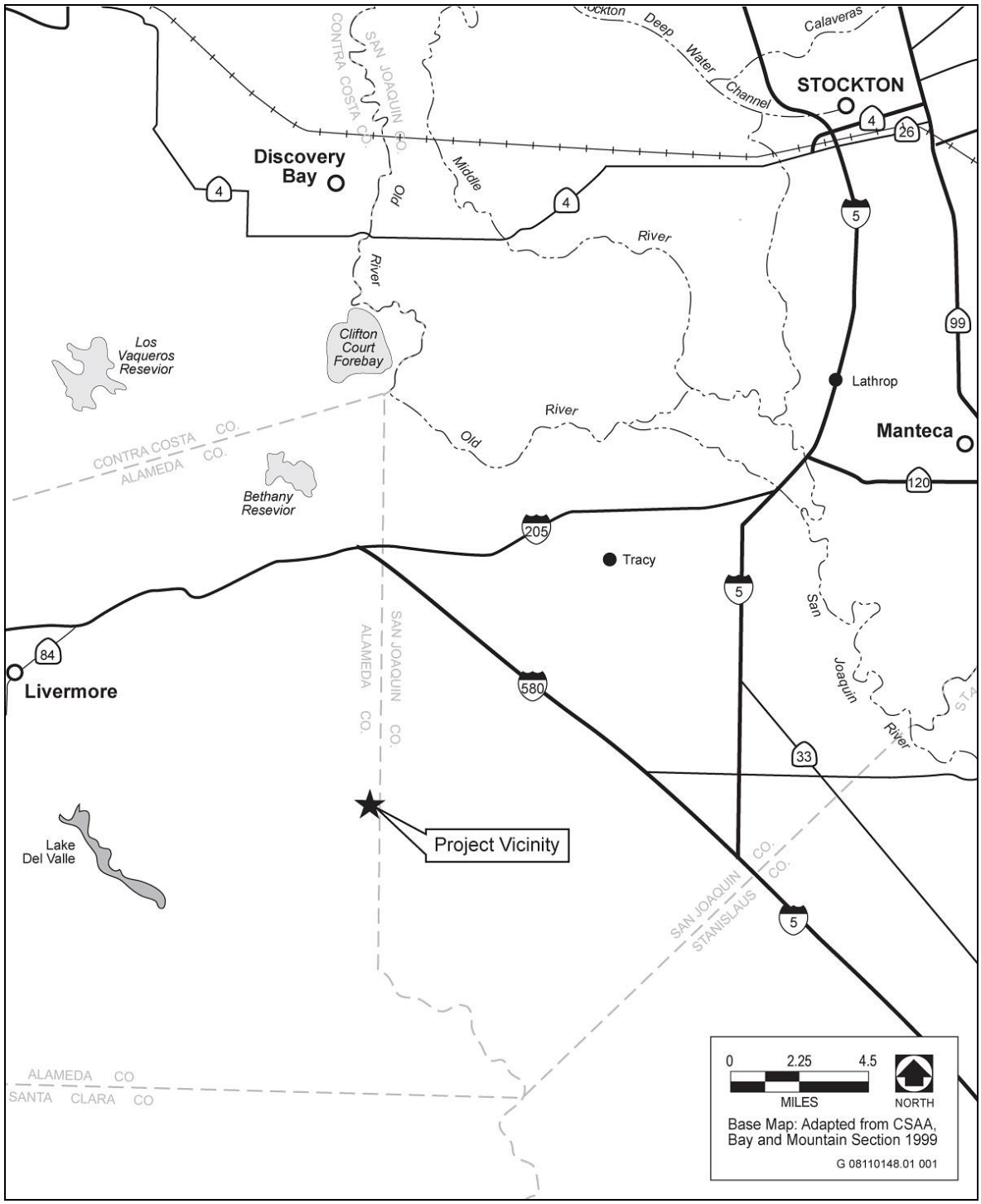

Figure 1. Regional Location Map, Adapted by AECOM 2022

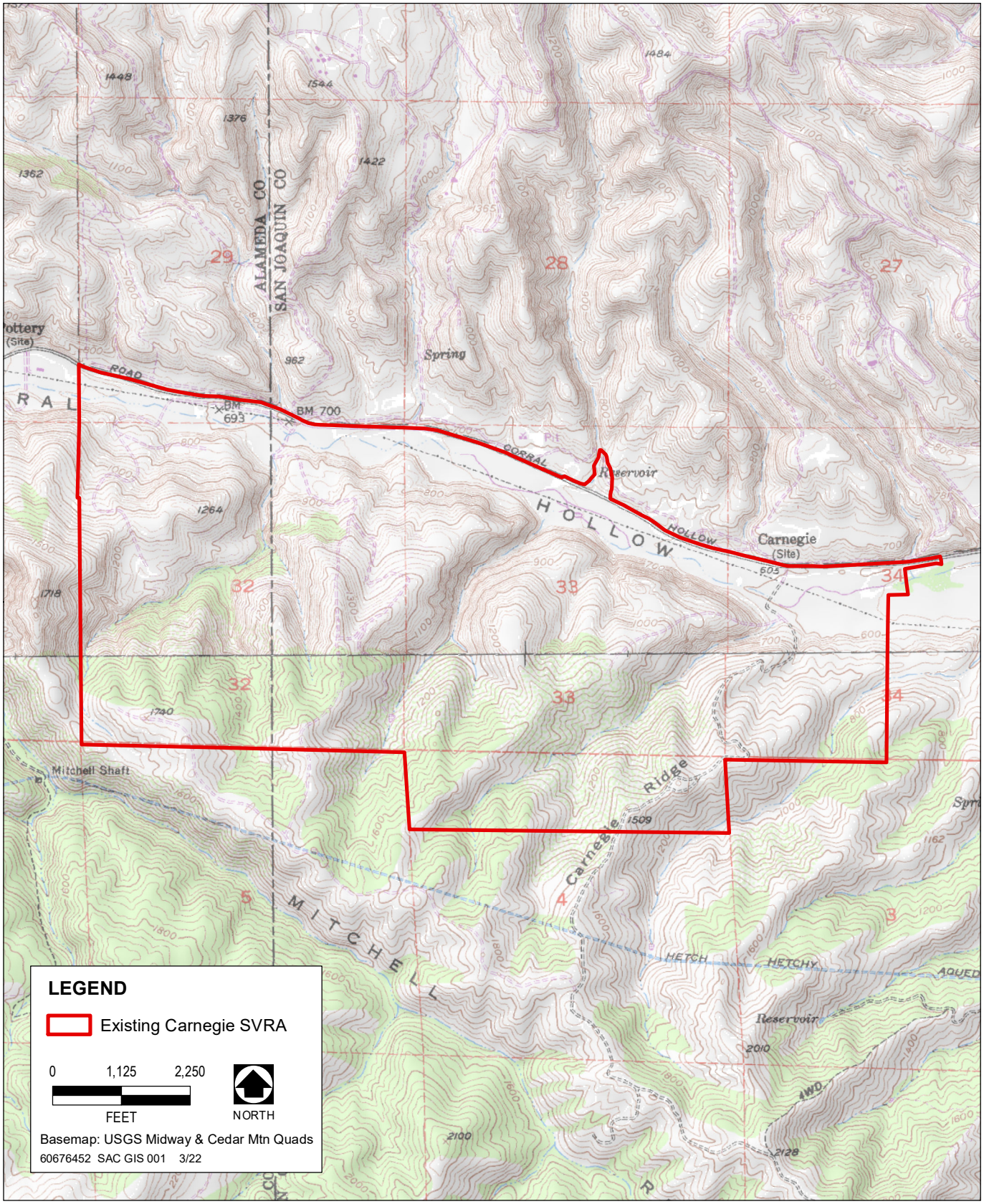

Figure 2: Figure 2. Carnegie SVRA Vicinity Map Source: State Parks 2008, TRA 2011, AECOM 2022

AECOM

2 May 2022

Alexandra Stehl
Department of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296
Alexandra.Stehl@parks.ca.gov

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, CARNEGIE STATE VEHICULAR RECREATION AREA GENERAL PLAN UPDATE PROJECT, SCH#2022030810, ALAMEDA AND SAN JOAQUIN COUNTIES

Pursuant to the State Clearinghouse's 30 March 2022 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Carnegie State Vehicular Recreation Area General Plan Update Project, located in Alameda and San Joaquin Counties.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore, our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has

adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the

State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage

under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter Minkel

Peter Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

State of California
Department of Fish and Wildlife

Memorandum

Date: May 19, 2022

To: Alexandra Stehl
California Department of Parks and Recreation
C/o Katie Metraux
OHMR Division
California State Parks
Post Office Box 942898
Sacramento, CA 94296-0001
planning@parks.ca.gov

From: Erin Chappell, Regional Manager
California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

Subject: Carnegie State Vehicular Recreation Area General Plan Update, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2022030810, Alameda and San Joaquin Counties

The California Department of Fish and Wildlife (CDFW) reviewed the Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) provided for the Carnegie State Vehicular Recreation Area General Plan Update (Project) located in unincorporated Alameda and San Joaquin Counties.

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA) §15386 for commenting on projects that could impact fish, plant and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as the California Endangered Species Act (CESA) Permit, a Native Plant Protection Act Permit, a Lake and Streambed Alteration (LSA) Agreement and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources. Pursuant to our jurisdiction, CDFW has the following concerns, comments, and recommendations regarding the Project.

PROJECT DESCRIPTION AND LOCATION

The Project is a General Plan Update to update the long-term management framework set in the 1981 General Plan and to establish the foundation for future park improvements. A General Plan is the primary management document for each park unit within the State Park System and establishes the park unit's primary purpose and management direction. An approved General Plan is required before State Parks can move forward with site-specific improvements that are beyond minor capital outlay projects.

The General Plan Update will describe recreational opportunities and management strategies for the Carnegie State Vehicular Recreation Area (Carnegie SVRA or the SVRA). The General Plan Update will document existing conditions and include a proposed land use plan, including specific use areas. The General Plan Update will also contain goals and guidelines that will guide Carnegie SVRA management and provide long-term direction for the development of future facilities. The location and extent of future facilities will be disclosed, where appropriate, and associated impacts will be analyzed in the General Plan Update EIR. If approved, the General Plan Update will supersede the 1981 General Plan and guide longer-term and day-to-day management at the Carnegie SVRA.

The Carnegie SVRA is a 1,575-acre off-highway vehicle (OHV) park overseen by the Off-Highway Motor Vehicle Recreation (OHMVR) Division and operated by the Diablo Range District of State Parks. Carnegie SVRA is located within unincorporated Alameda and San Joaquin Counties, approximately 15 miles east of Livermore and 12 miles west of Tracy. To the north is the Lawrence Livermore Laboratory property. Open space and rural residential areas (ranchland) are located to the east, west, and south. Carnegie SVRA lies south of Corral Hollow Road/Tesla Road and is largely located on a northern hillside.

The CEQA Guidelines (§§15124 & 15378) require that the draft EIR incorporate a full project description, including reasonably foreseeable future phases of the Project, and that it contain sufficient information to evaluate and review the project's environmental impact. Please include a complete description of the following project components in the project description, as applicable:

- Land use and existing recreational facilities.
- Footprints of proposed permanent Project features and temporarily impacted areas, such as staging areas and access routes.
- Existing and proposed trails for OHV use, hiking, etc.
- Area and plans for any proposed buildings/structures, ground disturbing activities, fencing, paving, and stationary machinery.
- Operational features of the Project, including level of anticipated human presence (describe seasonal or daily peaks in activity, if relevant), artificial lighting/light reflection, noise, traffic generation, and other features.
- Description of existing facilities and use, description of proposed facilities, descriptions of current uses and projected future uses of proposed facilities of the Carnegie SVRA, if available.
- Construction schedule, activities, equipment, and crew sizes.

- Mitigation monitoring and reporting program.

ENVIRONMENTAL SETTING

The draft EIR should provide sufficient information regarding the environmental setting ("baseline") to understand the Project's, and its alternatives' (if applicable), potentially significant impacts on the environment (CEQA Guidelines, §§15125 & 15360). CDFW recommends that the draft EIR prepared for the Project provide baseline habitat assessments for special-status plant, fish and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, or endangered species (CEQA Guidelines, §15380). The draft EIR should describe aquatic habitats, such as wetlands, vernal pools, breeding ponds, and/or waters of the U.S. or State, the existence of upland burrow complexes for species such as California tiger salamander and burrowing owl, historic nesting sites, and any sensitive natural communities or riparian habitat occurring on or adjacent to the Project site (for sensitive natural communities see: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities). Fully protected, threatened or endangered, candidate, and other special status species that are known to occur, or have the potential to occur in or near the Project site, include, but are not limited to those listed in the table below:

Common Name	Scientific Name	Status
Large-flowered fiddleneck	*Amsinckia grandiflora*	State rank S2, California Rare Plant Rank (CRPR)[1] 1B.2
California tiger salamander	*Ambystoma californiense*	CESA listed as threatened; Central California Distinct Population Segment ESA listed as threatened
Grasshopper sparrow	*Ammodramus savannahrum*	California Species of Special Concern (SSC)
Northern California legless lizard	*Anniella pulchra*	SSC
Golden eagle	*Aquila chrysaetos*	California Fully Protected species; Bald and Golden Eagle Protection Act
California glossy snake	*Arizona elegans occidentalis*	SSC

[1] CRPR rank definitions are available in CDFW's *Special Vascular Plants, Bryophytes, and Lichens List* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline) and on the California Native Plant Society website (https://www.cnps.org/rare-plants/cnps-rare-plant-ranks).

Burrowing owl	*Athene cunicularia*	SSC
Big tarplant	*Blepharizonia plumosa*	S2, CRPR 1B.1
Swainson's hawk	*Buteo swainsoni*	CESA listed as threatened
Chaparall harebell	*Campanula exigua*	S2, CRPR 1B.2
Lemmon’s jewelflower	*Caulanthus lemmonii*	S3; CRPR 1B.2
Townsend’s big-eared bat	*Corynorhinus townsendii*	SSC
Hospital Canyon larkspur	*Delphinium californicum* spp. *Interius*	S3, CRPR 1B.2
White-tailed kite	*Elanus leucurus*	California Fully Protected species
Western pond turtle	*Emys marmorata*	SSC
Diamond-petaled California poppy	*Eschscholzia rhombipetala*	S1, CRPR 1B.1
Brewer’s western flax	*Hesperolinon breweri*	S2, CRPR 1B.2
Loggerhead shrike	*Lanius ludovicianus*	SSC
Showy golden madia	*Madia radiata*	S3, CRPR 1B.1
San Joaquin coachwhip	*Masticophis flagellum ruddocki*	SSC
Alameda whipsnake	*Masticophis laterallus eruyxanthus*	CESA listed as threatened, ESA listed as threatened
Coast horned lizard	*Phrynosoma blainvilli*	SSC
Foothill yellow-legged frog (west/Central coast clade)	*Rana boylii*	CESA listed as endangered
California red-legged frog	*Rana draytonii*	SSC, ESA listed as threatened
Western spadefoot toad	*Spea hammonidii*	SSC
American badger	*Taxidea taxus*	SSC
San Joaquin kit fox	*Vulpes macrotis mutica*	CESA listed as threatened; ESA listed as endangered

COMMENTS AND RECOMMENDATION

CDFW offers the following comments and recommendations to assist California Department of Parks and Recreation in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on biological resources.

IMPACT ANALYSIS AND MITIGATION MEASURES

The CEQA Guidelines (§§ 15126, 15126.2, & 15358) necessitate that the draft EIR discuss all direct and indirect impacts (temporary and permanent), including reasonably foreseeable impacts, that may occur with implementation of the Project. This includes evaluating and describing impacts such as:

- Potential for "take" of special-status species;
- Encroachments into drainage ditches, dry streambeds, wetlands, breeding ponds, nesting areas, burrow habitat, or other sensitive areas;
- Loss or modification of breeding, nesting, dispersal and foraging habitat, including vegetation removal, alteration of soils and hydrology, soil erosion, and removal of habitat structural features (e.g., snags, roosts, breeding ponds, burrows, overhanging banks);
- Permanent and temporary habitat disturbances associated with ground disturbance; noise, lighting, reflection, air pollution, traffic or human presence; and
- Obstruction of movement corridors or access to water sources and other core habitat features.

The draft EIR also should identify reasonably foreseeable future projects in the Project vicinity, disclose any cumulative impacts associated with these projects, determine the significance of each cumulative impact, and assess the significance of the Project's contribution to the impact (CEQA Guidelines, §15355). Although a project's impacts may be insignificant individually, its contributions to a cumulative impact may be considerable; a contribution to a significant cumulative impact – e.g., reduction of available habitat for a listed species – should be considered cumulatively considerable without mitigation to minimize or avoid the impact.

Based on the comprehensive analysis of the direct, indirect, and cumulative impacts of the Project, the CEQA Guidelines (§§ 15021, 15063, 15071, 15126.2, 15126.4 & 15370) direct the lead agency to consider and describe all feasible mitigation measures to avoid potentially significant impacts in the draft EIR, and mitigate significant impacts of the Project on the environment. This includes a discussion of take avoidance and minimization measures for special-status species, which are recommended to be developed in early consultation with the U.S. Fish and Wildlife Service, the National

Marine Fisheries Service and CDFW. These measures can then be incorporated as enforceable project conditions to reduce potential impacts to biological resources to less-than-significant levels.

Fully protected species such as white-tailed kite and golden eagle may not be taken or possessed at any time (Fish and Game Code § 3511). Therefore, the draft EIR is advised to include measures to ensure complete take avoidance of these fully protected species.

Habitat descriptions and species profiles should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Based on the data and information from the habitat assessment, the draft EIR should adequately assess which special-status species are likely to occur on or near the Project site, and whether they could be impacted by the Project.

CDFW recommends that prior to distribution of the draft EIR, surveys be conducted for special-status species with potential to occur, following recommended survey protocols if available. Findings of any such surveys should be included and referred to in the impacts analysis section of the draft EIR. As detailed elsewhere in this letter, these findings should be presented together with an analysis and proposal for how any potential impacts to sensitive resources will be avoided, minimized, and/or mitigated to a level less than significant. Survey and monitoring protocols and guidelines are available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocol.

Botanical surveys for special-status plant species, including those including those with a California Rare Plant Rank listed by the California Native Plant Society (http://www.cnps.org/cnps/rareplants/inventory/), must be conducted during the blooming period for all sensitive plant species potentially impacted by the Project within the Project area and require the identification of reference populations. Please refer to CDFW protocols for surveying and evaluating impacts to rare plants, and survey report requirements, available at: https://www.wildlife.ca.gov/Conservation/Plants. Please follow the reporting requirements in the protocols and provide the findings in a botanical surveys report as part of the draft EIR.

The draft EIR should map the existing natural resources and sensitive habitats and provide avoidance and minimization measures to monitor and protect them in the future. CDFW recommends incorporating the following avoidance, minimization, and mitigation measures into the Project's draft EIR, and that the following measures be made required mitigation measures for the Project:

- Habitat and Wildlife Surveys. Perform surveys that identify and map habitats on-site used by special-status species, perform surveys that identify and map habitat features on-site (e.g. breeding ponds, burrow complexes, dens, friable soils, potential nesting trees, bat roosting habitat like large trees, crevices, loose bark,

etc.), perform wildlife surveys, and perform vegetation surveys. Surveys should be performed during the time of day and the time of year when detection is most likely for wildlife and plants. Survey methods and results should be provided for review and feedback. Survey protocols for wildlife and plants are available at https://wildlife.ca.gov/Conservation/Survey-Protocols.

- Robust Monitoring Surveys. Not only should surveys be implemented to map the habitat, habitat features, wildlife, and vegetation, but a robust monitoring program should be developed. The purpose is to monitor if avoidance and minimization measures are effective, to identify where on-going avoidance measures are needed, and to assess if compensatory mitigation for impacts to protected species is required and the amount. *A long-term schedule for the surveys above should be planned and performed to monitor the health of the habitats and habitat features (e.g., breeding ponds) in the Carnegie SVRA on which wildlife rely. The schedule should include criteria that will trigger remedial action/additional protection if surveys show that the special-status species habitats or features are being degraded.*

- Amphibian (e.g., western spadefoot toad, California tiger salamander) Avoidance. Breeding pools for western spadefoot toad are known to occur on the Carnegie SVRA site and they are impacted by off-road vehicles driving through them and near them. Construction and use of off-road trails, roads, practice areas, facilities, and other motorized activities occurring within dispersal distance of known or potential breeding ponds could cause take of CTS and other special-status amphibians. Filling of breeding ponds and aggradation of stream channels with sediments eroding from disturbed hillsides can eliminate aquatic habitat and shorten the hydroperiod, thus causing mortality of larvae prior to successful metamorphosis.

  The draft EIR should determine and quantify impacts to amphibians and then present take avoidance and minimization measures and mitigation for impacts to breeding and/or upland habitat, to conclude that the impacts have been mitigated to less-than-significant levels. This should include any impacts to hydrology and/or breeding ponds resulting from OHV use on-site.

- Avoidance and minimization measures could include the following: erecting protective fencing during the breeding season to block off breeding areas and allow amphibians to disperse without being disturbed or crushed by vehicles; specific areas could be restricted from use during breeding and dispersal times of year or after rains (e.g., from May 1 through August 31 when salamander metamorphs are likely to be migrating away from their natal ponds); and establishing adequate buffer areas. Activities that will impede or cause take of CTS during movement periods should be avoided after the first 0.5 inches of rain in the fall until mid-March and from mid-May until the breeding ponds are dry. Based on existing literature, a buffer of 5,587 feet surrounding a breeding pond would protect 95% of the CTS population associated with that pond. If impacts

cannot be avoided and fully minimized, then compensatory mitigation should be proposed.

- Western spadefoot toad (*Spea hammondii*) is a California Species of Special Concern and has been documented in the Original Carnegie SVRA. Western spadefoot toads are almost completely terrestrial and enter water only to breed (Dimmitt and Ruibal 1980). Recently metamorphosed juveniles emerge from water and seek refuge in the immediate vicinity of natal ponds. They spend several hours to several days near these ponds before dispersing. CDFW staff observed western spadefoot toadlets seeking refuge in drying mud cracks in the breeding pools at the Original Carnegie SVRA. Sound or vibration from rain striking the ground appears to be the primary emergence cue used by spadefoot toads, and even the vibrations of a motor can cause toads to emerge (Dimmitt and Ruibal 1980). Based on calculations from upland habitat use data analyzed by Semlitsch and Brodie (2003), a buffer of 1,207 feet from suitable breeding wetlands or pools may provide protection for western spadefoot toads.

- Western pond turtles (*Actinemys marmorata*) use aquatic habitat mainly for foraging, thermoregulation, and avoidance of predators. Gravid females leave drying creeks from May through July to oviposit in sunny upland habitats, including grazed pastures. Nesting has been reported to occur up to 1,391 feet from water (Jennings and Hayes 1994), but is usually closer, averaging 92 feet from aquatic habitat (Rathbun et al. 2002). In an arid habitat similar to Carnegie SVRA, radio-tagged turtles left ponds as water levels receded in the fall, traveled 837 to 3,596 feet overland, and remained terrestrial for periods ranging from 10 to 30 weeks (Pilliod et al. 2013). An adequate buffer for western pond turtles should include the upland surrounding their known aquatic habitat.

- Swainson's Hawks. CDFW recommends conducting protocol-level surveys for Swainson's hawk nest sites to determine the appropriate mitigation to reduce impacts to less-than-significant. CDFW recommends using the Swainson's Hawk Technical Advisory Committee's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (TAC Report) available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols.

  To mitigate for the loss of Swainson's hawk foraging habitat in a method consistent with the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California,* CDFW 1994, (SWH Staff Report), CDFW recommends the draft EIR to incorporate the following language:

  - For projects within one-mile of an active nest tree (the SWH Staff Report defines an active nest as used during one or more of the last five years), provide one-acre of land for each acre of development authorized (1:1 ratio).

- For projects within five miles of an active nest tree, but greater than one mile from the nest tree, provide 0.75 acres of land for each acre of development authorized (0.75:1 ratio).

- For projects within 10 miles of an active nest tree, but greater than 5 miles from an active nest tree, provide 0.5 acres of land for each acre of development authorized (0.5:1 ratio).

CDFW recommends that Project-related disturbance within a minimum of 0.25 miles (and up to 0.5 miles depending on site-specific conditions) of active Swainson's hawk nest site should be reduced or eliminated during the critical phases of the nesting cycle (March 1 through September 15) in order to avoid significant impacts to the hawk. If Project activities must be conducted during this critical phase, then appropriate buffers should be established by a qualified biologist until September 15 (or until the young have fully fledged and are feeding independently).

- Burrowing Owl. Burrowing owl surveys should be conducted by a qualified CDFW-approved biologist. Consistent with the CDFW *Appendix D: Breeding and Non-breeding Season Surveys* of the CDFW *Staff Report on Burrowing Owl Mitigation* (Staff Report), a *minimum* of four survey visits should be conducted during the owl breeding season which is typically between February 1 and August 31. 1) At least one site visit between February 15 and April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15. Pre-construction surveys should be conducted no-less-than 14 days prior to the start of construction activities with a final survey conducted within 24 hours prior to ground disturbance.

  If burrowing owls are documented within or adjacent to proposed facilities, then the project may have a significant impact to burrowing owls. If suitable burrowing owl nest sites are present within or adjacent to the Project area, then the draft EIR should include "take" avoidance and minimization measures for the owl. It should also include measures to avoid or minimize loss of burrowing owl foraging habitat. At a minimum, if burrowing owls have been documented to occupy burrows at the project site in recent years, the current scientific literature supports the conclusion that the site should be considered occupied, and mitigation should be required by the CEQA lead agency to address project specific significant and cumulative impacts (Staff Report). Please refer to the Staff Report, section on *Mitigation Methods*, on avoiding disturbance of occupied burrows through establishment of exclusion zones. Please be advised that CDFW does not consider exclusion of burrowing owls or "passive relocation" as a "take" avoidance, minimization or mitigation method, and considers exclusion as a significant impact. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of evicted or excluded owls is unknown. All possible avoidance and minimization measures

should be considered before temporary or permanent exclusion and closure of burrows is implemented in order to avoid "take."

The draft EIR for the Project should also include measures to avoid or minimize loss of burrowing owl foraging habitat. Any permanent impacts to owl foraging habitat should be effectively mitigated, and the draft EIR should outline the mitigation. Mitigation lands for owls should include presence of burrows, burrow surrogates, presence of fossorial mammal dens, well-drained soils, abundant and available prey within close proximity to burrows, as well as foraging, wintering, and dispersal areas. The location of mitigation areas for burrowing owls should be approved by CDFW prior to the start of Project-related activities. Mitigation may be partially or fully accomplished in conjunction with mitigation associated with loss of Swainson's hawk foraging habitat.

- Nesting Birds. The lead agency is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act of 1918 or Fish and Game Code section 3503. CDFW recommends that a qualified avian biologist conduct pre-activity surveys for active nests no more than seven (7) days prior to the start of ground or vegetation disturbance and every 14 days during Project activities to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. Prior to initiation of ground or vegetation disturbance, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once Project activities begins, CDFW recommends having the qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

- Nesting Bird Buffers. If continuous monitoring of identified nests by a qualified avian biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified avian biologist advise and support any variance from these buffers.

- Mammal Buffer Zone. CDFW recommends non-disturbance buffers of a minimum of 500 feet around active San Joaquin kit fox or American badger dens.

- Bats. Bat species are known to occur within and surrounding the project site. The Townsend's big-eared bat is highly sensitive to disturbance at roosts sites, particularly during the reproductive season and during hibernation. Disturbances during these times likely contribute to reduced reproductive output. Humans simply entering a maternity roost can cause a colony to abandon the young or move to another roost (Graham 1966). Populations are especially susceptible to variations in survival and reproductive output. Therefore, it is critical that human activity in and near roosts be minimized or eliminated, especially during reproductive (April 1 to September 1) and hibernal periods (approximately November 1 to April 1) (Gruver, Keinatch 2006). To evaluate and avoid potential impacts to bat species, CDFW recommends incorporating the following mitigation measures into the Project's draft EIR, and requiring these measures as conditions of approval for the Project.

    - Bat Habitat Assessment. To evaluate Project impacts to bats, a qualified bat biologist should conduct a habitat assessment for bats at work sites seven (7) days prior to the start of Project activities and every 14 days during Project activities. The habitat assessment shall include a visual inspection of features within 50 feet of the work area for potential roosting features (bats need not be present). Habitat features found during the survey shall be flagged or marked.

    - Bat Habitat Monitoring. If any habitat features identified in the habitat assessment will be altered or disturbed by Project activities, the qualified bat biologist should monitor the feature daily to ensure bats are not disturb, impacted, or fatalities are caused by the Project.

    - Bat Project Avoidance. If bat colonies are observed at the Project site, at any time, all Project activities should stop until the qualified bat biologist develops a bat avoidance plan to be implement at the Project site. Once the plan is implemented, Project activities may recommence.

    - Due to the transmission of noise and the proposed level of disturbance in the project area, CDFW recommends an updated study of the Townsend's big-eared bat population be conducted to evaluate the appropriate buffer zones. The study should include all bats in the area and be conducted by a scientist with demonstrable experience with each species of bat that could be impacted by the Project.

- Noise Effect Studies. The lead agency should perform noise effect studies to assess the impact of the Carnegie SVRA activities on special-status species. Excessive noise (decibel levels/noise durations well above those of typical background noise) and other disturbance associated with OHV activities have significant effects on wildlife. Disturbance effects can range from physiological impacts including stress, inner ear bleeding, and mortality to damage of nesting habitat, to collapsed burrows, to an increase in vehicle-animal collisions, and to

changes in behaviors and population distribution/dispersal patterns (Ouran, et al. 2007).

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in take[2] of plants or animals listed under CESA or NPPA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. CDFW remains concerned that the current ongoing OHV and management activities are not covered for take and that the potential increase in take resulting from on-site recreational activities has not been considered or analyzed in the General Plan. CDFW strongly recommends obtaining an ITP for threatened and endangered species. The Project is within potential upland and breeding habitat of the California tiger salamander (*Ambystoma californiense*), a CESA listed as threatened species; foothill yellow-legged frog (*Rana boylii*), a CESA listed as endangered species; San Joaquin kit fox (*Vulpes macrotis mutica*), a CESA listed as threatened species, and Alameda whipsnake (*Masticophis laterallus euryxanthus*), A CESA listed as threatened species. Ground disturbing activities have the potential for take of these species. In addition, Swainson's hawk (*Buteo swainsoni*), a CESA listed as threatened species, is known to forage in the Project area. Noise-generating or vegetation-disturbing activities could result in take of Swainson's hawks. If the Project will impact CESA or NPPA listed species, including but not limited to California tiger salamander, foothill yellow-legged frog, San Joaquin kit fox, Alameda whipsnake and, Swainson's hawk, early consultation with CDFW is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a Mandatory Finding of Significance if a Project is likely to substantially impact, substantially restrict the ranger of, or reduce the population of threatened or endangered species (Public Resources Code §§ 21001(c), 21083, & CEQA Guidelines §§ 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code § 2080.

Lake and Streambed Alteration Agreement

CDFW will require an LSA Agreement, pursuant to Fish and Game Code §§ 1600 et. seq. for Project-related activities affecting lakes or streams and associated riparian

[2] Take is defined in Fish and Game Code section 86 as hunt, pursue, catch, capture, or kill, or attempt any of those activities.

habitat. Notification is required for any activity that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. CDFW may not execute the final LSA Agreement until it has complied with CEQA (Public Resources Code § 21000 et seq.) as the responsible agency.

Nesting Birds

CDFW also has authority over actions that may disturb or destroy active nest sites or take birds. Fish and Game Code sections 3503, 3503.5, and 3513 protect birds, their eggs, and nests. Fully Protected birds such as white-tailed kite (Elanus leucurus), and golden eagle (Aquila chrysaetos) may not be taken or possessed at any time (Fish & G. Code, § 3511). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

ENVIRONMENTAL DATA

CEQA requires that information developed in EIRs and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNNDB online field survey form and other methods for submitting data can be found at: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at: https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish & Game Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

If you have any questions, please contact Andrea Boertien, Environmental Scientist at (707) 317-0388 or Andrea.Boertien@wildlife.ca.gov; or Michelle Battaglia, Senior Environmental Scientist (Supervisory), at (707) 339-6052 or Michelle.Battaglia@wildlife.ca.gov.

cc: State Clearinghouse
Katie Metraux – planning@parks.ca.gov
Petra Unger, AECOM – petra.unger@aecom.com

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SAN JOAQUIN COUNTY
Greatness grows here.

Environmental Health Department

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April 25, 2022

To: OHMVR Division, California State Parks
Attention: Katie Metraux

From: Aldara Salinas; (209) 661-3019
Environmental Health Specialist

RE: **PA-2000152, (GP), SU0014867**
Carnegie State Vehicular Recreation Area, Tracy

The Environmental Health Department has the following comments regarding this application:

1. Any geotechnical drilling shall be conducted under permit and inspection by The Environmental Health Department (San Joaquin County Development Title, Section 9-1115.3 and 9-1115.6).

CENTER for BIOLOGICAL DIVERSITY Because life is good.

Protecting and restoring natural ecosystems and imperiled species through science, education, policy, and environmental law

via email

April 29, 2022

Carnegie SVRA General Plan Update
C/O Katie Metraux,
OHMVR Division, California State Parks,
P.O. Box 942896,
Sacramento, CA 94296-0001
planning@parks.ca.gov

RE: Scoping Comments on Carnegie SVRA General Plan Update and EIR

Dear Ms. Metraux,

On behalf of the 1.7 million members and supporters of the Center for Biological Diversity including many members and supporters that live in California, we submit the following the following scoping comments on Carnegie State Vehicular Recreation Area's (SVRA) General Plan Update (GP Update) and Environmental Impact Report (EIR).

The Carnegie SVRA is a 1,575-acre off-highway vehicle (OHV) "park" that is home to plants and animals that are protected under federal and state Endangered Species Acts, including but not limited to the California red-legged frog and the California tiger salamander. While Californians and others enjoy a variety of recreational opportunities, it is incumbent on State Parks to protect California's threatened biodiversity and landscapes particularly as climate change progresses. Recent science confirms that protecting biodiversity has direct benefits to slowing anthropogenic climate change (Shin et al. 2022).

Resource management

- **GP must incorporate the 2020 Soil Conservation Standard and Guidelines and demonstrate compliance with it throughout the plan area.**

Public Resources Code Section 5090.35 (a) states that "The protection of public safety, the appropriate utilization of lands, and the conservation of land resources are of the highest priority in the management of the state vehicular recreation areas; and, accordingly, the division shall… *anticipate and prevent accelerated and unnatural erosion*.." (emphasis added). The State's 2020 Soil Conservation Standards and Guidelines identifies that the 2008 Standard provides guidance to achieve the following Standard: "Off-highway vehicle (OHV) recreation facilities shall be managed for sustainable long-term prescribed use *without generating soil loss that exceeds restorability*, and without causing erosion or sedimentation which significantly affects resource values beyond the facilities." (emphasis added) is the current standard to be followed. The General Plan Update needs to include clear specific metrics for annually evaluating compliance with the 2020 Soil Conservation Standard and Guidelines.

Ileene Anderson, Senior Scientist
tel: (323) 490-0223 *email*: ianderson@biologicaldiversity.org
www.BiologicalDiversity.org

- **The GP Update must require air quality monitoring inside/outside the boundary of the Carnegie SVRA**

Because off-road vehicle activity destabilizes soil structure and causes airborne dust particles that are a known health hazard under the Clean Air Act, the General Plan Update needs to identify an air quality monitoring protocol and implementation plan. The monitoring plan should include multiple monitoring sites both within and outside of Carnegie SVRA and include monitoring of PM10 and 2.5 levels. Triggers need to be included that would require limiting vehicular recreation activities if unhealthful PM10 and other pollutant levels are exceeded.

- **Biological Resources must be fully inventoried and included.**

Based on the proposed project description, Carnegie is already used for off-road vehicle recreation, and it is also rich in biological resources. Careful documentation of the current biological resources is imperative in order to analyze how best to protect plants, animals, and soils from impacts.

Biological Surveys and Mapping

While State Parks performs monitoring of some areas of Carnegie SVRA, we request that thorough, seasonal surveys be performed for sensitive plant species and vegetation communities, and animal species under the direction and supervision of State Parks and resource agencies such as the US Fish and Wildlife Service and the California Department of Fish and Wildlife. Full disclosure of survey methods and survey results to the public and other agencies without limitations must be implemented to assure full CEQA/ESA compliance.

Surveys for the plants and plant communities should follow California Native Plant Society (CNPS) and California Department of Fish and Game (CDFG) floristic survey guidelines[1] and should be documented. A full floral inventory of all species encountered needs to be documented and included in the the DEIR. Surveys for animals should include an evaluation of the California Wildlife Habitat Relationship System's (CWHR) Habitat Classification Scheme. All rare species (plants or animals) need to be documented with a California Natural Diversity Data Base form and submitted to the California Department of Fish and Game using the CNDDB Form[2] as per the State's instructions[3].

The Center requests that the vegetation maps be at a large-enough scale to be useful for evaluating the resources and can be used subsequently as data points to evaluate impacts from previous data points and into the future, to provide scientific data on the status and effectiveness of protective measures. Vegetation and habitat mapping needs to be at an adequate scale to provide an accurate accounting of habitat types (both on and directly adjacent to the site) that

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[1] http://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf ; https://www.cnps.org/wp-content/uploads/2018/03/guidelines-rare_veg_mapping.pdf ; https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=102342&inline and https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

2 https://nrm.dfg.ca.gov/fieldSurvey/default.aspx

3 https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=88567&inline

will be directly or indirectly affected by the off-road vehicle and camping activities. A half-acre minimum mapping unit size is recommended, such as has been used for other projects.

Adequate surveys must be implemented, not just a single season of surveys, in order to evaluate the current on-site conditions. Due to climate change, unpredictable precipitation patterns and a general drying are developing, and many plant and animal species are adjusting activities (germination and reproduction) to survive. If surveys are performed at inappropriate times or year or in particularly dry years many plants that are in fact on-site may not be apparent during surveys (ex. annual and herbaceous perennial plants).

- **<u>Species and Critical Habitat Must be Considered and Protected</u>**

The plan should ensure conservation of all federally and state-listed species, as well as species of special concern (SSC and California Plant Rank) in this area which include and have been documented on Carnegie SVRA, but are not limited to:

Plants		
big tarplant	*Blepharizonia plumosa*	--/1B.1
Brewer's western flax	*Hesperolinon breweri*	--/1B.2
chaparral harebell	*Campanula exigua*	--/1B.2
chaparral ragwort	*Senecio aphanactis*	--/2B.2
Hospital Canyon larkspur	*Delphinium californicum ssp. interius*	--/1B.2
large-flowered fiddleneck	*Amsinckia grandiflora*	FE/1B.1
showy golden madia	*Madia radiata*	--/1B.1
Insects		
western bumblebee	*Bombus occidentalis*	--/--
Amphibians		
California red-legged frog	*Rana draytonii*	FT/SSC
California tiger salamander	*Ambystoma californiense*	FT/CT
foothill yellow-legged frog	*Rana boylii*	--/CE
western spadefoot	*Spea hammondii*	--/SSC
Reptiles		
Alameda whipsnake	*Masticophis lateralis euryxanthus*	FT/CT
California glossy snake	*Arizona elegans occidentalis*	--/SSC
coast horned lizard	*Phrynosoma blainvillii*	--/SSC
Northern California legless lizard	*Anniella pulchra*	--/SSC
western pond turtle	*Emys marmorata*	--/SSC
Birds		
burrowing owl	*Athene cunicularia*	--/SSC
California horned lark	*Eremophila alpestris actia*	--/WL
golden eagle	*Aquila chrysaetos*	--/FP
grasshopper sparrow	*Ammodramus savannarum*	--/SSC

Mammals		
San Joaquin kit fox	*Vulpes macrotis mutica*	FE/CT
Townsend's big-eared bat	*Corynorhinus townsendii*	--/SSC
American badger	*Taxidea taxus*	--/SSC
San Joaquin pocket mouse	*Perognathus inornatus*	--/SSC

State Designation

CE – State listed as endangered.
CT - State listed as threatened. Species that although not presently threatened in California with extinction are likely to become endangered in the foreseeable future.
FP – Fully protected species
SSC California Department of Fish and Game "Species of Special Concern." Species with declining populations in California.
1B.1 Plant rare, threatened or endangered in California and elsewhere, and very threatened.
1B.2 Plant rare, threatened or endangered in California and fairly threatened in CA.
2B.2 Plant rare, threatened or endangered in California but more common elsewhere and fairly threatened in CA.

Federal Designation

FE Federally listed as endangered.
FT Federally listed as threatened.

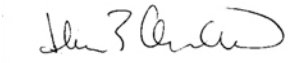
Unique plant communities including all riparian and open water areas should also be identified, mapped, and analyzed for potential impacts and conservation purposes. For all these sensitive plants, unique plant communities and animals, the GP Update should clearly lay out criteria for conservation and triggers for action if the conservation criteria are not being met.

In addition, the GP Update needs to analyze the impacts to federally designated critical habitat for the California red-legged frog and the Alameda whipsnake whose critical habitats overlap wholly (California red-legged frog) or significantly (Alameda whipsnake) with the Carnegie SVRA area. Directly across Corral Hollow Road from the main entrance to Carnegie SVRA, the large-flowered fiddleneck has federally designated critical habitat. The GP Update needs to identify this adjacent designation and the EIR needs to evaluate if on-site or spillover activities from the SVRA are impacting this critical habitat unit. The EIR must identify the mitigation for impacts to the federally designated critical habitat.

- **Natural Resource education needs to include information on all the species identified above, the increasingly important values of riparian areas**.

Thank you for the opportunity to submit more detailed comments on the proposed General Plan Update and EIR. Please feel free to contact me with any questions at ianderson@biologicaldiversity.org or 323-490-0223

Sincerely,



Ileene Anderson
Senior Scientist
Center for Biological Diversity

ec:
Erin Chappell, CDFW Erin.Chappell@wildlife.ca.gov
Jennifer Norris, CNRA Jennifer.Norris@resources.ca.gov

Reference:
Shin, Yunne-Jai, G.F. Midgley, E.R. M. Archer, A. Arneth, D.K.A. Barnes5, L. Chan. S. Hashimoto, O. Hoegh-Guldberg, G. Insarov, P. Leadley, L.A. Levin, H.T. Ngo, R. Pandit, A.P. F. Pires, H.O. Pörtner, A.D. Rogers, R. J. Scholes, J.Settele, and P. Smith. 2022. Actions to halt biodiversity loss generally benefit the climate. *Global Change Biol.* 28:2846–2874.

April 26, 2022

California State Parks
OHMVR Division
c/o Katie Metraux
P.O. Box 942896
Sacramento, CA 94296-0001

RE: Carnegie SVRA General Plan Update

Dear Planning Team:

Please accept these scoping comments from the AMA District 36 Legislative Action Office (D36 LAO) in regards to the Notice of Preparation (NOP) of an Environmental Impact Report Carnegie State Vehicular Recreation Area General Plan Update. This document shall not supplant the rights of other D36 agents, organizational or individual members, and partners to submit their own comments. The agency should consider all comments received.

The D36 LAO understands the California Department of Parks and Recreation (PARKS) Off-Highway Motor Vehicle Recreation (OHMVR) Division is the lead agency for the preparation of a General Plan Update and associated environmental impact report (EIR) for the Carnegie State Vehicular Recreation Area (SVRA). The decision-making body for the General Plan Update and EIR is the OHMVR Commission, a body of appointees that advises the OHMVR Division and has final authority of approval of General Plans and certification of associated EIRs for SVRAs.

The NOP presents the rationale for this update by stating the OHMVR Division had previously prepared a General Plan Revision and associated Program EIR for the original Carnegie SVRA and the adjacent 3,100-acre Alameda and Tesla Expansion Area. While the General Plan Revision was approved and the EIR certified by the OHMVR Commission in 2016, the Commission rescinded these decisions in 2021 as the result of several lawsuits. The lawsuits, along with subsequent legislation requiring that the Alameda and Tesla Expansion Area not be designated as an SVRA, resulted in the Department and the Division electing to prepare a standalone General Plan Update for the Carnegie SVRA. The Department will conduct a separate planning effort for the Alameda and Tesla Expansion Area to determine a suitable classification and future use of these properties.

Therefore, this proposed General Plan Update and EIR are limited to the 1,575-acre original Carnegie SVRA and specifically exclude the Expansion Area. The classification of and planning for the Expansion Area will be addressed in the future under a separate effort.

The D36 LAO appreciated the chance to speak at the virtual EIR scoping meeting held on April 19 that gave D36 representatives and other stakeholders the opportunity to provide additional information related to this planning process.

The D36 LAO agrees with the vast majority of comments made by members of the OHV community at that virtual meeting. Comments made by the D36 LAO and other speakers created an overarching theme or foundation for this planning process going forward and that foundation and related tenets are highlighted below.

FOUNDATION – PARKS and the OHMVR Division must maximize and significantly enhance the OHV opportunity in the existing SVRA to mitigate the loss of the 3,100-acre Alameda and Tesla Expansion Area to future OHV use. Use the 3,100-acre Alameda and Tesla Expansion Area as the mitigation bank for that maximization and enhancement effort. Some of those maximization and enhancements include but are not limited to:

- Improve staging for competition events at east end of the SVRA
- Improve ingress and egress for competition routes at staging area(s)
- Open currently closed areas at the east end of the SVRA such as Waterfall Canyon
- Reopen lands that were closed due to wildfires including routes in the west end of the SVRA
- Plan should reflect SVRA commitment to competition events
- Plan should approve/authorize a meaningful number of competition events
- Plan (and Division) should develop/authorize a more streamlined event permitting process

Thanks for your review of these comments and the D36 LAO looks forward to working with you on this current planning effort and other future projects to protect and preserve access to managed OHV recreation and competition events at Carnegie SVRA.

Respectfully submitted,

Don

Don Amador
Legislative Action Office
AMA District 36
3306 West Ho Trail
Cottonwood, CA 96022
Email: damador@cwo.com
Cell: 925.783.1834

CAPITAL TRAIL VEHICLE ASSOCIATION (CTVA)

P.O. Box 5295
Helena, MT 59604-5295

April 19, 2022

C/O Katie Metraux
OHMVR Division, California State Parks
P.O. Box 942896, Sacramento, CA 94296-0001
planning@parks.ca.gov

Re: Carnegie SVRA General Plan Update

Dear Project Team,

We have assembled the following comments, information and issues from our members and other motorized recreationists for the project record. We appreciate the opportunity to provide our comments for the Carnegie SVRA General Plan Update. We enjoy riding our OHVs on primitive trails and roads in our public lands. All multiple-use land managed by California State Parks including the Carnegie SVRA General Plan Update area provides a significant source of these OHV recreational opportunities. Moreover, the pandemic has reconnected visitors to our public lands as a critical way to counter the stresses of ever day life. Ninety-eight percent of these visitors are looking for multiple-use activities including OHV recreation. We are passionate about OHV recreation for the following reasons:

Enjoyment and Rewards of OHV Recreation

- Opportunity for a recreational experience for all types of people.
- Opportunity to strengthen family relationships.
- Opportunity to experience and respect the natural environment.
- Opportunity to participate in a healthy and enjoyable sport.
- Opportunity for relief from the pandemic.
- Opportunity to experience a variety of opportunities and challenges.
- Camaraderie and exchange of experiences.
- We like to build and maintain trails for use by everyone.
- For the adventure and "flow" of it.

Acknowledged Responsibilities of Motorized Visitors

- Responsibility to respect and preserve the natural environment. We are practical environmentalists who believe in a reasonable balance between the protection of the natural environment and the human environment.
- Responsibility to respect all visitors.
- Responsibility to use vehicles in a proper manner and in designated places.
- Responsibility to work with land, resource, and recreation managers. We are committed to resolving issues through problem solving and not closures.

- Responsibility to educate the public on the responsible use of motorized vehicles on public lands.

Motorized recreation represents and supports many different visitor interests. Supporting motorized recreation is the best way to support diversity of uses and multiple-use. This over-arching fact should be adequately addressed in the purpose and need and adequately considered in the analysis and decision. We are representative of the needs of most visitors who recreate on public lands but may not be organized with a collective voice to comment on their needs during the public input process. These independent multiple-use recreationists include visitors who use motorized routes for family outings and camping trips, weekend drives, mountain biking, sightseeing, exploring, picnicking, hiking, ranching, rock climbing, skiing, camping, hunting, RVs, shooting targets, timber harvesting, fishing, viewing wildlife, snowmobiling, accessing patented mining claims, and collecting firewood, natural foods, rocks, etc. Mountain bikers have been observed to prefer OHV trails because we clear and maintain the trails and the trails have a desirable surface for biking.

Multiple-use also provides for the needs of physically challenged visitors including the elderly and veterans who must use wheeled vehicles to visit public lands. These multiple-use visitors use roads and motorized trails for their recreational purposes and the preferred alternative and decision should adequately consider motorized designations serve many recreation activities, not just recreational trail riding. We have observed and documented that 98% of the visitors to our public lands are represented by the activities discussed above. Ninety-eight percent of the visitors are there to enjoy activities associated with motorized access and motorized recreation.

We have been listening to and documenting significant issues and information from our members, families, and friends for the past 40 years. Following this letter is an outline of the significant issues and information that should be adequately considered during the evaluation and decision-making. The agency's decisions have a significant impact on the quality of the human environment related to motorized recreationists and the agency must give the entire spectrum of the human environment adequate consideration.

Our position is that the existing system of motorized routes does not adequately meet the needs discussed above. The lack of high-quality motorized trails including motorized singletrack is an over-arching significant issue. The closing of any motorized routes or the conversion to non-motorized is contrary to the needs of the public.

The public would greatly benefit from continued management for multiple-uses including an enhanced system of OHV routes and less designated or defacto wilderness area. The pandemic has brought visitors back to our public lands and 98% of them are looking for multiple-use activities. Therefore, we oppose the closure of any motorized access and motorized recreational opportunities and the development of a Pro-Recreation Alternative.

The Carnegie SVRA General Plan Update area should adequately address 19 significant issues associated with inadequate consideration of motorized recreational opportunities and the significant impacts on motorized recreationists that have occurred in the past 40 years. We strongly oppose the excessive closure of motorized access and motorized recreational opportunities. We are providing this information to assist you with the development of a purpose and need statement and evaluation that will fully develop and support a reasonable Pro-Recreation alternative.

We understand that the Project Team is under pressure from those opposed to motorized access and recreation. We have experienced the vast closure of motorized access and motorized recreational opportunities that have gone far beyond reasonable and justifiable decisions because of that influence. We ask that the Project Team review our issues and work on refinements to the analysis and plan that would adequately address and mitigate these significant issues. We ask the Team to use these comments and information as support and justification for more motorized access and recreational opportunities.

We are looking forward to reviewing to your consideration of these significant issues and your use of them to develop a reasonable Pro-Recreation Alternative for the Carnegie SVRA General Plan Update.

Thank you for considering our comments and issues.

Sincerely,

/s/ CTVA Action Committee on behalf of our 240 members and their families and friends
Capital Trail Vehicle Association (CTVA)[1]
P.O. Box 5295
Helena, MT 59604-5295
ctva_action@q.com

Contacts:
Mike Sedlock, President ctvaohvclub@gmail.com
Jody Loomis, VP jloomis@mt.net
Doug Abelin dabelin@live.com
Ken Salo ctva_action@q.com

Attachments: Scoping Comments

[1] CTVA is also a member of Montana Trail Vehicle Riders Association (mtvra.com), Blue Ribbon Coalition (sharetrails.org), and New Mexico Off highway Vehicle Alliance (nmohva.org),. Individual memberships in the American Motorcycle Association (ama-cycle.org), Citizens for Balanced Use (citizensforbalanceduse.com), Montana 4X4 Association, Inc. (m4x4a.org), Snowmobile Alliance of Western States (snowmobile-alliance.org), and United Four Wheel Drive Association (ufwda.org)

SIGNIFICANT SCOPING ISSUES THAT SHOULD BE ADEQUATELY ADDRESSED BY THE CARNEGIE SVRA GENERAL PLAN UPDATE

The following are significant overarching issues that should be adequately addressed by the Carnegie SVRA General Plan Update. These significant issues deserve to be given a hard look. We ask that the Project Team review these issues and work on refinements to the analysis and plan that will adequately address and mitigate these significant issues. We ask the project team to use these issues to reverse the massive, motorized closure trend and as justification for the development of enhanced motorized access and recreational opportunities in the Carnegie SVRA General Plan Update.

NEPA is required to be a process that adequately addresses significant issues associated with a proposed action. NEPA definition of significantly is established by https://www.govinfo.gov/content/pkg/CFR-2011-title40-vol33/pdf/CFR-2011-title40-vol33-sec1508-27.pdf

§ 1508.27 Significantly. Significantly as used in NEPA requires considerations of both context and intensity:

(a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action.

1. Develop a Reasonable Alternative to Address the Public's Need for More Motorized Access and Motorized Recreational Opportunities

a. The agency should adequately review recent aerial photographs of the project area and ride the area on an OHV with all types of OHVs and skill levels to determine the routes that the public currently uses and needs in the project area.

b. The agency should adequately consider that there are over 50,000,000 OHV recreationists in the United States and over 4 million OHV recreationists in California plus a significant number of out-of-state OHV visitors.

c. The agency should adequately consider that motorized access and motorized recreation are the #1 use of the project area.

d. The agency should adequately consider that motorized recreationists now include e-bike enthusiasts who have been excluded from sharing hiking, walking and mountain bike trails.

e. The agency should adequately consider and carry forward an alternative that would provide a reasonable level of motorized trail opportunities to meet the existing and future needs of OHV recreationists.

f. The agency should adequately consider that adjacent travel plans did not adequately consider the needs of motorized recreationists at the time. Moreover, conditions and information has changed dramatically as documented by our comments.

g. The Agency should adequately identify and consider the needs of motorized recreationists and OHV recreationists including those motorized recreationists that the process does not comfortably accommodate and reasonably provide for those needs.

h. The agency should adequately consider that the public needs to be able to camp and picnic using at least a 300-foot setback from roads for the safety of children and pets and health (dust).

i. The agency should adequately consider that E-bikes have become popular in the last 5 years including:

1) E-bikes have significant positive impacts on the human environment.
2) E-bikes do not have any greater impact on the natural environment than mountain bikes.
3) E-bikes should be allowed on all non-wilderness trails.
4) E-bikes should be legal to use everywhere except for congressionally designated wilderness for people who are over 55 years of age or have a qualifying physical limitation.
5) The Agency should give E-bikes proper procedural consideration including public input on their use on all existing non-wilderness trails.

j. The agency should adequately consider and understand the needs of motorcycle single-track recreationists and adequately provide for those needs.

k. The agency should adequately consider that the public prefers dispersed camping spots and that is consistent with the need for social distancing.

l. The agency should adequately consider that there is an inadequate number of dispersed camping spots in the project area and the preferred alternative should address this significant issue.

m. The agency should adequately consider that the pandemic and social distancing requirements have significantly increased the public need for more OHV opportunities.

n. The agency should adequately consider that the pandemic and social distancing requirements have significantly increased the public need for more dispersed camping opportunities.

o. The agency should adequately consider that all potential negative issues associated with non-motorized and motorized recreationists can be mitigated by education and that education of all visitors should be used as an alternative to closure.

p. The project team should include enthusiasts for all types of OHVs, 4x4s, and e-bikes.
q. The agency should adequately consider the full recreation opportunity spectrum for motorized recreationists including e-bikes, e-motorcycles, singletrack motorcycles, ATV, SxS, 4x4, and automobile.

2. Develop a Reasonable Alternative to Address the Need for Motorized Access and Motorized Recreation for Youth

a. The agency should adequately consider that youth need motorized recreational opportunities that are relatively close to town.
b. The agency should adequately consider alternatives that would adequately provide motorized opportunities to replace the closure of opportunities close to town.
c. The agency should adequately consider and address the youth suicide issue that exists in every western state and the critical need that youth have for healthy activities such as OHV recreation.
d. Consideration for motorized trail riding opportunities for the youth should be given a hard look.

3. Develop a Reasonable Alternative to Address the Need for Motorized Access and Motorized Recreation for the Elderly, Handicapped, and Disabled

a. The agency should adequately consider that the elderly, handicapped, and disabled need motorized recreational opportunities that are relatively close to town.
b. The agency should adequately consider that the project area is used extensively by elderly, handicapped, disabled and veterans and motorized closures significantly impact this user group.
c. The agency should adequately consider alternatives that would adequately provide motorized opportunities to replace the closure of opportunities close to town.
d. The agency should adequately consider reasonable alternatives that would adequately provide motorized opportunities that adequately meet the needs of the elderly, disabled and veterans.
e. Consideration for motorized trail riding opportunities for the disabled, elderly, and veterans should be given a hard look.

4. Adequately Address the Impacts on and Benefits of Motorized Recreation on the Human Environment

a. The agency should adequately consider that a healthy human environment includes adequate motorized access and motorized recreational opportunities as required to meet the needs of the public.
b. The agency should adequately consider that the public needs robust access to all forms of recreation for a healthy state of mind including adequate stress relief.
c. The agency should adequately consider that with increasing fuel costs that motorized recreational opportunities are needed that are relatively close to town.
d. The agency should adequately consider that the public is losing a lifetime of motorized access and motorized recreational opportunities for reasons that are not significant when judged with a reasonable sense of magnitude.
e. The agency should adequately consider that the motorized closure trend enacted by federal agencies is destroying a culture which is based on motorized access and motorized recreation in our public lands.
f. The agency should adequately consider that our pursuit of happiness has been significantly impacted by the magnitude of all motorized closures.

g. The agency should adequately consider that the significant closing of motorized routes in the project area should meet the basic requirement of the NEPA act of 1969 as stated in "Sec. 101 (b) (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities".
h. The agency should adequately consider that any closure action will significantly affect our pursuit of happiness and the quality of the human environment.
i. The agency should adequately consider the significant positive economic impact that motorized recreationists have on the economy.
j. The agency should adequately consider that because of the excessive motorized closures that have taken place, our memories and conversations are dominated by stressful discussions of places that we used to go and can no longer access.
k. The agency should adequately consider that a pandemic affects our ability to participate in and comment on planning actions.
l. The agency should adequately consider that the evaluations and decision are out of date now that the quality of the human environment has been significantly impacted by a crippling pandemic.
m. The agency should adequately consider that recreation opportunities should now become the priority for land management plans now that the quality of the human environment has been significantly impacted by a crippling pandemic.
n. The agency should adequately consider that abundant dispersed camping sites and motorized trails are essential to keep the public healthy and sane during and after this pandemic.
o. The agency should adequately consider that it is not OK to create significant impacts on the human environment by closing motorized access and motorized recreational opportunities.
p. The agency should adequately consider that all travel management and resource management evaluations and decisions made over the past 40 years have closed a significant amount of motorized access and motorized recreation.
q. The agency should adequately consider that creating any additional significant impacts on the human environment including any closures of motorized access and OHV recreation contributes to a significant cumulative effect.
r. The agency should adequately consider that we dream of getting out camping and using our OHVs and at the same time federal land managers are working to close these recreational opportunities.
s. The agency should adequately consider our local heritage which is based on generations of access to public land and reasonable use of public land.
t. The agency should adequately consider that the recreation time lost to motorized closures is recreation time that we will never get back.
u. The agency should adequately consider that multiple-use is now squeezed into an unreasonably limited area.
v. The agency should adequately consider that we dreamed about retiring and visiting places that we were not able to visit while working and now we find that those places are closed to us.
w. The agency should adequately consider that we need to get out during this pandemic more than ever, but we are finding more closed motorized recreation opportunities than ever before.
x. The agency should adequately consider that the human environment should receive equal attention in the Agency's analysis and decision.
y. The agency should adequately consider that there is so little motorized singletrack riding opportunity left that trail riders are not willing to share any information about singletrack trails.

z. The agency should adequately consider that all forms of motorized outdoor recreation are more popular than ever. https://helenair.com/news/state-and-regional/great-outdoors-a-great-escape-as-forest-visits-soar/article_16e1b9e9-4b59-5bd7-bd2c-183aa701e1f9.html#tracking-source=home-top-story

aa. The agency should adequately consider that the pandemic has reconnected visitors to our public lands as a critical way to counter the stresses of everyday life.

bb. The agency should adequately consider that ninety-eight percent of the visitors are visiting public lands to enjoy activities associated with motorized access and motorized recreation, yet the agency continues to close these opportunities.

cc. The agency should adequately consider that comments from motorized recreationists are minimal for many reasons.

dd. The agency should adequately consider that a large transient population of out-of-state visitors are unaware of the process.

ee. The agency should adequately consider that non-motorized agendas and campaigns have created a significant impact on the quality of life for motorized recreationists.

ff. The agency should adequately consider that memorials for deceased OHV recreationists should be protected as cultural sites.

gg. The agency should adequately consider that it created a significant human environment crisis by closing an excessive number of motorized recreational opportunities and creating an excessive amount of defacto wilderness.

hh. The agency should adequately consider that dispersed camp sites fill a significant need for retirees, family weekenders, boondockers, and nomads whose lives are fulfilled by these motorized dispersed camping opportunities.

ii. The agency should adequately consider that all existing dispersed motorized camp sites need to be included in the plan as well as new sites to meet the growing need.

jj. The agency should adequately consider that some reasonable visual evidence of public use on multiple-use land including dispersed camp sites is acceptable.

kk. The agency should adequately consider that all dispersed camp sites are highly-valued contemporary cultural sites.

ll. The agency should adequately consider that excessive protection of threatened and endangered species has had a significant impact on the quality of the human environment.

mm. The agency should adequately consider that this unintended consequence of the threatened and endangered law has created a significant unintended consequence on the public.

nn. The agency should adequately consider that it is time to accept reasonable threatened and endangered recovery and mitigate the negative impacts on the human environment.

oo. The agency should adequately consider that threatened and endangered species should be delisted when a reasonable recovery within the available habitat is reached.

pp. The agency should adequately consider the significant negative cumulative impact from the motorized closure trend has created a significant unintended negative consequence on the public.

qq. The agency should adequately consider that available time for the working public is extremely limited by commitments to work, family, and friends and recreation time is even more limited, and therefore, invaluable.

rr. The agency should adequately consider that many motorized recreationists do not have the time or emotional energy required to participate in NEPA actions, RACs, etc. and the overarching need of the public is for recreation to relieve their stress.

ss. The agency should adequately recognize that the working public at-large should not be expected to counter organized anti-public limited-use interests.

tt. The agency should adequately recognize that a healthy human environment depends on adequate access to dispersed camping and motorized recreational opportunities.
uu. The agency should adequately address that a healthy human environment is equally important as the natural environment.
vv. The agency should adequately address that the trail rangers should only be used with the purpose of education, mentoring and education of fellow OHV recreationists
ww. The agency should adequately recognize that many motorized recreationists enjoy the history and heritage of a time when nearly everyone made a living from the land including mining, timber harvest, farming, and ranching.
xx. The agency should adequately recognize that we have a short trail riding season due to winter weather, therefore, excessive spring and fall closure dates should not be used.
yy. The agency should adequately address the value of motorized recreational opportunities for the mental health of the public.
zz. The agency should adequately recognize that the e-bike discussion has once again brought forward the unreasonable position of the anti-motorized community, i.e., no sharing of trails with other users including e-bikes.
aaa. The agency should adequately address the need for motorized recreational opportunities on public land including e-bike and adequately provide for those needs.
bbb. The agency should adequately recognize that a significant percentage of the public does not have the knowledge, training, or time necessary to function in the NEPA process.
ccc. The agency should adequately recognize that there are plenty of opportunities and resources if we share.
ddd. The agency should adequately recognize that motorized recreationists agreed to be managed and supported the original Travel Management initiative with the understanding that our needs would be reasonably met.
eee. The agency should adequately address the need to honor our support of the original travel management initiative by pursuing a Pro-Recreation alternative.
fff. The agency should adequately address meeting the current needs of the public by maximizing recreation in proportion to the numbers that visit and use public lands based on actual observations of recreationists such as ours.
ggg. The agency should adequately address that there is a shortage of motorized recreational opportunities on public lands.
hhh. The agency should adequately address that recreational opportunities on public lands are the greatest beneficial use available for those lands.
iii. The agency should adequately address that the fall motorized recreation season should be extended in years when the motorized summer recreation season is shortened by wildfire smoke, agency restrictions, and red flag alerts.
jjj. The agency should adequately address that the because of the extremely short supply of OHV recreational opportunities, new motorized opportunities should be created whenever existing ones are destroyed by fire.
kkk. The agency should adequately address that the stresses of life and recreation in the Rocky Mountain Region has increased dramatically because of wildfires and smoke, access closures, population migration, climate cycle, and covid.
lll. The agency should adequately commit to pursuing actions that reduce the stresses of life and recreation.
mmm. The agency should adequately recognize that all federal lands are owned by the same government and any volunteer effort on any federal land should be accepted for grant credit by any federal agency.

nnn. The agency should vigorously pursue motorized trail maintenance funding as part of the RTP and infrastructure bill.

ooo. The agency should adequately recognize that the human environment may not be a significant issue in the agency's eyes, but the human environment is a significant issue including motorized recreation in our eyes.

ppp. The agency should adequately consider that beetle kill and resulting downfall and fires deprive us of the green forest trail experience that we prefer.

qqq. The agency should adequately consider that wildfires and smoke are significantly impacting the publics ability to recreate during the short summer recreation season. https://apnews.com/article/lifestyle-health-business-environment-and-nature-coronavirus-pandemic-8e98ea74259fb1a087b3e2ea21868a22 or https://abcnews.go.com/Lifestyle/wireStory/wildfires-smoke-snuff-outdoor-adventures-us-79845646

rrr. The agency should adequately consider that life is short, motorized recreationists want to enjoy motorized recreational opportunities throughout their lifetimes.

sss. The agency should adequately consider that motorized recreational opportunities damaged by wildfire and beetle killed trees need to be restored as soon as possible.

ttt. The agency should adequately consider that OHV recreation including trail maintenance are activities that provides both mental and physical exercise.

uuu. The agency should adequately consider that travel management plans currently in place were focused on the closure of motorized access and recreation and consequently the human environment was not given adequate consideration.

vvv. The agency should adequately consider timely restoration of all motorized routes that existed before the fire.

www. The agency should adequately consider that human stress is at an all-time high while the agency continues to add to human stress by creating new motorized closures and not addressing the need for adequate motorized access and recreation opportunities.

xxx. The agency should adequately consider an adequate number of miles and an adequate network of singletrack motorcycle trails.

yyy. The agency should adequately consider why we must drive over 100 miles one-way to find a reasonable diversity of OHV and dispersed camping opportunities (quantity and quality) when the agency has multiple-use lands located near population centers.

zzz. The agency should adequately consider the significant need for constructive activities such as OHV recreation to counter the significant drug, alcohol, gambling, and suicide problems that exist in our society.

aaaa. The agency should adequately consider using economic recovery funding for projects that have direct benefits to the human environment and economy including:

1) Not using economic recovery funding for closure of motorized routes.
2) Use of economic recovery funding for maintenance and enhancement of existing motorized routes.
3) Use of economic recovery funding for the creation of new motorized routes.

bbbb. The agency should adequately consider the ever-changing needs of motorized recreationists along with the need to be responsive to these changes.

cccc. Many of us are seniors who looked forward to enjoying motorized access and motorized recreational opportunities in our retirement that are now closed to us.

dddd. The agency should adequately recognize that there is room for everybody.

eeee. The agency should adequately consider the needs of the human environment. The public needs more not less motorized access and motorized recreational opportunities including dispersed camping. The pandemic has demonstrated the significance of this issue and need.

ffff. The agency should adequately consider the human environment.

1) NEPA was intended to protect and promote all environments equally.
2) The depth and breadth of analysis of the Human Environment should be equal to that of the Natural Environment.

5. Should Not Over-Represent the Public's Need for More Wilderness

a. The agency should adequately consider that less than 3% of the visits to our public lands are for wilderness recreation and 97% of the visits are for multiple-use.

b. The agency should adequately consider that management of our public lands should reflect the ratio of visitors and meet their needs in an equal manner.

c. The agency should adequately consider that wilderness is not managed for beneficial use and health and to create more defacto wilderness only compounds the problem.

d. The agency should adequately consider that the current planning process is being used as a backdoor process to create defacto wilderness areas by closing motorized access and motorized recreation on lands designated for multiple-use.

e. The agency should adequately consider that the acreage set aside for wilderness and wilderness study areas is significantly greater than the needs of less than 3% of the public.

f. The agency should adequately consider that a sense of magnitude for public needs should be used when managing wilderness versus multiple-use land.

g. The agency should adequately consider that the evaluation and decision should consider the acres per wilderness visitor (3% of the observed visits) versus acres per motorized visitor (97% of the observed visits).

h. The agency should adequately consider that lands designated by congress for multiple-use should not be managed by wilderness standards.

i. The agency should adequately consider the acres per wilderness visitor versus acres per multiple-use visitor both before and after the proposed action.

6. Properly Consider Roadless Areas

a. The agency should adequately consider that any conversion of lands designated by congress for multiple-use to defacto wilderness lands circumvents congressional laws regarding multiple use and the wilderness designation process.

7. Adequately Consider and Disclose the Cumulative Impact of All Motorized Closures

a. The agency should adequately consider that public access to public lands and the use of public lands have declined dramatically over the past 40 years due to management trends.

b. The agency should adequately consider, evaluate, and disclose those trends to the public including the significant cumulative impacts of closure and reduced use on the health of the public land and the health of the public including the significant need for motorized access and recreation.

1) The health of the human environment must be given a hard look.
2) Nothing in NEPA and CEQ guidance says that the health of the natural environment should prevail over the health of the human environment.

3) The health of the human environment must be given consideration equal to the natural environment.
4) The agency should adequately consider that it has created significant cumulative impacts on the human environment by closing an excessive amount of multiple-use land to motorized access and motorized recreation.
5) The agency should adequately consider that motorized recreationists have been hammered by motorized closure after motorized closure in California and surrounding states.

c. The agency should adequately consider that travel planning and other planning actions have closed 25 to 75% of the historic motorized routes and all cross-country opportunities since the 1960's.

d. The agency should adequately consider that the analysis should adequately disclose and evaluate the amount of motorized access and motorized recreation that has been lost to public use since the 1960's.

e. The agency should adequately consider and mitigate the significant negative cumulative effect of all motorized closures on the public.

f. The agency should adequately consider and mitigate the significant negative cumulative effect of all motorized closures on the youth, disabled, elderly, and veterans.

g. Every weekend we talk to fellow motorized recreationists and they ask us where they can go to ride trails and camp in dispersed areas. The agency should adequately consider that the public has been squeezed into too small of an area with too few motorized routes.

h. The agency should adequately consider that the cumulative effect of this action combined with many other similar motorized closure decisions significantly affects our pursuit of happiness and the quality of the human environment.

i. The agency should adequately consider that the continual closure of motorized access and motorized recreation on lands managed demonstrates the intent to eliminate motorized access and motorized recreation without adequately disclosure of that intent.

j. The agency should adequately consider that significant cumulative effects have occurred because motorized recreationists cannot successfully change or challenge the Agency's predisposition to motorized closures.

k. The agency should adequately consider that motorized closures since 1985 meet the NEPA and CEQ test for significance with respect to cumulative effects and cumulative effects should be adequately considered in the analysis.

l. The agency should adequately consider that agency actions and mining claims are closing much needed dispersed camp spots during a pandemic when the public needs more dispersed camp sites.

m. The agency should adequately consider that a sense of magnitude should be used to identify the significant cumulative impact that motorized recreationists have experienced over the past 40 years.

n. The agency should adequately consider that the analysis and decision should consider the massive amount of multiple-use land originally used for beneficial use that has effectively been converted to defacto wilderness and limited or exclusive-use land.

o. The agency should adequately consider that it uses every opportunity to close dispersed camp sites, motorized spur routes, and motorized roads and trails and has not adequately evaluated and considered the cumulative impact of that trend on the human environment.

p. The agency should adequately consider that all of the defacto motorized closures that have resulted from wildfires have a significant impact on the public's opportunity to enjoy motorized access and motorized recreation.

q. The Agency must adequately evaluate and disclose significant cumulative effects that their management decisions have created.
r. The agency should provide full and adequate disclosure of the cumulative effects of all motorized closures on the public so that the decision does not marginalize motorized recreational opportunities.

8. Recognize the Need for Long-Distance Motorized Trail Systems

a. The agency should adequately consider that it has developed many long distance non-motorized trail systems including the CDNST and PCT and has not developed any long-distance trail systems for motorized recreationists.
b. The agency should adequately consider that long distance motorized trail systems would see far more use than non-motorized trails.
c. The agency should adequately consider that long distance motorized trail systems would provide far more benefit to the human environment including therapeutic recreation and economic benefit than non-motorized trails.
d. The agency should adequately consider that;
    1) Closures of motorized sections of the CDNST have been enacted without adequate consideration of the requirements of the National Trails System Act (16 U.S.C. 1241) (CDNST enabling law),
    2) Without adequate consideration of the CDNST EIS and ROD dated April 7, 1989,
    3) Without adequate consideration of the policy memorandum by the Deputy Forester dated July 3, 1997,
    4) Without adequate consideration of the policy memorandum by the Deputy Forester dated February 1, 2006,
    5) Corrective action for illegal closures of motorized sections of the CDNST should be part of this decision.

9. Adequately Identify and Address the Imbalance of Motorized Trail Opportunity in our Public Lands including State Parks, National Forest, BLM, and NPS.

a. The agency should adequately consider that with unrestricted cross-country access, the opportunity for non-motorized recreationists is infinite.
b. The agency should adequately consider the miles of non-motorized trail and cross-country opportunity provided in wilderness and defacto wilderness areas to non-motorized recreationists.
c. The agency should adequately consider the comparison of non-motorized trail and cross-country opportunity to motorized trail opportunity including the miles of trails, quality of experience, costs and conditions, and number of users.
d. The agency should adequately consider that every Agency action creates more non-motorized trail and cross-country opportunities.
e. The agency should adequately consider that;
    1) Non-motorized recreationists have hundreds of potential opportunities in the project area including cross-country travel to any desired location.
    2) Motorized recreationists are limited to a small system of designated routes.

10. Provide for a Reasonable Level of Multiple Use

a. The agency should adequately consider that motorized access and motorized recreation are the #1 use of the project area.
b. The agency should adequately consider that the lands in the project area are designated by congress for multiple-use.
c. The agency should adequately consider that lands designated by congress for multiple-use should not be managed by wilderness standards.
d. The agency should adequately consider that sharing should be the expectation on all multiple-use land otherwise multiple-use land becomes exclusive-use land.
e. The agency should adequately consider that the action should not illegally convert lands designated for multiple-use by congress into defacto wilderness areas.
f. The agency should adequately consider that the existing routes, mines, historic use, current use, and greater needs of the public demonstrate that the proposed non-motorized areas do not qualify as wilderness and, therefore, should not be treated as wilderness.
g. The agency should adequately consider that Congress recognized that management for multiple-use best meets the needs of the public and provided that direction in their multiple-use laws.
h. The agency should adequately consider that management for multiple-use best meets the overall needs of the public.
i. The agency should not apply wilderness standards to lands designated for multiple-use.
j. The agency should adequately consider that some visible use of the land for the good of the public is reasonable and acceptable.
k. The agency should not convert congressional designated multiple-use lands to defacto wilderness.
l. The agency should not circumvent congressional law and the wilderness designation process.
m. The agency should adequately consider that equality needs to be restored to public lands by restoring wide-ranging multiple-use management to all multiple use lands.
n. The agency should adequately consider that multiple use land should be used for the greatest good and not manipulated for elite and exclusive use only.
o. The agency should not reward those that demand exclusive use of resources.
p. The agency should adequately consider that public land is for the benefit of all the public (not just exclusive uses) which can only be reasonably accomplished by management for a broad spectrum of uses (multiple-use).
q. The agency should adequately consider that it is not reasonable to reward individuals unwilling to share multiple-use lands with exclusive-use of those lands.
r. The agency should adequately consider that the project area is not designated wilderness and that some visual use of multiple-use land is reasonable and acceptable.
s. The agency should adequately consider that managing lands designated by congress for multiple uses by wilderness standards is not legal.
t. The agency should adequately consider that there is a shortage of multiple-use land to meet the needs of 97% of the public because too much has been converted to wilderness or defacto wilderness which only benefits 3% of the public.
u. The agency should adequately consider that during the past 40 years federal agencies have created a shortage of multiple-use land by management action that have created an excessive amount of wilderness, defacto wilderness, segregated-use, and limited-use land.
v. The agency should adequately consider that it is acceptable and reasonable to put lands designated for multiple-use to beneficial use including putting people to work and providing quality recreational opportunities for the public that owns them.

w. The agency should adequately consider that beneficial use should be the #1 goal for all multiple-use lands.
x. The agency should adequately consider that developing and selecting a robust multiple-use alternative as opposed to a marginalized multiple-use alternative would better serve the over-arching needs of the public.
y. The agency should adequately consider the acres per wilderness/non-motorized visitor versus acres per multiple-use visitor both before and after the proposed action.
z. The agency should seek to develop an alternative and analysis that would provide a reasonable level of multiple-use and a decision that would provide more motorized access and motorized recreation.

11. Avoid the Unreasonable Use of Climate Change as a Reason to Eliminate Motorized Access and Motorized Recreation

a. The agency should adequately consider that motorized recreation is not a significant contributing factor to purported climate change.
b. The agency should adequately consider that if CO2 is a significant factor, then wildfires and prescribed burns are creating a significant impact and this impact should be adequately addressed and mitigated.
c. The agency should adequately consider that if wildfires are a significant contributor to CO2 and the agency can do something about controlling wildfires.
d. The agency should adequately consider that it is responsible for wildfire smoke which is creating a significant impact on the climate.
e. Climate Change is really Climate Cycle that has naturally occurred every day since the earth was created.
f. The agency should adequately consider that the climate is always changing and that the last ice age was about 12,000 years ago which is not significant in geologic time.
g. The agency should adequately consider that climate warming that prevents a future ice age and elimination of the human population in the U.S. may not be a bad thing.
h. The agency should adequately consider that climate change is an issue without adequate and impartial scientific basis.
i. The agency should adequately consider that climate scientists will find only what their minds are looking for (confirmation bias).
j. The agency should adequately consider that climate change nonscience and hysteria should not be used to close motorized recreational opportunities.
k. The agency should adequately consider that 100 years of weather data is not adequate to evaluate the trends of climate change and any conclusions made on this basis are erroneous.
l. The climate has always been unpredictable and changing during the time frame of human existence. The agency should adequately consider that while we would like to have a controllable and predictable climate, that desire is not a reasonable expectation.
m. The agency should adequately consider that a sense of magnitude must be used to properly identify natural changes that earth has experienced during the time frame of human existence.
n. The agency should adequately consider the big picture climate trends, i.e., there were no humans living in the project area 14,000 years ago due to a sheet of ice and it has been getting warmer and drier ever since that time.
o. The agency should adequately consider applying the laws of thermodynamics, i.e., the total heat energy (enthalpy) of a thermodynamic system (including earth) will always be increasing.
p. The agency should adequately consider Paleo climatology, i.e., the earth is still in the warming cycle following the last ice age.

q. The agency should adequately consider that humans did not cause the ice age climate cycle 12,000 years ago.
r. The agency should adequately consider that it's not just about carbon, the earth has always trapped solar energy and mass is always being converted to energy.
s. The agency should adequately consider that the enthalpy of the earth (total heat content) has always been increasing.
t. The agency should adequately consider that earth's climate has never been static.
u. The agency should adequately consider that the southern limits of western forests have been moving northward since the end of the last ice age.
v. The agency should adequately consider how its wildfires and the Let-It-Burn policy are creating a significant amount of the earth's current climate change.
w. The agency should adequately consider how changes in the output of the sun including the current hyperactive sun cycle and the earth's change magnetic field produce a significant amount of climate change that is not CO2 based. https://www.cnbc.com/2022/02/09/why-solar-geomagnetic-storms-destroy-satellites-like-spacex-starlink.html
x. The agency should adequately consider the significant impacts that the massive release of CO2 from wildfires has on the natural and human environment.
y. The agency should adequately consider using a sense of magnitude the significant impacts that foreign conditions have on our climate.
z. The agency should adequately consider a plan that avoids burning (both wildfires and planned fires) due to the significant release of CO2 and the significant impact that CO2 is purported to have on the climate.

12. Provide Adequate Coordination with Local and State Government

a. The agency should adequately consider coordination with all surrounding counties is required and should be adequately provided.

13. Adequately Recognize and Address RS2477 Route Standing

a. The agency should adequately consider RS2477 route standing and perpetuating those routes for public motorized access and use as originally allowed by the laws and customs in place at the time of their creation.

14. Arbitrary and Capricious Analysis and Decision-Making

14.a Site-Specific Data and Evaluation

a. The agency should not make decisions based on beliefs. Decisions musts be made using site-specific data.
b. The agency should adequately consider that repeating a statement until you believe it is true is not a replacement for site-specific data. For example, there is no site-specific data supporting the statement that wildlife are negatively affected by OHV trails. There is data that supports wildlife using motorized routes and promoting their movement such as the Swan Valley grizzly bear study. Therefore, motorized routes can enhance the movement of wildlife through forested areas that are impassable by downfall.
c. The agency's decision-making should be based on site-specific data and evaluation as required by NEPA, and CEQ guidance. Site-specific date is emphasized 11 times in the final 2005 travel management rule.

d. For assessment of negative and positive impacts on the natural environment, the agency should develop site specific data, evaluations and comparisons by:
    1) Collection and development of site-specific data including monitoring for each route,
    2) Development of site-specific positive and negative impact evaluations for each route,
    3) For both positive and negative impacts on the natural environment, the test of significance should be made using a comparison to the natural level of impacts occurring on each route.
    4) The agency should adequately consider that impacts on fish and wildlife should not be assumed and impact analyses should be based on adequate site-specific data and studies.
    5) The agency should adequately consider only site-specific data that demonstrates that closures of motorized and dispersed camping opportunities produce significant benefit to the natural environment.
    6) The agency should adequately consider that the road density impact criteria are not site-specific and, consequently, not valid for the project area.
    7) The agency should adequately consider the need for site-specific data and the value for decision-making as demonstrated by 6 years of monitoring in Yellowstone National Park which demonstrated little impact to wildlife from snowmobiles.
e. For assessment of negative and positive impacts on the human environment, the agency should develop site specific data, evaluations and comparisons by collection and development of site-specific data and evaluations for each route including:
    1) Interviews with motorized recreations to find out their needs and values for each motorized route,
    2) Document why motorized recreationists enjoy this route,
    3) Who is using each road and trail by development of a Need Factor for each route.
        a. The Need Factor should be based on category of user (non-motorized or motorized), observed number of users during a reasonable monitoring period, and divided by the total number of users.
        b. For example, 90 motorized visitors and 10 non-motorized users observed over 4 weekends equals a Need Factor of 0.90 for motorized users and 0.10 for non-motorized users.
        c. Route availability should then be based on these Need Factors.
    4) Is this motorized route part of a network or destination?,
    5) Research to document the history of the route including historic wheeled use and historic pioneer and mining use.
    6) Quality of the route,
    7) Alternatives that would allow sharing of the route,
    8) Document who is working to maintain the route,
    9) Site-specific data for each of the claimed negative impacts from motorized access and motorized recreation on the natural environment,
    10) Site-specific data and analysis of e-bike recreation,
    11) The agency should adequately consider that motorized recreation and dispersed camping opportunities should not be closed without site-specific data and analysis as required by NEPA, and CEQ guidance.
    12) and benefits to the human environment including flow by use of the route.

f. The agency should adequately monitor evaluations and decisions so that they are not made based on beliefs and are made on site-specific data.
g. The agency should adequately monitor the use of an adequate sense of magnitude in the evaluations and decision-making so that decisions are not arbitrary and capricious by

comparing naturally occurring levels of impact to the impacts of human use established by data and site-specific data.

h. The agency should adequately monitor whether the purported negative impacts of motorized recreation including e-bike have sufficient and appropriate site-specific data and studies and are being compared to natural levels.

i. The agency should adequately monitor whether site-specific data that compares any purported impact of significance from motorized recreation and dispersed camping to the naturally occurring levels of impact and change is being used.

j. The agency should have their recreation team visit the project area during the weekends and seek out motorized recreationists so that they have site-specific information on needs necessary to adequately evaluate the number of motorized recreationists, types of motorized recreation and visitors accessing the project area.

k. The agency should use adequate site-specific data and evaluations to support more motorized recreational opportunities in the decision-making and record of decision.

l. The agency should revisit any motorized closures that were enacted without adequate site-specific data.

14.b Employ a Sense of Magnitude

a. The agency should adequately consider that the public is losing a lifetime of motorized access and motorized recreational opportunities for reasons that are not significant when judged with a reasonable sense of magnitude.

b. The agency should adequately consider that a sense of magnitude for public needs should be used when managing wilderness versus multiple-use land.

c. The agency should adequately consider that a sense of magnitude should be used to identify the significant cumulative impact that motorized recreationists have experienced over the past 40 years.

d. The agency should adequately consider that a sense of magnitude must be used to properly identify natural changes that earth has experienced during the time frame of human existence.

e. The agency should adequately consider using a sense of magnitude the significant impacts that foreign conditions have on our climate.

f. The agency should adequately consider that the analysis and decision-making for claimed impacts should be based on an adequate sense of magnitude which can only be established by comparing impacts based on science and site-specific data to natural levels.

g. The agency should adequately consider that a sense of magnitude should be used in the evaluations and decision-making so that decisions are not arbitrary and capricious by comparing naturally occurring levels of impact to the impacts of human use established by data and site-specific data.

h. The agency should adequately consider analysis and evaluations based on site-specific data and studies that support an unbiased view and sense of magnitude regarding the impacts of motorized recreation on the natural environment.

i. The agency should adequately compare impacts from all types of visitors to natural impacts in order to demonstrate a true sense of magnitude for all impacts and so that impacts are not over-stated.

j. The agency should adequately consider that a sense of magnitude should be used in the evaluations and decision-making so that potential impacts on the natural environment including fish and wildlife are compared to the naturally occurring range of impacts and that this approach

is necessary in order to keep impacts from being over-stated and decisions from being arbitrary and capricious.

k. The agency should adequately consider that impacts from all user groups should be adequately compared to the natural level of impacts in order to demonstrate and use a true sense of magnitude for analysis and decision-making.

l. The agency should adequately consider a sense of magnitude in the evaluations and decision-making so that potential impacts on the natural environment are compared to naturally occurring impacts and decisions avoid being arbitrary and capricious.

m. The agency should employ an adequate sense of magnitude so that the record of decision provides a reasonable level of multiple-use and motorized recreation.

14.c Other Areas

a. The agency should adequately consider that theories based on impartial data and studies to back them should not be used to close motorized opportunities.

b. The agency should adequately consider studies that support OHV recreation or provide an unbiased analysis of OHV recreation.

c. The agency should adequately recognize when bogus issues based on an anti-motorized bias are presented as justification to close valuable motorized access and motorized recreational opportunities.

d. The agency should adequately consider that by assigning equal impacts to single-track motorcycle/e-bike trails versus ATV trails versus gravel roads versus highways that the road density criteria is flawed and should not be used.

e. The agency should adequately consider that;
   1) Activities other than OHV recreation have a greater impact on wildlife,
   2) Repeating and exaggerating nontruths about the negative impacts of motorized recreation does not make them true and represents arbitrary and capricious decision-making.

f. The agency should adequately develop site-specific Need Factors for each route and the decision establishing the amount of non-motorized versus motorized opportunity should be informed and reliable.

15. Adequately Address NEPA and Environmental Justice Issues

a. The agency should adequately consider that the human environment which includes motorized access and motorized recreation was included in the 1969 NEPA law and must be given a hard look.

b. The agency should develop a purpose and need that adequately identifies and addresses the needs and significant issues associated with motorized recreation so that they are adequately address in the evaluation and record of decision.

c. The agency should adequately consider that it is overwhelming the public with involvement requirements and catering to well-funded activist groups with paid representatives.

d. The Agency should adequately identify the needs of the silent majority including motorized recreationists and OHV recreationists and reasonably provide for those needs.

e. The agency should adequately consider that the proposed action should not include new non-motorized opportunities without also creating new motorized opportunities.

f. The agency should adequately consider that in the state-wide picture there are many more miles of high quality non-motorized trails and cross-country opportunities (including wilderness and defacto wilderness opportunities) than high quality motorized trails.

g. The agency should adequately consider that motorized recreationists should not be the only group to lose in every travel management planning action and bear a disproportionate share of the negative consequences.
h. The agency should adequately consider that;
    1) Decisions should not ignore the overall needs of the public for motorized access and motorized recreation,
    2) Equal opportunity requirements, and
    3) Congressionally directed management for multiple-uses.
i. The agency should adequately consider that;
    1) Motorized recreationists cooperated with the travel management rule believing that travel management planning would be reasonable because it was sold to us that way,
    2) Travel management planning has turned out to be a massive, motorized closure process, and
    3) Our original trust and cooperation should be honored.
j. The agency should adequately consider that motorized access and recreation opportunity has been marginalized since the 1960's without adequate disclosure and analysis of the significant negative impacts on the public and the needs of the public for that opportunity.
k. The agency should adequately consider that;
    1) In the past OHV recreationists trusted the Agency with the belief that they would look after our needs and we agreed to cooperate and be managed based on that belief.
    2) However, in return our needs were marginalized, and OHV recreationists were rewarded with excessive motorized closures.
    3) This action should compensate and mitigate for this injustice.
l. The agency should adequately consider that the lack of adequate and full disclosure of significant impacts on motorized recreationists and the lack of adequate and meaningful consideration of the needs of motorized recreationists including OHV recreationists should be corrected starting with this action.
m. The agency should adequately consider that motorized recreationists, including our members, have worked hard to maintain routes for over 40 years and should be recognized for that effort and dedication.
n. The agency should adequately consider that the proposed action is overly influenced by well-funded groups that represent less than 3% of the visitors but seek exclusive rights to excessive amounts of public lands and that influence should not be allowed to close public land to 97% of the public visitors and recreationists.
o. The agency should adequately consider that:
    1) Exclusive-use groups have the money, time, staff, and expertise required to participate and skillfully negotiate the complicated NEPA planning process.
    2) The NEPA planning process is too complicated to reach most of the public.
    3) Agency decision-making must recognize this condition.
p. The agency should adequately consider that recreationists who believe that they are "better" than other recreationists should not be rewarded in this action.
q. The agency should adequately consider that motorized recreationists have lost significant access because we cannot possibly comment on the thousands of planning actions that ultimately close our recreational opportunities.
r. The agency should adequately consider that it is not predisposed to motorized closure.
s. The agency should adequately consider that the NEPA process for this action has been significantly influenced by the number of visits, meetings, telephone calls, correspondence, and information provided by exclusive-use groups.

t. The agency should adequately consider that it is not catering to the 3% of the public land visitors who use wilderness and adequately address the needs of the 97% who seek motorized access and motorized recreation.
u. The agency should adequately consider whether it is providing preferential treatment to non-motorized recreationists compared to motorized recreationists including the adequacy and level of opportunities, quality of opportunities, internal staff representation, and levels of maintenance.
v. The agency should adequately consider that non-motorized recreationists have received preferential treatment for the past 40 years in the form of motorized closures by nearly every planning action.
w. The agency should adequately consider that closing opportunities to the public on multiple-use land in the name of conservation is really code for suppression of motorized recreationists.
x. The agency should adequately consider that a policy of furtiveness against motorized recreation will ultimately blowback.
y. The agency should adequately consider that motorized recreationists have been squeezed into an inadequate area because of other users including hikers, equestrians and mountain bikers who find motorized opportunities, refuse to share with motorized recreationists, and then force motorized recreationists out so that they have exclusive use.
z. The agency should adequately consider the demands of recreationists who refuse to share public resources and demand exclusive use for themselves and then not accept those demands.
aa. The agency should adequately consider establishing procedures that will counter undue influence by professional influencers.
bb. The agency should adequately consider motorized recreational opportunities including e-bike with adequate site-specific data and evaluations as required by NEPA, and CEQ guidance.
cc. The agency should give a hard look at the significant positive benefits of motorized access and motorized recreation including OHV trails.
dd. The agency should adequately consider whether it is overly influenced by well-funded, vocal and organized exclusive-use groups causing it to ignore the reasonable needs of the multiple-use public who are not well-funded, non-vocal, and not well-organized but represent the majority of the visitors and the greater good of the public.
ee. The agency should adequately consider whether the proposed action creates more exclusive access and recreation entitlements for hikers, hunters, mountain bikers, and equestrians at the expense of valuable and much needed access and recreation resources for multiple-use recreationists.
ff. The agency should adequately consider that motorized recreationists enjoy mechanical things and that we are not bad people, nor do we deserve to be second class citizens because of our appreciation of mechanical things.
gg. The agency should adequately consider that it is not reasonable to reward those who for selfish reasons frame everyone else as unacceptable.
hh. The agency should adequately consider that the project area is not designated wilderness and some visual use of multiple-use land is reasonable and acceptable.
ii. The agency should adequately consider the closing of dispersed camping sites and motorized recreation opportunities based on vegetation and resource management concerns because this strategy is not aligned at all with the significant public need for these recreation opportunities.
jj. The agency should adequately consider the segregation of high-quality back country access and embrace a policy of tolerance for all recreational preferences.
kk. The agency should adequately consider rewarding recreationists who cannot accept sharing with anyone that is not closely aligned with their personal form of recreation.

ll. The agency should adequately consider catering to non-motorized interests by maintaining non-motorized recreation opportunities at a higher level (both miles and quality) than motorized recreation opportunities.

mm. The agency should adequately consider that early and late season motorized closure dates take away the opportunity for motorized recreationists to enjoy fall and spring weather and the colors of foliage.

nn. The agency should adequately consider using an interdisciplinary team that includes an adequate number of motorized enthusiasts in order to reasonably evaluate and understand the need for motorized access and motorized recreation.

oo. The agency should adequately consider that motorized recreationists provide a significant amount of Trail Steward effort shown in our work logs that should be recognized with an adequate motorized trail system.

pp. The agency should adequately consider the current trend which is squeezing motorized recreationists into the smallest possible area and providing non-motorized recreationists with the greatest possible area.

qq. The agency should adequately consider that in order to provide equality, the action should not create more defacto wilderness when 3% of the visitors use wilderness and 97% of the visitors enjoy multiple-uses.

rr. The agency should adequately consider that the general public is not inclined to participate in the NEPA process and the agency's decision-making process must account for that attribute.

ss. The agency should adequately recognize that it posts information on thousands of non-motorized opportunities and posts very little information on motorized recreational opportunities.

tt. The agency should adequately consider that completed travel management plans should provide user-friendly maps so that the public can reasonably follow the plan.

uu. The agency should adequately recognize that it provides detailed and user-friendly information (maps, web sites, recreation.gov, etc.) for non-motorized recreation and the same level of information should be provided for motorized recreationists.

vv. The agency should adequately consider not granting more privileges to non-motorized recreationists than motorized recreationists.

ww. The agency should adequately consider that federal land managers have created over-use and lack of opportunity issues by closing an excessive amount of motorized recreational opportunities and that the agency has an obligation to correct the significant issues that closing an excessive amount of motorized opportunity has created.

xx. The agency should adequately consider that;

1) Segregation is not acceptable in society.
2) Its actions should not promote segregation on our public lands.
3) Segregation should not be acceptable on public lands and especially on multiple-use lands.

yy. Privilege - a special right, advantage, or immunity granted or available only to a particular person or group. The agency should adequately consider that non-motorized recreationists should not be put in the position of being privileged.

zz. The agency should adequately consider that the NEPA process should not be used to impose the will of others on motorized recreationists.

aaa. The agency should adequately consider that;

1) Education of all recreationists is a reasonable alternative and the most equitable alternative.
2) Education as an alternative to motorized closures should be exercised and increased.

bbb. The agency should adequately consider that repeating and exaggerating nontruths about the level of impacts from motorized recreation does not make them true.

ccc. The agency should adequately consider that dirt bikes have been reasonably muffled with sound standards since the 1980's yet EO 11644 and 11989 are still used to close motorized opportunities which presents evidence of a continuing strong bias against motorized recreation.

ddd. The agency should adequately address why motorized recreationists are the only ones to lose in every planning action.

eee. The agency should adequately consider that;

1) Anti-mechanized interests are not free of mechanized.
2) They use vehicles in their daily lives.
3) However, anti-mechanized interests choose to impose their level of mechanized use on others.

fff. The agency should adequately consider that social justice means that any bias, discrimination or segregation should not be allowed on public lands.

ggg. The agency should adequately consider that the analysis should seriously question the position of those that refuse to share with others.

hhh. The agency should adequately consider;

1) How the world would look without acceptance and tolerance of others,
2) How the world would look without sharing with others, and
3) How the world would look when only the elite have recreation privileges.

iii. The agency should adequately consider whether any form of discrimination is legal or justifiable.

jjj. The agency should adequately consider that the most desirable public land should not be available just for the elite.

kkk. The agency should adequately consider that the most desirable recreation opportunities should not be available just for the elite.

lll. The agency should adequately consider that the balance of opportunity should adequately recognize that non-motorized recreationists have endless miles of cross-country opportunity and that motorized recreationists have little to none.

mmm. The agency should adequately consider that the balance of opportunity should adequately recognize that non-motorized recreationists have significantly more acres per user compared to motorized recreationists.

nnn. The agency should adequately consider that closing motorized recreation opportunities eliminates our pursuit of happiness.

ooo. The agency should adequately consider that travel management alternative maps should be of sufficient detail so that the average citizen can locate all existing routes and evaluate those routes on the ground.

ppp. The agency should adequately consider that given the massive, motorized closure trends of the last 40 years that the time has arrived to add new motorized trail riding opportunities.

qqq. The agency should adequately consider how wildfires and Let-It-Burn policy are violating our right to clean air and a healthy environment.

rrr. The agency should adequately consider the position of property owners near public land that build homes and then complain about public use of adjacent public land.

sss. The agency should adequately consider that if a private landowner denies access to an established public route, then any public access used by the private landowner should be blocked.

ttt. The agency should adequately consider the mitigation that the agency must undertake to address the excessive motorized closures of the past.

uuu. The agency should adequately consider how it delays the full implementation of travel planning such that when the travel plan is implemented the public has no recourse.
vvv. The agency should not tell the public what kind of comments are most useful because it tends to support a pre-determined agenda.
www. The agency should carefully consider the social justice issues associated with imposing their will on motorized recreationists.
1) Open-minded people do not work to impose their beliefs on other people.
2) Open-minded people accept all of life's perspectives and realities.
3) Open-minded people do their own thing in peace without judgement of other people.
xxx. The agency should adequately consider that NEPA, CEQ guidance and other environmental laws are not neutral and have not worked equally for all recreation groups including motorized recreationists.
yyy. The agency should adequately consider need for and use of site-specific data and evaluations for each and every motorized route including consulting with an adequate cross-section of local motorized users.
zzz. The agency should adequately consider that the endless lawsuits from environmental groups is an attempt to impose their non-use agenda and is counter to the greater needs of the public for multiple-use of our public lands.
aaaa. The agency should adequately consider that the position taken by environmentalists are not considering the quality of the human environment including the need and value of motorized recreational opportunities.
bbbb. The agency should adequately recognize that restricting comments to only those that address specific routes does not adequately address the significant issues found in these 19 categories.
cccc. The Agency should not use comment rules so that significant issues and comments from motorized recreationists are dismissed.
dddd. The agency should not create non-motorized recreational opportunities by taking opportunities from motorized recreationists.

16. Avoid Overstating the Impact of Motorized Access and Motorized Recreation on Fish and Wildlife

a. The agency should adequately consider analysis and evaluations based on site-specific data and studies that support an unbiased view and sense of magnitude regarding the impacts of motorized recreation on the natural environment.
b. The agency should adequately compare impacts from all types of visitors to natural impacts in order to demonstrate a true sense of magnitude for impacts.
c. The agency should adequately consider alternatives to wholesale motorized closures that would mitigate fish and wildlife concerns should be given a hard look.
d. The agency should adequately consider that the road density impact criteria are not site-specific and, consequently, not valid for the project area.
e. The agency should adequately consider that the road density impact criteria over-estimates the impact of motorized recreation on wildlife and does not reasonably consider mitigation measures and alternatives that could be implemented.
f. The agency should adequately consider that the road density impact criteria are not a reasonable measure of motorized impact on wildlife habitat.
g. The agency should adequately consider that;
1) Topography is a significant factor affecting wildlife habitat.
2) The vertical topography in the project area greatly reduces the impact on wildlife and is just as effective as or more effective than cover.

3) The analysis should reasonably consider topography.

h. The agency should adequately consider that;
   1) A motorized trail does not have the same impact on wildlife as a road.
   2) The impact analysis should not assume that one size of impact fits all motorized uses.
   3) A criteria and impact analysis should be developed that differentiates between different tread widths and level of use including traffic counts.

i. The agency should adequately consider that;
   1) OHVs cause less severe disturbance of wildlife because the relatively low level of sound that they emit provides a soft warning of human presence compared to non-motorized recreation.
   2) For example, OHVs have never had a damaging encounter with a grizzly bear while hikers and hunters have had many that have ended badly for both the humans and the bear.

j. The agency should adequately consider that motorized closures are being enacted using the Endangered Species Act when there is no site-specific data and studies documenting a significant connection between OHV and e-bike recreation and significant impacts on an endangered species.

k. The agency should adequately consider that there are other impacts on fish and wildlife including natural processes that are far more significant than motorized recreation.

l. The agency should adequately consider that adequately documented OHV impacts should be compared to natural levels and natural changes in order to avoid impacts being over-stated and leading to arbitrary and capricious decision-making.

m. The agency should adequately consider that fish and wildlife can coexist and prosper with OHV recreation when using public education to protect them.

n. The agency should adequately consider that;
   1) Human activities other than OHV recreation have a greater impact on wildlife and the natural environment.
   2) Repeating and exaggerating nontruths about the negative impacts of motorized recreation on fish and wildlife does not make them true and represents arbitrary and capricious decision-making.

o. The agency should adequately consider that a sense of magnitude should be used in the evaluations and decision-making so that potential impacts on fish and wildlife are compared to the naturally occurring range of impacts and that this approach is necessary in order to keep decisions from being arbitrary and capricious.

p. The agency should adequately consider that in many cases wildlife populations are at all-time highs and in excess of the carrying capacity of the land.

q. The agency should adequately consider that negative impacts to fish and wildlife from fires are thousands of times greater than OHV recreation.

r. The agency should adequately consider giving much needed motorized recreation opportunities a higher priority in the decision-making.

s. The agency should adequately consider the need for site-specific data and the value for decision-making as demonstrated by 6 years of monitoring in Yellowstone National Park which demonstrated little impact to wildlife from snowmobiles.

t. The agency should revisit any motorized closures that were enacted without site-specific data.

17. Avoid Overstating the Impact of Motorized Access and Motorized Recreation on the Natural Environment

a. The agency should adequately consider that the analysis should develop data and studies that supports an unbiased and a balanced view of how motorized recreation impacts the natural environment.
b. The agency should adequately consider developing and using adequate site-specific data and studies as required by NEPA, and CEQ guidance in order to justify closure of any motorized opportunity.
c. The agency should adequately consider that impacts from all user groups should be adequately compared to the natural level of impacts in order to demonstrate and use a true sense of magnitude for analysis and decision-making.
d. The agency should adequately consider alternatives to motorized closures such as public education that would mitigate concerns with the natural environment.
e. The agency should adequately consider that;
    1) A motorized trail does not have the same impact on the natural environment as a road.
    2) The impact analysis should not assume that one size fits all.
    3) A criteria and impact analysis should be developed that differentiates between different treads and level of use.
f. The agency should adequately consider that there are other natural processes that create more significant impacts than motorized recreation.
g. The agency should adequately consider that the analysis of documental OHV impacts should be compared to natural levels and natural changes in order to avoid impacts being over-stated and leading to arbitrary and capricious decision-making.
h. The agency should adequately consider that the negative impacts on the natural environment from dispersed camping sites is relatively insignificant when compared to the natural level of environmental impacts.
i. The agency should adequately consider that any significant negative impacts on the natural environment from dispersed camping spots can be mitigated to a reasonable level in most locations.
j. The agency should adequately consider that wilderness visitors deposit their waste in the wilderness and RV campers dispose of their waste at treatment facilities.
k. The agency should adequately consider that self-contained campers have an acceptable and minimal environmental impact and more dispersed camping sites need to be created to serve this popular form of recreation.
l. The agency should adequately consider a sense of magnitude in the evaluations and decision-making so that potential impacts on the natural environment are compared to naturally occurring impacts and decisions avoid being arbitrary and capricious.
m. The agency should not complain about the impact in high use areas because the agency created significant impacts on the natural and human environment by squeezing 93% of the visitors (motorized recreationists) into an inadequate number of areas and opportunities.
    1) The agency should take responsibility and mitigate all impacts associated with this issue.
n. The agency should adequately consider giving much needed motorized recreation opportunities a higher priority in the decision-making.

18. Motorized References Should Be Adequately Considered

a. The analysis should adequately consider all information and references that;
    1) Support the need for motorized recreation,

2) Document the value of motorized recreation to both the economy and human health,
3) Identify alternatives that mitigate any impacts that are adequately documented,
4) Develop alternatives that enhance motorized recreation.
5) Available motorized trail design and maintenance references include:
    1. Trail Construction and Maintenance Notebook USDA
    2. A Comprehensive Framework for OHV Trail Mgmt USDA
    3. Sustainable ATV Trails USDA
    4. Designing Sustainable OHV Trails USDA
    5. Keeping water off the trail USDA
    6. Off-Highway Vehicle Program Route and Designation Guide USDA
    7. Standard Trail Plans and Specifications USDA
    8. Sustainable Trail Bridge Design USDA
    9. Marshall University OHV Courses
    10. https://nohvcc.org/assistance/manager-assistance/online-resource-hub/
    11. NOHVCC Webinars
    12. https://nohvcc.org/economic-impact-studies/
    13. https://nohvcc.org/assistance/manager-assistance/great-trails-projects/
    14. https://nohvcc.org/education/manager-education/great-trails-guidebook/
    15. ATV Route Guideline Manual
    16. Wernex Report for Design Construction Maintenance AMA
    17. Off Highway Motorcycle and ATV Trail Management U of I
    18. https://go.campendium.com/wp-content/uploads/2022/03/2022CamperReport.pdf

b. The agency should adequately consider that observing motorized tracks cannot always be used as evidence of motorized use because we practice "Tread Lightly" and the rain, wind, and snow erase our tracks.

19. Adequately Consider Maintenance, Funding and Gas Tax Issues

a. The agency should adequately consider that an equitable percentage of the gas tax paid by OHV recreationists has not been returned to OHV recreation.
b. The agency should adequately consider that an equitable percentage of the gas tax paid by OHV recreationists has not been returned to OHV recreation for a very long time and the cumulative effects are significant.
c. The agency should adequately consider the significant issues surrounding the inequality of maintenance funding, design and construction funding and gas tax funding with respect to motorized recreation versus non-motorized recreation.
d. The agency should adequately consider that if motorized is removed, then motorized funds should not have been used in the area at any time in the past.
e. The agency should adequately consider that if motorized is removed, then motorized funds used previously in the area should be equitably returned for use on new motorized projects.
f. The agency should adequately consider that that there are significant new funding sources available for motorized trails at both federal and state levels.
g. The agency should adequately consider that based on the significant need and past inequalities, motorized trail maintenance should be the first priority for all available trail maintenance funding.

CONNOLLY RANCH INC.

MARK V. CONNOLLY, PRESIDENT

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TRACY, CALIFORNIA 95378

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SENT BY EMAIL ONLY

April 30, 2022

Alexandra Stehl
Deputy Director, Strategic Planning and Recreation Services
Alexandra.Stehl@parks.ca.gov

Katie Metraux
OHMVR Division, Planning
planning@parks.ca.gov

California State Parks
P.O. Box 942896
Sacramento, CA 94296

RE: NOP Comments on Carnegie SVRA 2022 General Plan Update

This letter is to provide comments on the Notice of Preparation dated March 31, 2022 for the new Carnegie SVRA EIR. The new Carnegie State Vehicular Recreation Area (CSVRA) Environmental Impact Report (EIR) must address the following issues, impacts, uses, mitigation and alternatives:

1. **2021 Court Ruling ordering the prior 2016 EIR be set aside and rescinded -** Among many important elements of the Court Ruling, the court specifically found that the past position of the OHMVR Division that its only obligation was to maximizing OHV recreation and self-mitigation including with best management practices was legally insufficient and unsupported. The 2021 Judgment and Order is contained at the drop box link at the end of this letter. The new CSVRA EIR must properly consider:
    a. Conservation of the land within the area of the existing CSVRA
    b. Mitigate for impacts including extensive **ongoing** impacts from OHV use itself and from management practices including the impacts of self-identified best management practices (such as extensive fencing, ongoing grading, importing new materials for roads, and tracks, new trail and road construction, dust suppression, pond dredging, etc.) with set-aside mitigation within the existing CSVRA boundaries that conserves land with no OHV or other impacts. Mitigation requirements are at a minimum 3:1, meaning for every 1 acre of OHV recreation 3 acres must be preserved

c. Motorized access to non-motorized recreation within CSVRA, including specific areas designated and limited to non-motorized recreation as OHV use cannot be mixed with other uses.

2. **Offsite impacts** – CSVRA and the EIR must consider, analyze and include mitigation to stop off-site environmental impacts, including impacts to adjoining and off-site property, habitat, fauna, flora and species, including sediment drainage down hills and into Corral Hollow Creek and other ephemeral drainages, noise and other wildlife and vegetation impacts that extend onto adjoining and other off-site property. Specifically, CSVRA and the EIR must consider closing additional areas and keeping closed areas that drain into adjoining and nearby land and establishing buffers along boundaries to prevent noise, dust and garbage and other habitat and species impacts onto adjoining and nearby land.

3. **Preservation and interpretation of historic and cultural resources -** Fencing the perimeter footprint of historic and cultural features is insufficient. Significant historic resources relative to the Carnegie historic townsite and clay works of Carnegie are located in this most heavily OHV impacted area of CSVRA along Corral Hollow Creek where there are 3 tracks and 4x4 area. This area is part of the Historic Tesla Mining District which the State Office of Historic Preservation identified in 2012 as eligible for listing on the National Registry of Historic Places, as documented in the letter in the attached Dropbox link. It needs to be protected from the damaging impacts of OHV use and related maintenance with no surrounding OHV recreation in the entire area. The EIR should consider making the entire east end of CSVRA from the ATV track near the camping area to the east boundary being converted to a non-OHV historic area with NO OHV recreation in or around it for multiple reasons including conservation, mitigation and proper protection and interpretation of historic resources, and eliminating some off-site impacts.

4. **WST habitat –** CSVRA allows continued intensive OHV use in habitat for Western spadefoot toad (WST) in the 4x4 area. WST habitat was also located on the west edge of the SVRA. OHV use is damaging this habitat as documented by the OHMVR Division's own documents and evidence submitted in the 2016 EIR process. CSVRA is going to extirpate species by destroying their habitat. The 4x4 area must be moved out of essential habitat near the creek. This and other impacts from OHV use are ongoing impacts that must be mitigated by set- aside mitigation within CSVRA.

5. **Impacts to habitat for threatened and endangered species – The following links provide all documents provided by State Parks thus far in response to a PRA request concerning the Habitat Monitoring System (HMS) and is evidence of inadequate or nonexistent analysis of the habitat and species data**.

   https://www.dropbox.com/sh/95bsrt03ncf1h7c/AAC3rX0zbc1tuFmcex25aIALa?dl=0
   https://www.dropbox.com/s/10tylmmohyuycc1/OneDrive_2022-04-29.zip?dl=0

CSVRA has failed to comply with its statutory obligations as to the HMS and adaptive management. The data provided documents the ongoing degradation of habitat and species in CSVRA, including but not limited to California tiger salamander, California red legged frog and Western spade foot toad. The failure to comply with the statute and analyze survey data, prepare and publish the required HMS reports renders an EIR insufficient. It denies the public and commentators of statutorily required information necessary to analyze, discuss and comment on the significant ongoing impacts of the SVRA. The EIR must contain, reference, analyze and include the statutorily required HMS reports, as well as the information contained in the above links. The HMS report requirement is discussed further below.

Also attached at the drop box link at the end of this letter is the 2015 statistical analysis (and 2016 follow-up letter) of CSVRA's own data documenting habitat and specific listed species impacts. The ongoing impacts documented in the analysis must be mitigated with set aside land within CSVRA designated for permanent protection.

6. **HMS data and reports for 2015 forward** – As described above, by statute CSVRA must conduct annual Habitat Monitoring System (HMS) surveys and issue reports. It appears no reports have been issued since 2015 for 2014. The HMS reports and data from 2015 forward provided pursuant to a PRA request and are contained in the link provided above. In addition to not providing HMS reports annually as required by statute, the multiple failures to properly conduct HMS surveys and Wildlife Habitat Improvement Plan (WHIP) activities was also documented in 2015 and 2016 which analysis is contained in the drop box link at the end of this letter. This combined evidence documents that CSVRA has not been meeting its statutory requirements and professional standards of practice for protecting habitats and species for decades. Not only is CSVRA operating in violation of the law, but it is doing so in a manner that generates significant unavoidable impacts that must be mitigated to a level of insignificant. Before any further work is conducted on an EIR the HMS data and reports for 2015 through 2021 must be released to the public.

7. **Endangered Species Take Permits** – CSVRA has never sought or obtained required Take Permits for the impacts of its operations on critical habitat and threatened and endangered species and other protected species. The EIR must discuss, consider and analyze these impacts and the necessity of Take Permits. And while Take Permits are needed, permits are not mitigation as required by CEQA and set aside mitigation within CSVRA is still required.

8. **Air Quality, Dust and Water –** OHV's generate particulate pollution (including dust and combustion particulates) and greenhouse gases as do CSVRA's own operations. Red Sticker vehicles are allowed in the park, even if limited to Fall – Spring – which do not meet air quality standards. CSVRA operates a huge fleet of diesel-fueled heavy equipment which are used daily including for near daily grooming of the MX track. It

uses large pickups and other gas-powered vehicles in maintenance. These air pollution impacts are not limited to the hills or windy days. All of these air pollution impacts and require mitigation must be considered and analyzed in the EIR, including closing CSVRA to all OHVs on poor air quality days and all Red Sticker OHVs year round.

OHV recreation generates huge amounts of dust. For dust control CSVRA uses magnesium chloride on the roads along Corral Hollow Creek. CSVRA then uses water trucks to wet down the roads to further attempt to control dust. The impacts of these dust control methods, including damage to the riparian area of the creek, sources of water used and ground water depletion, particularly during droughts when water restrictions are in place for the public, must be analyzed in the EIR and alternatives, including moving OHV use out of the sensitive creek and other habitat areas considered.

9. **Alternatives –** Given the Court Ruling, CSVRA needs to consider feasible alternatives that mitigate the significant unavoidable impacts that OHV recreation has and will cause. These include the following:
    a. Setting aside mitigation onsite because the habitat values cannot be replicated through an off-site mitigation or bank. Areas currently closed which drain into neighboring property and buffers may provide some of the required set aside mitigation. Certainly, the footprint of OHV use cannot be expanded increasing the impacted areas from the baseline conditions particularly in light of the failure to mitigate to date based on the incorrect legal conclusion that the State has no duty to consider non-OHV use and mitigate. Waterfall Canyon, for example, must be permanently designated as a preserve area with no OHV or other uses.
    b. Mitigation must include consideration of historic and cultural areas, such as the historic Carnegie Townsite and address and mitigate for impacts to cultural resources. Such mitigation should include designating the entire eastern end of CSVRA as a historic area with no OHV or other use other than hiking and interpretation.
    c. Mitigation for air quality impacts must include consideration of:
        i. Designating part of the current SVRA for non-motorized bikes to reduce air quality impacts even though other habitat impacts remain significant;
        ii. Closing the entire CSVRA in all locations (hills, tracks and creek floor) to all OHV use and heavy equipment maintenance on spare the air days/poor air quality days in the San Joaquin Valley and the Bay Area.
        iii. Not allowing Red Sticker vehicle in CSVRA at any time as there are air quality impacts year-round (the ability to register a Red Sticker OHV does not mean that they should be allowed in state parks or CSVRA.)
    d. The EIR must consider relocating the MX and ATV tracks and other OHV use to other locations out of the sensitive Corral Hollow Creek area which is a rich riparian habitat with listed/special status species and important historic resources. For example, MX and ATV tracks and flat roads for easy riding, which a large proportion of visitors, use can be moved to other already impacted 'brown fields'

in the Valley which addresses multiple impacts and mitigation measures. Moving OHV use out of CSVRA to other locations that do not have such sensitive habitats and species is feasible given existing OHV budget surpluses and funding included in SB 155 enacted in September 2021.

10. **Impacts to Connolly Ranch property and easement** – Any General Plan and EIR must be consistent with the law and cannot be contrary to law. An EIR or General Plan in breach of any contract is a violation of state law. The EIR and any proposed General Plan must be consistent with and address existing contacts including easements and restrictions use of CSVRA property and address impacts to Connolly Ranch Inc. and Connolly Garamendi LLC from OHV or other future uses, such as permanently closing areas to OHV or other uses that drain sediment into Connolly Ranch, establishing buffers along the entire boundary with Connolly Ranch to reduce noise impacts on Connolly Ranch wildlife and habitats, reduce litter and damage to fences and gates by direct impacts from users on the boundary. Trespass is a statutory violation and any General Plan that is adopted that incorporates trespass is contrary to statute and adoption of such a plan an abuse of discretion. A General Plan that incorporates any nuisance is also contrary to statute, and therefore an abuse of discretion. CSVRA must also fence along the entire length of the Carnegie Ridge Road easement from Corral Hollow Road to the Boundary with Connolly Garamendi LLC property, maintain the fence at all times and keep the public off of the easement including the Connolly Low Water crossing as required by Judgment documenting the Connolly Ranch Inc. easement. Any General Plan that does not comply with the contractual and judicially ordered restrictions is contrary to the law and an abuse of discretion.

Please let me now if you have any questions or if you have any difficulties opening the drop box links. Thank you.

Sincerely,

Mark V. Connolly

Attachments – Drop box link to documents referenced in letter:
https://www.dropbox.com/sh/xo4v6p5z9sfz4qg/AAC1pJ6_vHiTpFePdjSJsdzKa?dl=0

1. 2021 Court Judgment and Order
2. 2015 Technical Memorandum and 2016 follow-up
3. 2015 WHIP Critique and 2016 follow-up
4. 2012 SOHP Letter on Tesla historic district NRHP listing

Attachments – Drop box link to HMS State Parks PRA documents referenced in letter:
https://www.dropbox.com/sh/95bsrt03ncf1h7c/AAC3rX0zbc1tuFmcex25aIALa?dl=0
https://www.dropbox.com/s/10tylmmohyuycc1/OneDrive_2022-04-29.zip?dl=0

From: Alan Carlton <carltonal@yahoo.com>
Sent: Wednesday, April 20, 2022 8:25 AM
To: Planning, Planning@Parks <Planning@parks.ca.gov>
Subject: Carnegie SVRA General Plan Update

The Carnegie EIR should fullly analyze all the detrimental environmental impacts of SUVs and should consider an alterantive of shutting down the Park and restoring it to its beautiful natural state.

Alan Carlton
408 Sunset Rd.
Alameda CA 94501
(510) 759-5387

From: Jerry Fouts <jerryfouts@icloud.com>
Sent: Thursday, April 21, 2022 10:47 AM
To: Planning, Planning@Parks <Planning@parks.ca.gov>
Cc: Don Amador <damador@cwo.com>
Subject: Carnegie SVRA General Plan Update

When the Tesla/alameda acquisition came about and planning started for a general plan including that property started the public believed that would actually occur. During the planning for a bigger park the public including me was willing to "give up" certain areas of the park for buffers because of the size of the new proposed area. Now that the new area is off the table the motorcycle community I represent insists that every square inch of Carnegie be used for sustainable managed off road vehicle recreation. That includes areas known as waterfall canyon one drainage behind the MX track, that actually extends all the way up the hill on the other side of the canyon. Also the area known as red rock canyon up stream of waterfall canyon should be used. This area is very important as it lends itself to riding when all areas of the park are too muddy. The third area is the area at the west end of the park closed but never reopened because of the fire many years ago. That area was actually approved for use in a special event three years ago.
I would hope that the east area where the MX course is at, be improved for staging of a GP (overgrown MX type of event) type of event and for the annual HareScrambles event held at Carnegie.
I would also hope to get approval for at least two Hare Scrambles events (held on the east end divided by Carrol Canyon) a year (one spring, one fall) and three to four GP events per year in the designated area.
I would also plan for immediate electrification of designated kiosk areas for electric motorcycles and vehicles..including autos.
Another important challenge is the campground area. More privacy from the road in the form of closed fencing and trees/shrubs along the road and more trees and watering system in the campground. Camping in one of the Bay areas busiest commute routs needs to be addressed, or make camping free. Another thought I'd maybe a campground at the east end of the park by mini bike track.
Buffer areas would be a failure in the specific case of Carnegie. The land owner behind. Carnegie has professed his hatred of our park many times and will continue to sue state parks over any issue he can dream up. So I say let's do our homework and ride our bikes in a responsible manner and deal with what will come.
I have ridden at Carnegie for over 50 years, and have been involved with every stakeholder group out there along with 20 or so administrations. I can and do say that that Park has made giant strides in the last 10 years to provide more quality opportunity to the average rider. And be a good neighbor. Now it's time to enhance the experience of the public Thank you for your consideration

Jerry Fouts
AMA a district 36, Carnegie forever, 30 year promoter of the Old Crow Hare Scrambles

From: Marco Galvez <marcodgalvez7426@gmail.com>
Sent: Thursday, April 28, 2022 9:12 AM
To: Planning, Planning@Parks <Planning@parks.ca.gov>
Subject: Carnegie SVRA general plan update

Why is the expansion area for carnegie svra been removed from the project? This is money we the riders pay out of our pocket.

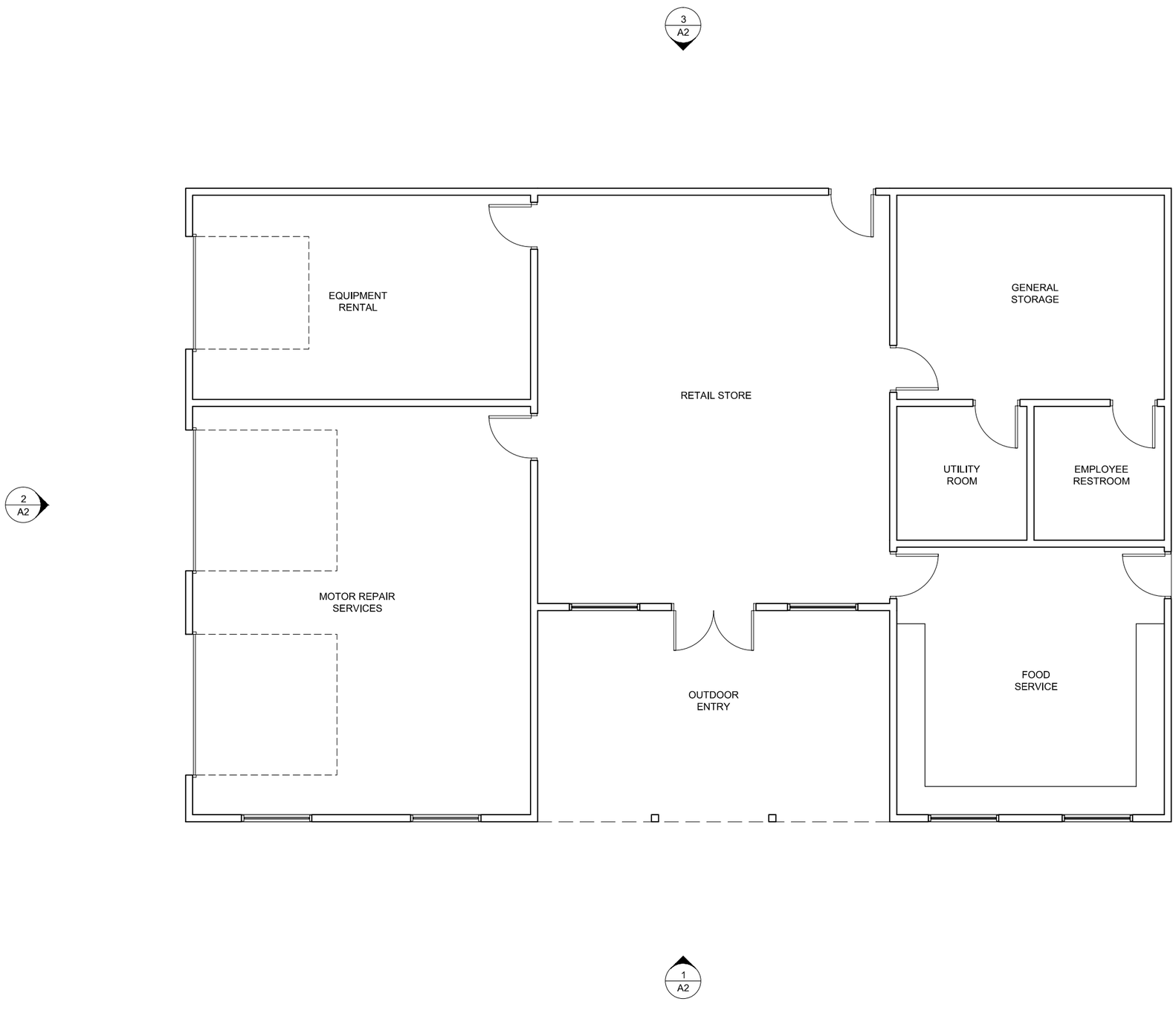
From: Robert <rob@4airflow.com>
Sent: Thursday, April 21, 2022 9:31 AM
To: Planning, Planning@Parks <Planning@parks.ca.gov>
Subject: Carnegie SVRA General Plan Update

Please keep the park open and the expansion as well

APPENDIX B

Conceptual Design Plans

BUDGET PACKAGE



1 FLOOR PLAN
SCALE@22X34 1/4" = 1'-0"

ACQUISITION &
DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

XREF
STAMP

CALIFORNIA STATE FIRE MARSHAL- APPROVED

Approval of this plan does not authorize or approve any omission of deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

Reviewed by Date

DPR ACCESS COMPLIANCE REVIEW
ACCESSIBILITY SECTION
CERTIFICATION #

Reviewed by Date

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED:	DESIGNER
DRAWN:	STAFF
CHECKED:	SUPERVISOR
DATE:	XX-XX-XXXX

REVISIONS

	DATE
1	

CARNEGIE SVRA
CARNEGIE CONCESSION STORE

CONCEPTUAL FLOOR PLAN

DRAWING NO.
12345.XXX

SHEET NO.
A1
XXX OF XXX

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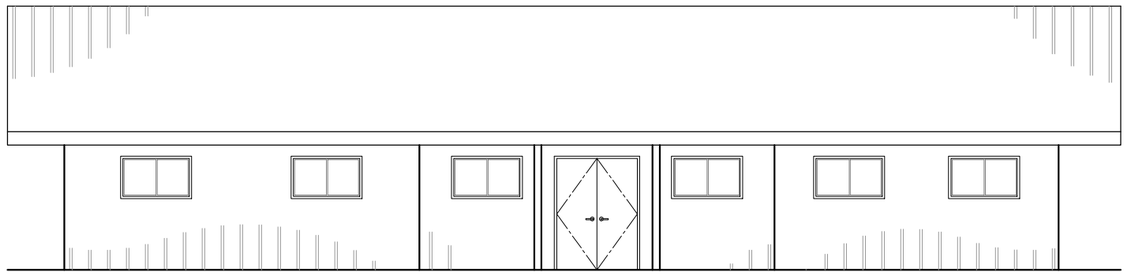
BUDGET PACKAGE



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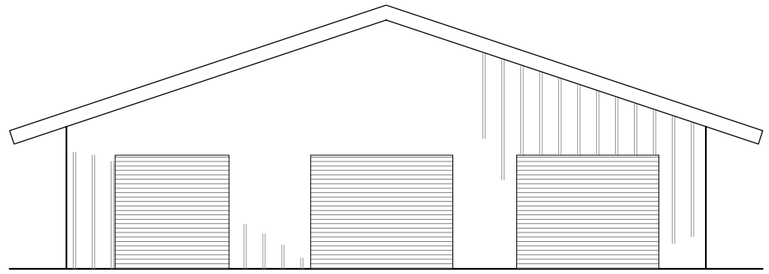

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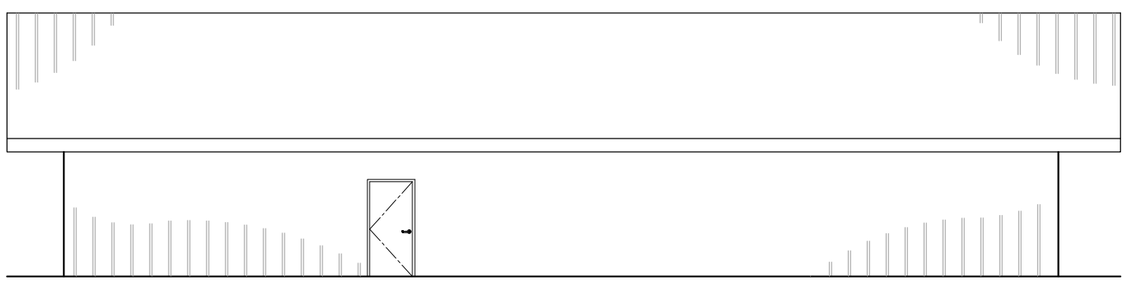

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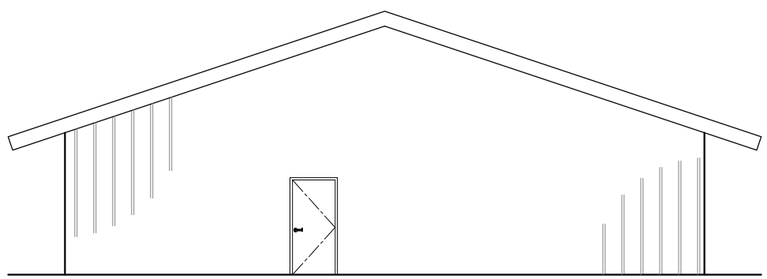

4 ELEVATION 4
SCALE@22X34 3/16" = 1'-0"

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DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

XREF
STAMP

CALIFORNIA STATE FIRE MARSHAL- APPROVED

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Reviewed by Date

DPR ACCESS COMPLIANCE REVIEW
ACCESSIBILITY SECTION
CERTIFICATION #

Reviewed by Date

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED: DESIGNER
DRAWN: STAFF
CHECKED: SUPERVISOR
DATE: XX-XX-XXXX

REVISIONS	
△	DATE

CARNEGIE SVRA
CARNEGIE CONCESSION STORE

CONCEPTUAL EXTERIOR ELEVATIONS

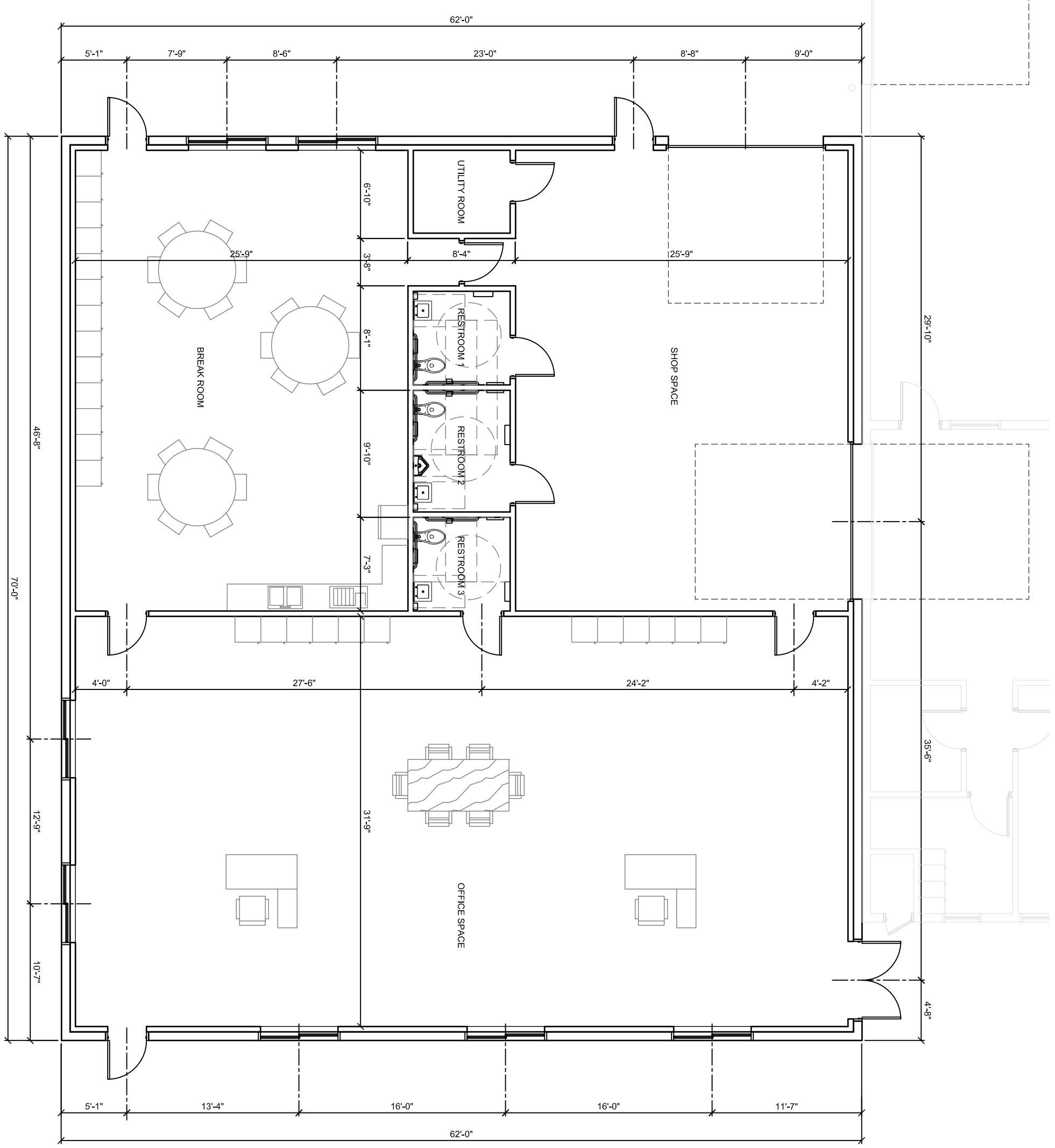
DRAWING NO.
12345.XXX

SHEET NO.
A2
XXX OF XXX

10% SUBMITTAL

1 FLOOR PLAN

SCALE@22X34 1/4" = 1'-0"



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95814-3229

CALIFORNIA STATE PARKS SINCE 1864

XREF STAMP

CALIFORNIA STATE FIRE MARSHAL- APPROVED

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Reviewed by Date

DPR ACCESS COMPLIANCE REVIEW
ACCESSIBILITY SECTION
CERTIFICATION #

Reviewed by Date

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED: DESIGNER
DRAWN: STAFF
CHECKED: SUPERVISOR
DATE: XX-XX-XXXX

REVISIONS DATE

CARNEGIE SVRA
MAINTENANCE OFFICE EXPANSION

FLOOR PLAN

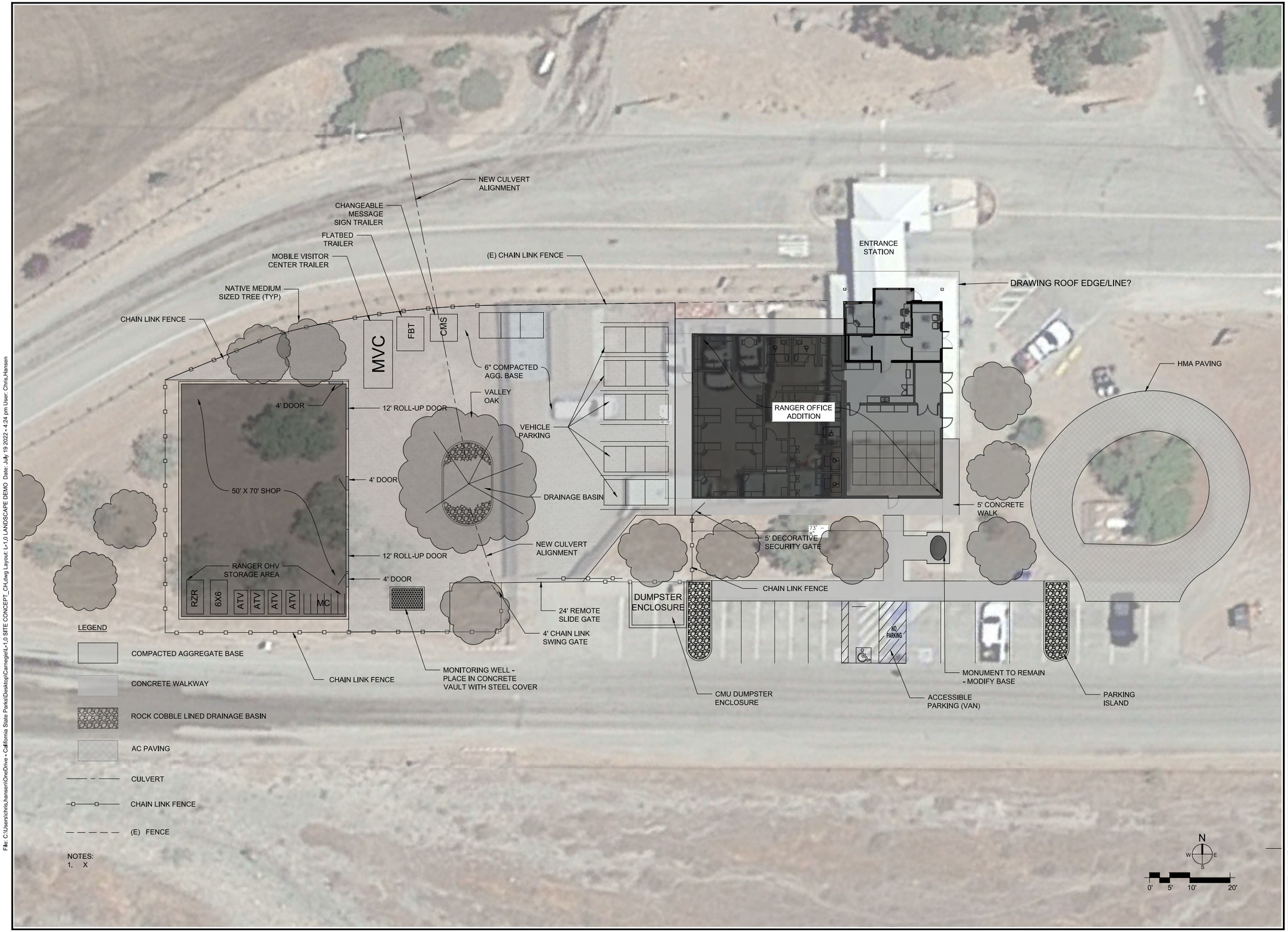
DRAWING NO. XXXXX.XXX

SHEET NO. A2.01

XXX OF XXX


INTERP
PARK AID
MEDICAL
UNISEX
ELEC/DATA
SUPERVISOR
BREAKOUT
UNISEX
UNISEX
JAN.
BREAKROOM
EQUIP STORAGE
WORKAREA
SHOWER
GENDER NEUTRAL LOCKER
SHOWER
STORAGE EVIDENCE
CHANGE ROOM
TACTICAL TRAINING
RANGER WORKSTATIONS
STORAGE
STORAGE
CHANGE ROOM


73' - 8"
48' - 4"



File: C:\Users\chris.hansen\OneDrive - California State Parks\Desktop\Carnegie\L-1.0 SITE CONCEPT_CH.dwg Layout: L-1.0 LANDSCAPE DEMO Date: July 19 2022 - 4:24 pm User: Chris.Hansen

FACILITIES AND DEVELOPMENT DIVISION

DPR ACCESS COMPLIANCE REVIEW
ACCESSIBILITY SECTION
CERTIFICATION #

Reviewed by Date

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED:	D. MOFFATT
DRAWN:	C. HANSEN
CHECKED:	STAFF
DATE:	07-19-2022

	REVISIONS	DATE

CARNEGIE STATE OHV PARK
RANGER OFFICE REMODEL

CONCEPTUAL SITE PLAN

##########.###

SHEET NO.
#####
OF 018

PROJECT MILESTONE:

Path of travel Tank Footprint Split rail Rock Bank Protection

Potential Tank Relocation Site

CONSTRUCTION DOCUMENTS

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
ACQUISITION AND DEVELOPMENT DIVISION

CARNEGIE SVRA

RESTROOM 4X4 MX TRACK AREA

CSFM # XX-XX-XX-XXXX

1-ALL MATERIALS SHOWN OR NOTED ON THE PLANS ARE NEW UNLESS CALLED OUT OTHERWISE.

2-THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS SHOWN OR DIMENSIONED HERE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STATE REPRESENTATIVE FOR RESOLUTION BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.

3-ALL WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE FOLLOWING LISTED CODES, AND ALL OTHERS HAVING JURISDICTION OVER THE WORK.
2010 EDITION OF THE CALIFORNIA BUILDING CODE.
2010 EDITION OF THE CALIFORNIA FIRE CODE.
2010 EDITION OF THE CALIFORNIA ENERGY CODE.
2010 EDITION OF THE CALIFORNIA ELECTRICAL CODE.
2010 EDITION OF THE CALIFORNIA MECHANICAL CODE.
2010 EDITION OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE.
2010 EDITION OF THE CALIFORNIA PLUMBING CODE.
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

4-CONDUCT ALL WORK IN ACCORDANCE WITH THE LATEST SAFETY RULES AND REGULATIONS OF ALL AUTHORITIES AND AGENCIES HAVING JURISDICTION OVER THE WORK.

5-ALL WORK SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. WHERE DETAILED INFORMATION OR CLARIFICATION IS REQUIRED, THE MATTER SHALL BE REFERRED TO THE STATE REPRESENTATIVE FOR WRITTEN RESOLUTION.

6-THE CONTRACTOR SHALL NOT SCALE THE DRAWINGS, BUT SHALL RELY ONLY ON THE WRITTEN DIMENSIONS GIVEN. IF A DISCREPANCY OCCURS OR NO DIMENSION IS GIVEN, THE CONTRACTOR SHALL NOTIFY THE STATE REPRESENTATIVE FOR WRITTEN CLARIFICATION BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.

GENERAL NOTES

INSTALL PRE-FABRICATED BATHROOM GRADE
PROVIDE ADA PARKING AND ACCESS TO FACILITY
PROVIDE SEPTIC LEACH FIELD, PIPING, EXCLUSIONARY FENCE
PROVIDE NEW 4" WATER MAIN AND HYDRANT
PROVIDE STACKED SPLIT RAIL FENCE
PROVIDE FENCE AND GATES
REMOVE AND REPLACE EXIST 4' HIGH CHAIN LINK FENCE
PROVIDE ROCK - LINED DRAINAGE DITCH

SCOPE

1.	BUILDING CONSTRUCTION TYPE	V-B
2.	OCCUPANCY CLASSIFICATION	U
3.	NUMBER OF STORIES	1
4.	ACTUAL BUILDING HEIGHT	9 FT
5.	BUILDING AREA IN SQUARE FEET	160
6.	ALLOWABLE AREA PER C.B.C.	9,000 SQ FT
7.	AREA AND/OR HEIGHT INCREASES	NONE
8.	FIRE SPRINKLERED YES OR NO	NO
9.	FIRE ALARM YES OR NO	NO
10.	OTHER FIRE PROTECTION SYSTEMS IF ANY	NO
11.	SMOKE CONTROL SYSTEM YES OR NO	NO
12.	SRA AREA YES OR NO	YES
13.	FIRE SEVERITY DESIGNATION	HIGH

BUILDING CODE REVIEW

A / A1 — SECTION NUMBER / SHEET NUMBER

1 / A1 — DETAIL NUMBER / SHEET NUMBER

1 — REVISION NUMBER

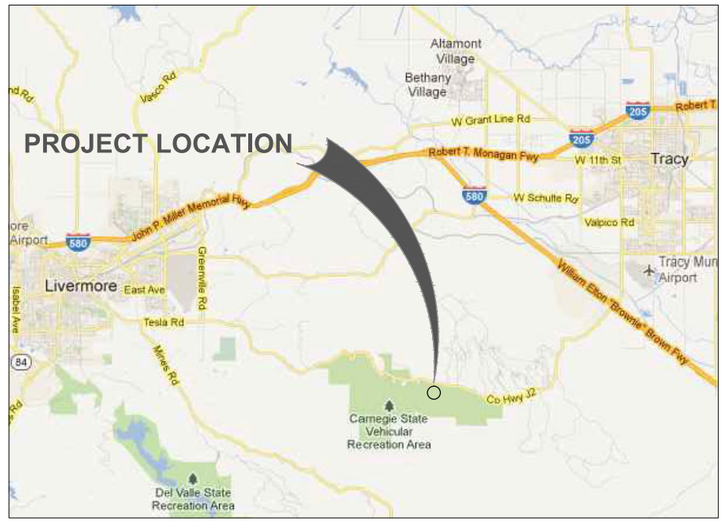
X'-X" — DIMENSION LINE CENTER LINE

X'-X" — DIMENSION LINE FACE OF MATERIAL

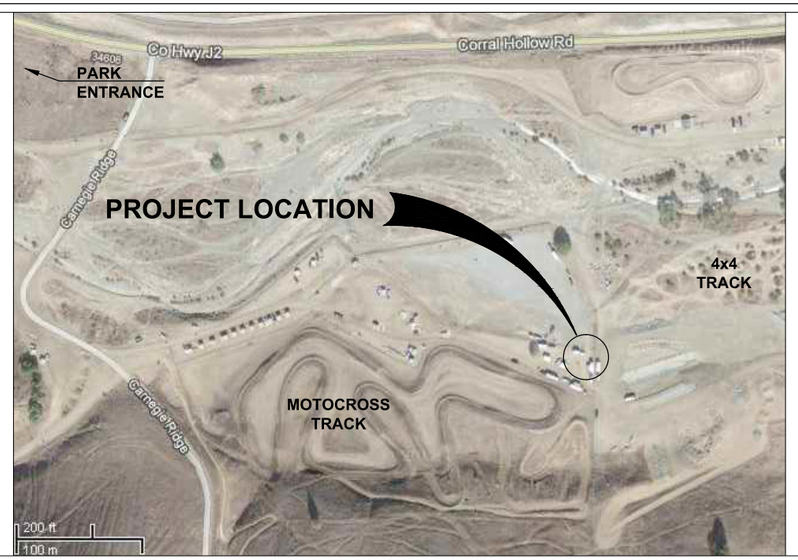
SYMBOLS LEGEND

CONCRETE
CLAY
ROCK LINED DITCH
SIDE WALK
SAND
PEAT

MATERIAL LEGEND



VICINITY MAP



LOCATION MAP

SHEET

SHEET INDEX

ADA	AMERICANS WITH DISABILITIES ACT
BFP	BACK FLOW PREVENTER
CBC	CALIFORNIA BUILDING CODE
CONC	CONCRETE
COTG	CLEAN OUT TO GRADE
DIA	DIAMETER
(E)	EXISTING
EA	EACH
EG	EXISTING GRADE
EL	ELEVATION
FFE	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FS	FINISHED SURFACE
Ø	DIAMETER
GAL	GALLON
GALV	GALVANIZED
INV	INVERT
MIN	MINIMUM
MAX	MAXIMUM
OC	ON CENTER
OD	OUTSIDE DIAMETER
OG	ORIGINAL GRADE
POC	POINT OF CONNECTION
PVC	POLY VINYL CHLORIDE
SCH	SCHEDULE
TYP	TYPICAL
VAR	VARIES
W	WIDTH

ABBREVIATIONS

18600 CORRAL HOLLOW RD.
TRACY, CA 95376
SAN JOAQUIN COUNTY

ADDRESS

1. PREFABRICATED RESTROOM BUILDING DRAWINGS

DEFERRED SUBMITTALS APPROVAL

APPROVAL

ACQUISITION & DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

REGISTERED PROFESSIONAL ENGINEER
GERHARD PANUSCHKA
No.C052670
Exp.12-31-14
CIVIL
STATE OF CALIFORNIA

CALIFORNIA STATE FIRE MARSHAL- APPROVED

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Reviewed by Date

DPR ACCESS COMPLIANCE REVIEW
ACCESSIBILITY SECTION
CERTIFICATION #

Reviewed by Date

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION. NORTHERN SERVICE CENTER

DESIGNED:	E. VILLALOBOS
DRAWN:	E. VILLALOBOS
CHECKED:	G. PANUSCHKA
DATE:	MARCH 11, 2013

REVISIONS	
	DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

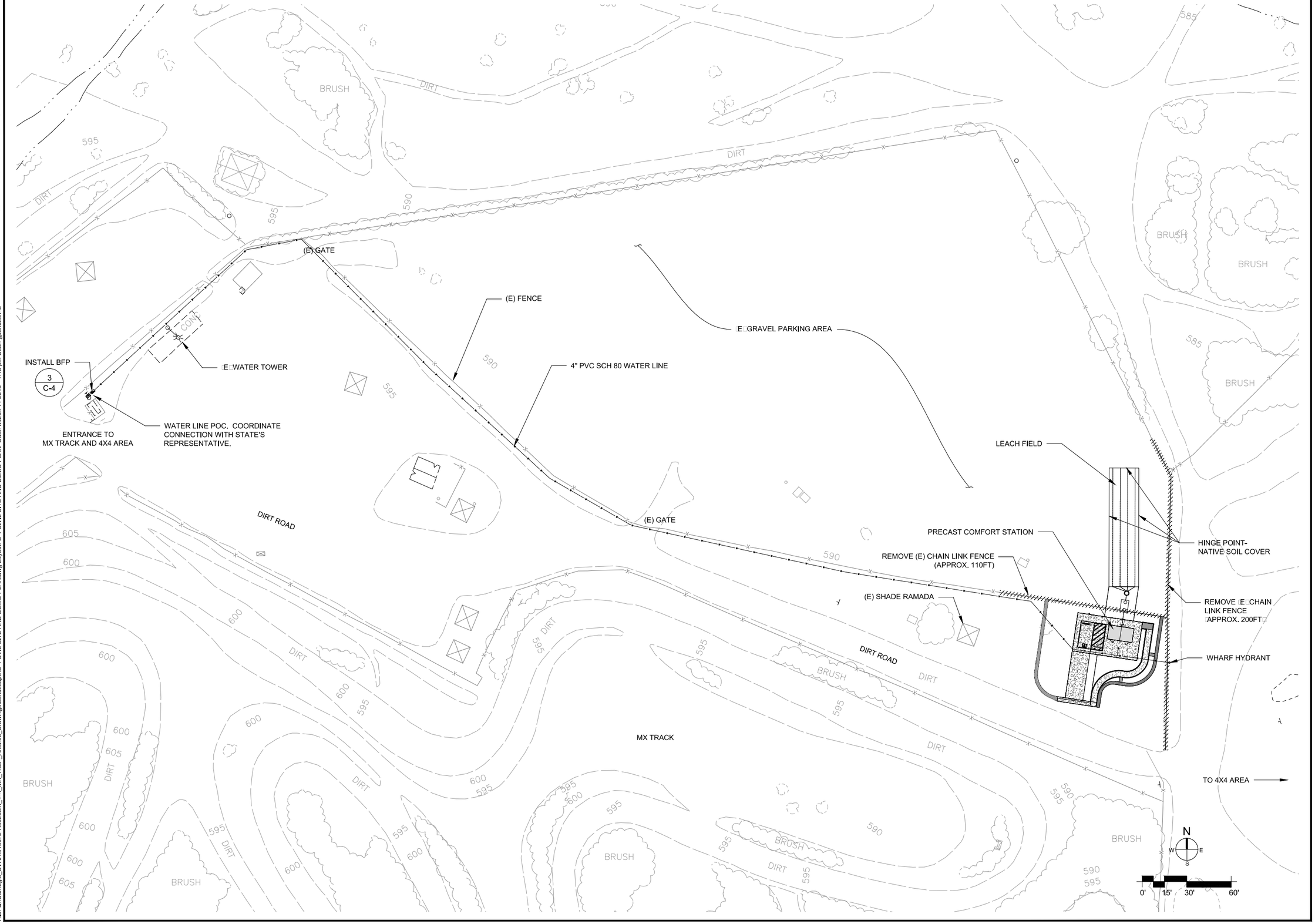
COVER SHEET

DRAWING NO.
016672.001

SHEET NO.
G1.0
001 OF 012

File: Q:\Carnegie_SVRA\016672-Restroom_4_4_MX_Trac_-_Area\05_Drawings\Sheet Set\G1.0 Cover Sheet.dwg Layout: G1.0 Cover Sheet Date: March 11 2013 - 1:42 pm User: gpanusch a

CONSTRUCTION DOCUMENTS



ACQUISITION &
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DATE:	MARCH 11, 2013

REVISIONS	
	DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

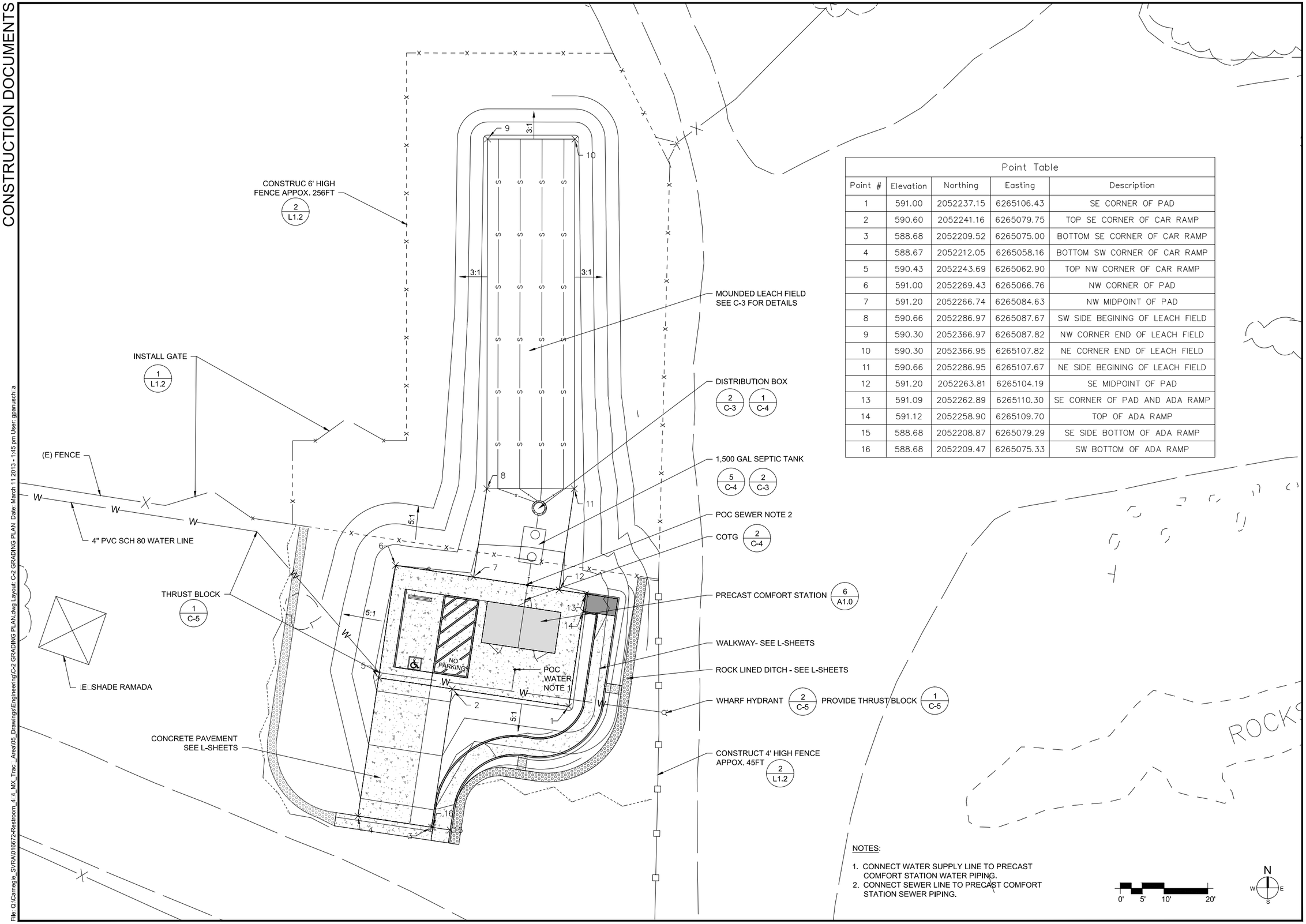
CIVIL SITE AND DEMO PLAN

DRAWING NO.
016672.002

SHEET NO.
C-1
002 OF 012

File: Q:\Carnegie_SVRA\016672-Restroom_4_4_MX_Trac_\Area\05_Drawings\Landscape\C-1 CIVIL SITE AND DEMO PLAN.dwg Layout: C-1 CIVIL SITE AND DEMO PLAN Date: March 11 2013 - 1:43 pm User: gpanusch a

CONSTRUCTION DOCUMENTS



Point Table				
Point #	Elevation	Northing	Easting	Description
1	591.00	2052237.15	6265106.43	SE CORNER OF PAD
2	590.60	2052241.16	6265079.75	TOP SE CORNER OF CAR RAMP
3	588.68	2052209.52	6265075.00	BOTTOM SE CORNER OF CAR RAMP
4	588.67	2052212.05	6265058.16	BOTTOM SW CORNER OF CAR RAMP
5	590.43	2052243.69	6265062.90	TOP NW CORNER OF CAR RAMP
6	591.00	2052269.43	6265066.76	NW CORNER OF PAD
7	591.20	2052266.74	6265084.63	NW MIDPOINT OF PAD
8	590.66	2052286.97	6265087.67	SW SIDE BEGINING OF LEACH FIELD
9	590.30	2052366.97	6265087.82	NW CORNER END OF LEACH FIELD
10	590.30	2052366.95	6265107.82	NE CORNER END OF LEACH FIELD
11	590.66	2052286.95	6265107.67	NE SIDE BEGINING OF LEACH FIELD
12	591.20	2052263.81	6265104.19	SE MIDPOINT OF PAD
13	591.09	2052262.89	6265110.30	SE CORNER OF PAD AND ADA RAMP
14	591.12	2052258.90	6265109.70	TOP OF ADA RAMP
15	588.68	2052208.87	6265079.29	SE SIDE BOTTOM OF ADA RAMP
16	588.68	2052209.47	6265075.33	SW BOTTOM OF ADA RAMP

NOTES:

1. CONNECT WATER SUPPLY LINE TO PRECAST COMFORT STATION WATER PIPING.
2. CONNECT SEWER LINE TO PRECAST COMFORT STATION SEWER PIPING.

0' 5' 10' 20'

N W E S

ACQUISITION & DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

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Exp.12-31-14
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DESIGNED: E. VILLALOBOS
DRAWN: E. VILLALOBOS
CHECKED: G. PANUSCHKA
DATE: MARCH 11, 2013

REVISIONS	
	DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

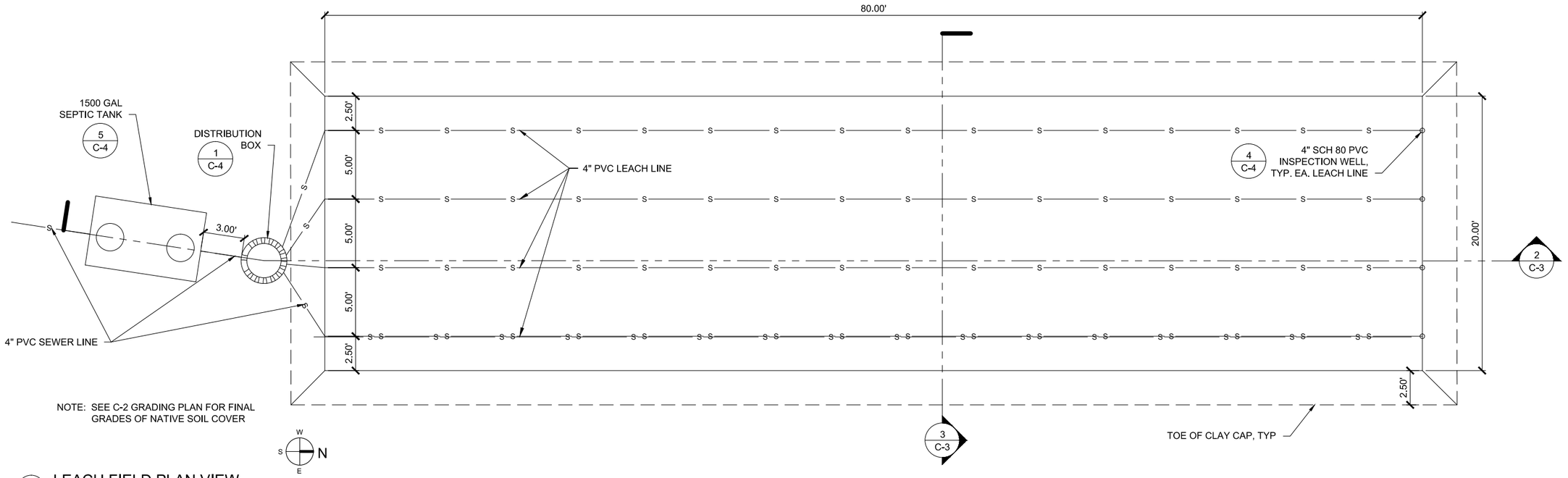
GRADING PLAN

DRAWING NO.
016672.003

SHEET NO.
C-2
003 OF 012

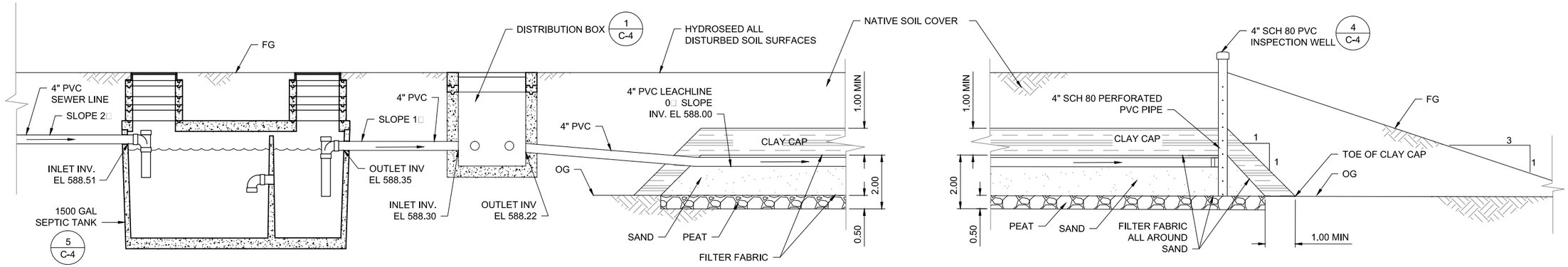
File: Q:\Carnegie_SVRA\016672-Restroom_4_4_MX_Trac_\Area\05_Drawings\Engineering\C-2 GRADING PLAN.dwg Layout: C-2 GRADING PLAN Date: March 11 2013 - 1:45 pm User: gpanusch: a

CONSTRUCTION DOCUMENTS



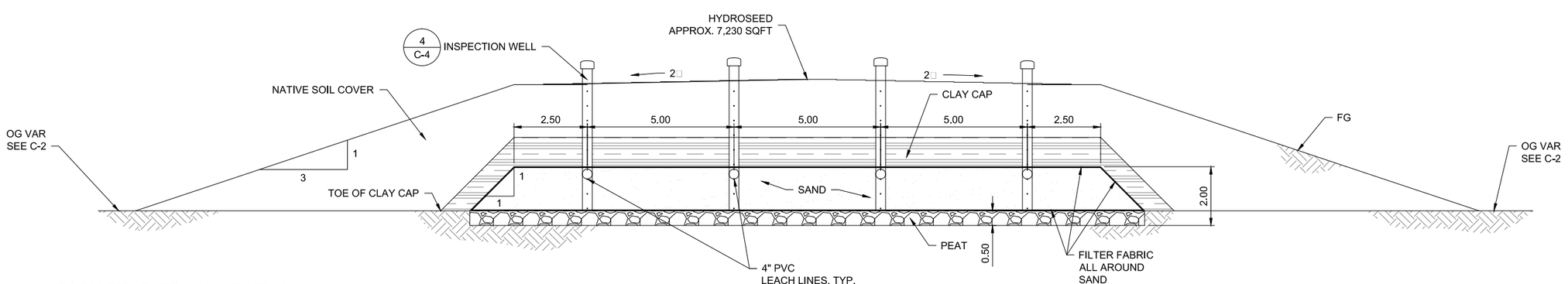
1 LEACH FIELD PLAN VIEW

SCALE@22X34 3" = 1'-0"



2 LEACH FIELD CROSS-SECTION

SCALE@22X34 6" = 1'-0"



3 LEACH FIELD CROSS-SECTION

SCALE@22X34 6" = 1'-0"

ACQUISITION &
DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

REGISTERED PROFESSIONAL ENGINEER
GERHARD PANUSCHKA
No.C052670
Exp.12-31-14
CIVIL
STATE OF CALIFORNIA

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CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

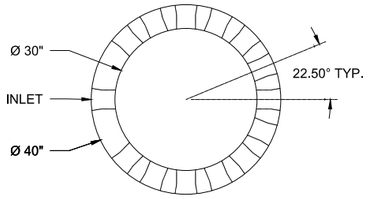
SEPTIC AND MOUNDED LEACH FIELD LAYOUT

DRAWING NO.
016672.004

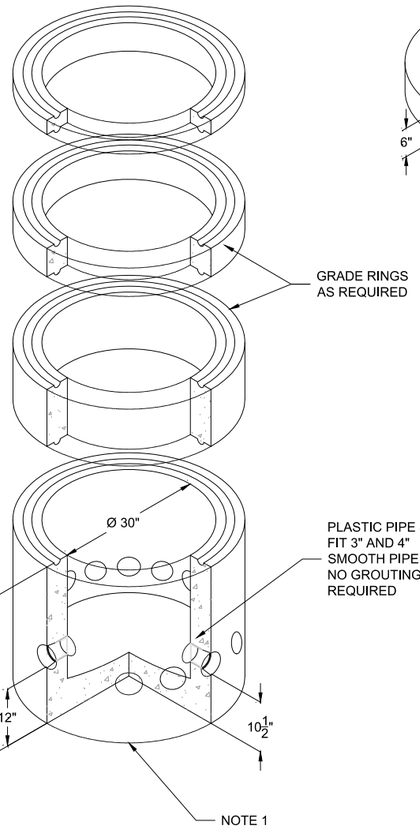
SHEET NO.
C-3
004 OF 012

File: O:\Carnegie_SVRA\016672-Restroom_4_4_MX_Trac...\Area\05_Drawings\Engineering\C-3 SEPTIC LAYOUT.dwg Layout: C-3 SEPTIC LAYOUT Date: March 13 2013 - 10:39 am User: lle

CONSTRUCTION DOCUMENTS

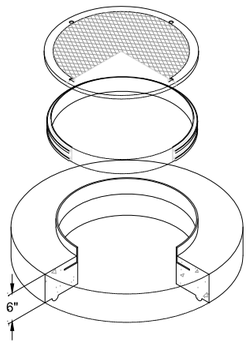


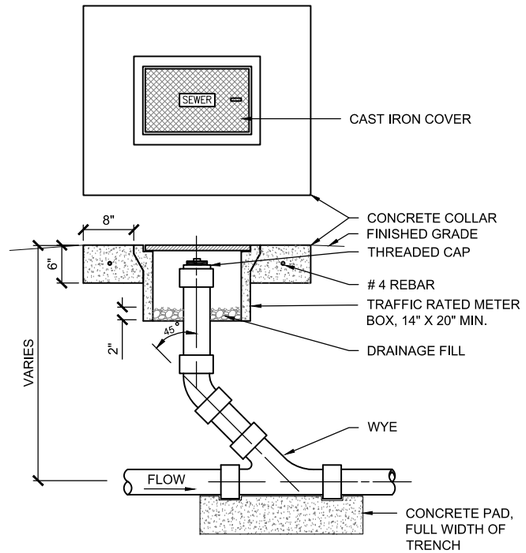
PLAN VIEW



1 DISTRIBUTION BOX D-30
SCALE@22X34 3/4" = 1'-0"

NON - TRAFFIC PEDESTRIAN LOADING
FIBERGLASS LID BOLT DOWN COVER
COLOR: GREEN

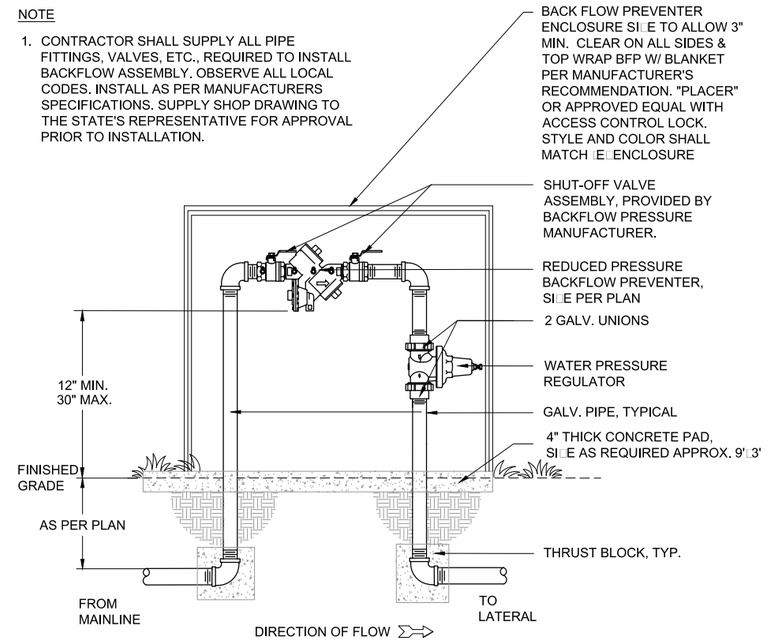




2 CLEAN-OUT TO GROUND (COTG)
SCALE@22X34 1" = 1'-0"

NOTE

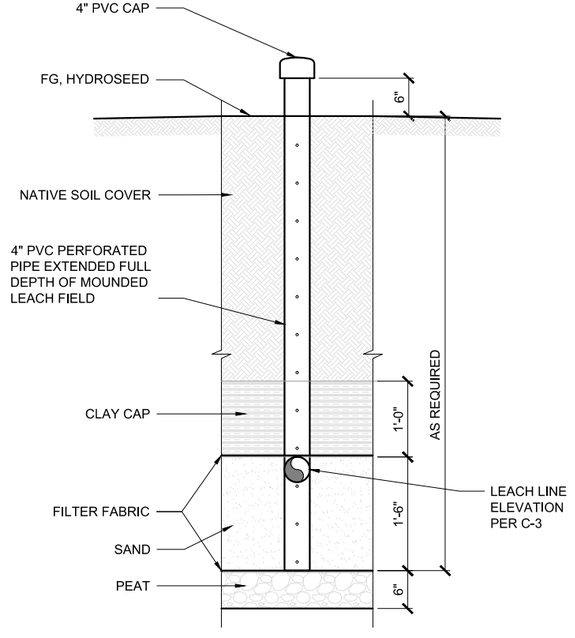
1. CONTRACTOR SHALL SUPPLY ALL PIPE FITTINGS, VALVES, ETC., REQUIRED TO INSTALL BACKFLOW ASSEMBLY. OBSERVE ALL LOCAL CODES. INSTALL AS PER MANUFACTURERS SPECIFICATIONS. SUPPLY SHOP DRAWING TO THE STATE'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.



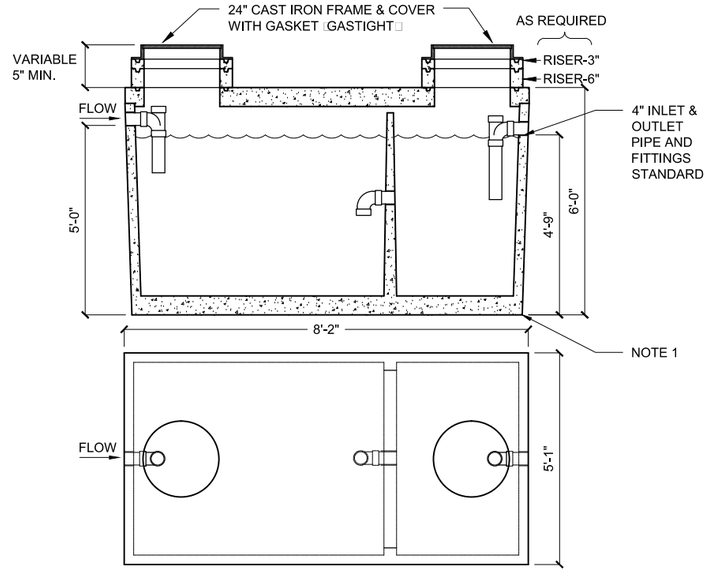
3 WATER BACKFLOW PREVENTER
SCALE@22X34 NTS

NOTES:

1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS



4 INSPECTION WELL DETAIL
SCALE@22X34 1" = 1'-0"



5 TRAFFIC RATED SEPTIC TANK
SCALE@22X34 1/2" = 1'-0"

ACQUISITION & DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

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GERHARD PANUSCHKA
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CIVIL
STATE OF CALIFORNIA

CALIFORNIA STATE FIRE MARSHAL- APPROVED

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DESIGNED:	E. VILLALOBOS
DRAWN:	E. VILLALOBOS
CHECKED:	G. PANUSCHKA
DATE:	MARCH 11, 2013

REVISIONS	
	DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

CIVIL DETAILS 1

DRAWING NO.
016672.005

SHEET NO.
C-4
005 OF 012

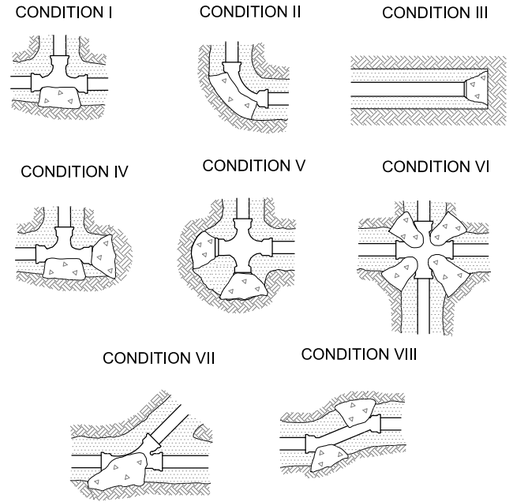
File: Q:\Carnegie_SVRA\016672-Restroom_4_4_MX_Trac_-_Area\05_Drawings\Engineering\C-4 CIVIL DETAILS.dwg Layout: C-4 CIVIL DETAILS Date: March 11 2013 - 1:46 pm User: gpanusch a

CONSTRUCTION DOCUMENTS

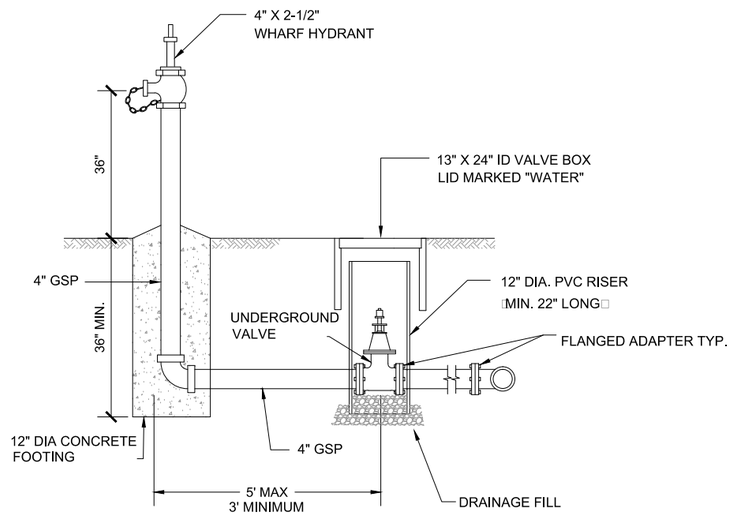
THRUST BLOCK BEARING AREA IN SQUARE FEET								
	CONDITION							
PIPE SIZE	I	II	III	IV	V	VI	VII	VIII
< 6"	2.0	2.9	2.0	2 @ 2.0	2 @ 1.6	4 @ 1.6	2.0	2 @ 1.6
6"	4.3	4.0	4.3	2 @ 4.3	2 @ 4.3	4 @ 3.3	4.3	2 @ 3.3
8"	7.4	10.6	7.4	2 @ 7.4	2 @ 7.4	4 @ 5.7	7.4	2 @ 5.7
10"	12.1	17.1	12.1	2 @ 12.1	2 @ 12.1	4 @ 9.3	12.1	2 @ 9.3
12"	17.2	24.1	17.2	2 @ 17.2	2 @ 17.2	4 @ 13.2	17.2	2 @ 13.2

NOTES

1. THRUST BLOCK AREAS BASED ON 225 PSI AND 2,000 PSF SOIL PRESSURE WITH 2 ½ FEET OF COVER MINIMUM.
2. THRUST BLOCK BEARING FACES SHALL BE PLACED AGAINST UNDISTURBED SOIL, APPROVED COMPACTED BACKFILL, OR CLASS 100-E-100 SLURRY.
3. THRUST BLOCKS SHALL BE CLASS 560-C-3250 CONCRETE, UNLESS SPECIFIED OTHERWISE.
4. TO FACILITATE FUTURE REMOVAL OF THRUST BLOCKS AND LINE EXTENSION USE CARDBOARD SEPARATORS BETWEEN BLOCKS, IF NEEDED.



1 THRUST BLOCK
SCALE@22X34 1' = 1'-0"



2 WHARF HYDRANT
SCALE@22X34 1' = 1'-0"

ACQUISITION &
DEVELOPMENT DIVISION
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DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

CIVIL DETAILS 2

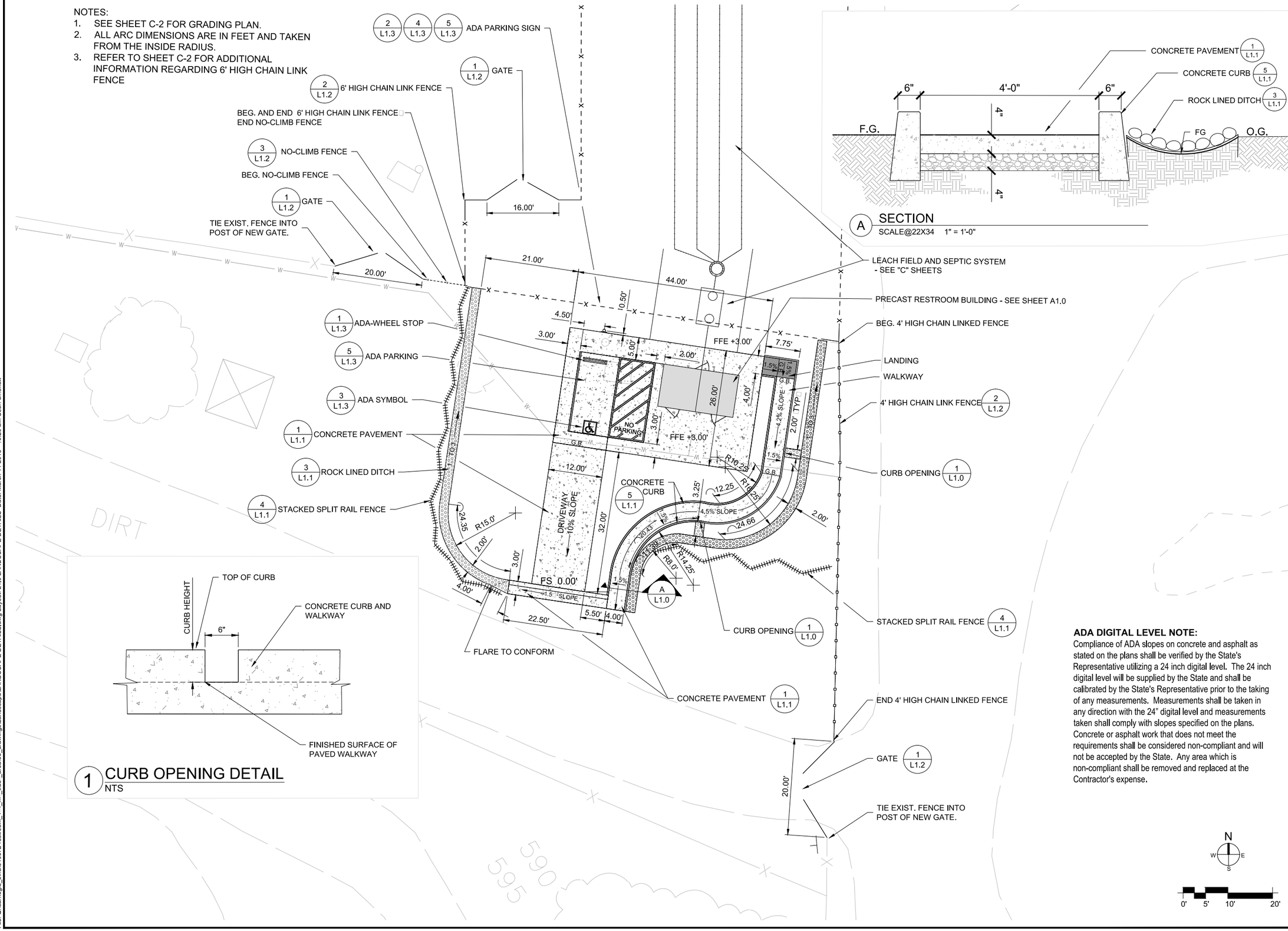
DRAWING NO.
016672.006

SHEET NO.
C-5
006 OF 012

File: Q:\Carnegie_SVRA\016672-Restroom_4_4_MX_Trac_-_Area\05_Drawings\Engineering\C-5 CIVIL DETAILS 2.dwg Layout: C-5 CIVIL DETAILS 2 Date: March 11 2013 - 1:47 pm User: gpanusch a

CONSTRUCTION DOCUMENTS

NOTES:
1. SEE SHEET C-2 FOR GRADING PLAN.
2. ALL ARC DIMENSIONS ARE IN FEET AND TAKEN FROM THE INSIDE RADIUS.
3. REFER TO SHEET C-2 FOR ADDITIONAL INFORMATION REGARDING 6' HIGH CHAIN LINK FENCE



A SECTION
SCALE@22X34 1" = 1'-0"

1 CURB OPENING DETAIL
NTS

ADA DIGITAL LEVEL NOTE:
Compliance of ADA slopes on concrete and asphalt as stated on the plans shall be verified by the State's Representative utilizing a 24 inch digital level. The 24 inch digital level will be supplied by the State and shall be calibrated by the State's Representative prior to the taking of any measurements. Measurements shall be taken in any direction with the 24" digital level and measurements taken shall comply with slopes specified on the plans. Concrete or asphalt work that does not meet the requirements shall be considered non-compliant and will not be accepted by the State. Any area which is non-compliant shall be removed and replaced at the Contractor's expense.

N
W E
S
0' 5' 10' 20'

CALIFORNIA STATE PARKS SINCE 1864

ACQUISITION & DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

LICENSED LANDSCAPE ARCHITECT
DAVID R. MOFFATT #4823
signature
6-30-2013
renewal date
3-11-2013
date
STATE OF CALIFORNIA

CALIFORNIA STATE FIRE MARSHAL- APPROVED

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Reviewed by Date

DPR ACCESS COMPLIANCE REVIEW
ACCESSIBILITY SECTION
CERTIFICATION #

Reviewed by Date

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED:	D. MOFFATT
DRAWN:	D. MOFFATT
CHECKED:	G. PANUSCHKA
DATE:	MARCH 11, 2013

REVISIONS	
	DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

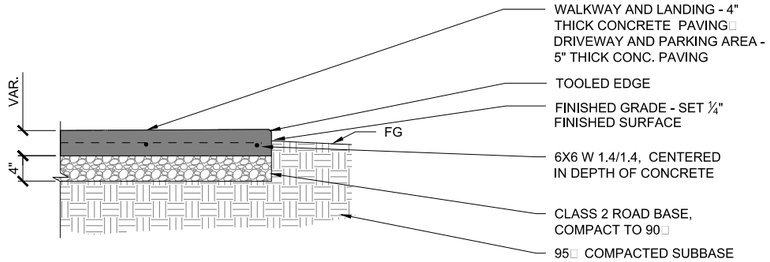
LANDSCAPE DETAILS 1

DRAWING NO.
016672.007

SHEET NO.
L1.0
007 OF 012

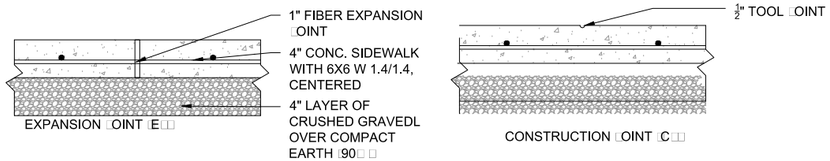
File: Q:\carnegie_svra\016672-restroom_4_4_m_trac_area\05_drawings\Landscape\LANDSCAPE DETAILS.dwg Layout: L1.0 LANDSCAPE DETAILS Date: March 11 2013 - 10:26 am User: dmoffatt

CONSTRUCTION DOCUMENTS



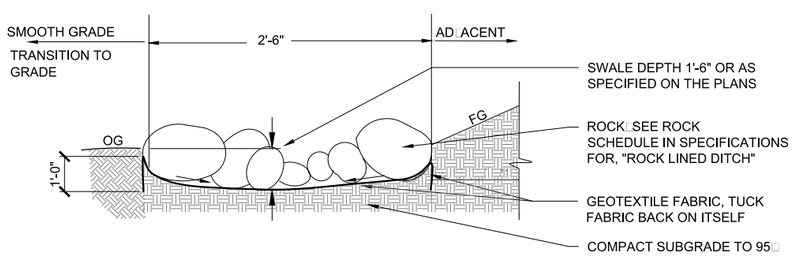
NOTE:
1. ON WALKWAYS, CONCRETE NOT TO EXCEED 4.5 RUNNING SLOPE OR 1.5 CROSS SLOPE, UNLESS OTHERWISE NOTED ON PLAN.
2. LANDING AND ADA PARKING AREA - 1-5 MAX. SLOPE IN ANY DIRECTION.

1 CONCRETE PAVEMENT
SCALE@22X34 1" = 1'-0"



NOTE: USE 4" THICKNESS ON CONC. TRAILS AND 5" THICKNESS FOR ADA PARKING STALL PADS

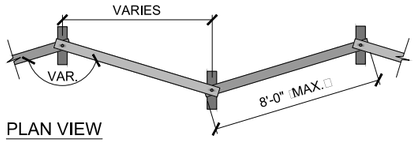
2 EXPANSION AND CONTRACTION OINTS
SCALE@22X34 1 1/2" = 1'-0"



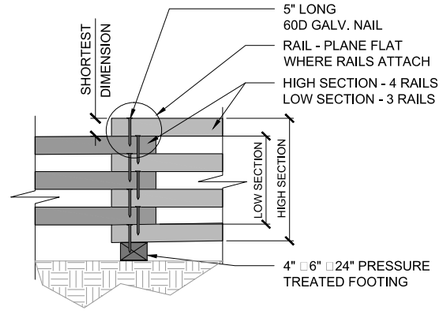
NOTE: INSTALL LARGER ROCK ON THE SWALE EDGES & FILL IN WITH SMALLER SI ES IN THE MIDDLE.

3 ROCK LINED DITCH
SCALE@22X34 3" = 1'-0"

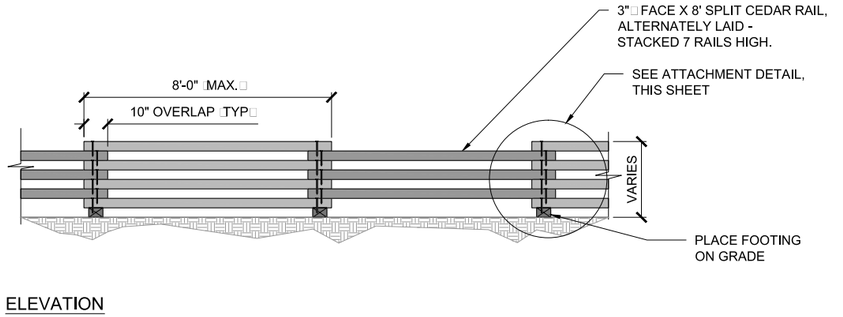
NOTES
1. FINAL ORIENTATION OF FENCE TO BE DETERMINED BY STATE'S REPRESENTATIVE.
2. FACE OF RAIL SHALL BE PLACED HORI ONTALLY FACE-SIDE DOWN.
3. FENCE ALIGNMENT/ORIENTATION SHOULD BE DETERMINED PRIOR TO NAILING RAILS IN PLACE.
4. PLACE NAILS IN AN ALTERNATING PATTERN TO AVOID NAIL-ON-NAIL CONFLICT.
5. FENCE FOOTING SITS ON GRADE AND IS NOT ANCHOR TO FINISHED GRADE.



PLAN VIEW

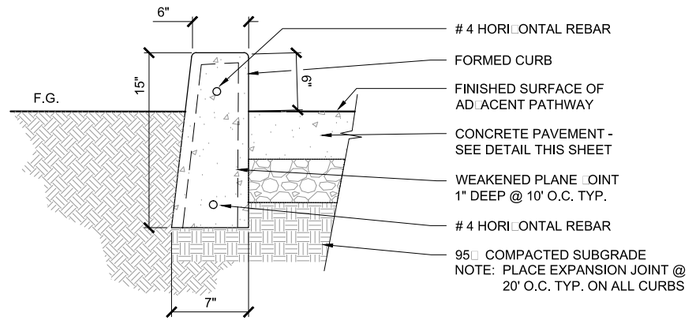


ATTACHMENT DETAIL



ELEVATION

4 STACKED SPLIT RAIL FENCE
SCALE@22X34 1/4" = 1'-0"



5 6 INCH CONCRETE CURB
SCALE@22X34 1 1/2" = 1'-0"

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signature
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CALIFORNIA STATE FIRE MARSHAL- APPROVED

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Reviewed by Date

DPR ACCESS COMPLIANCE REVIEW ACCESSIBILITY SECTION

CERTIFICATION #

Reviewed by Date

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED:	D. MOFFATT
DRAWN:	D. MOFFATT
CHECKED:	G. PANUSCHKA
DATE:	MARCH 11, 2013

REVISIONS

	DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

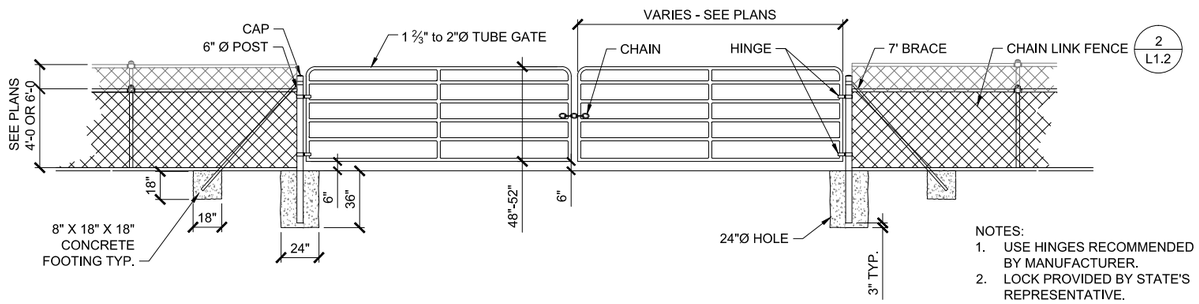
LANDSCAPE DETAILS 2

DRAWING NO.
016672.008

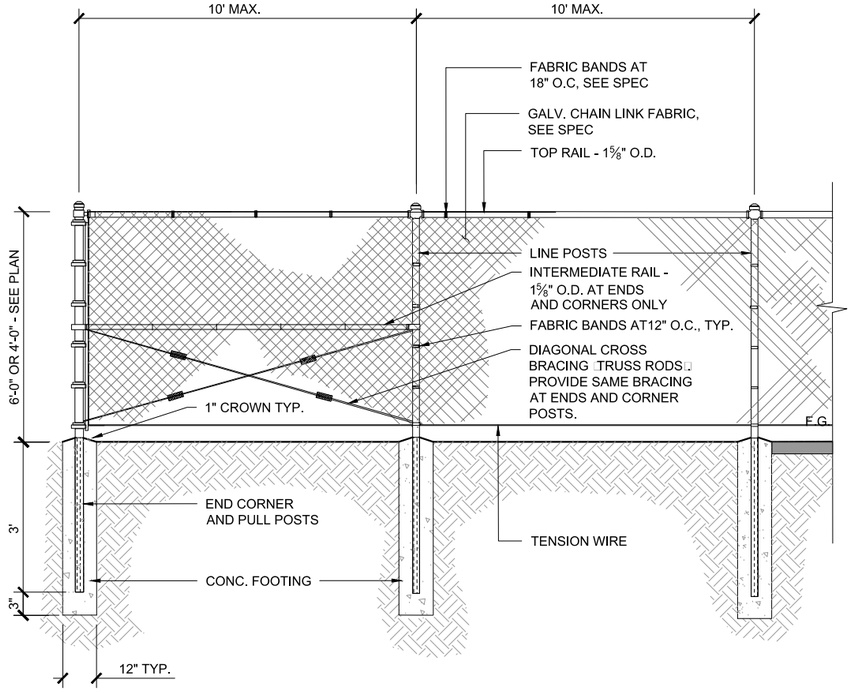
SHEET NO.
L1.1
008 OF 012

File: Q:\carnegie_svra\016672-restroom_4_4_m__trac__area\05_drawings\Landscape\L2.1 LANDSCAPE DETAILS 2.dwg Layout: L1.1 LANDSCAPE DETAILS 2 Date: March 11 2013 - 10:28 am User: dmoffatt

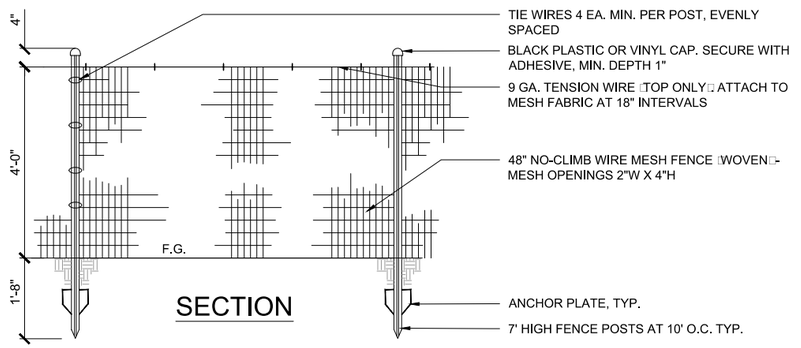
CONSTRUCTION DOCUMENTS



1 GATE DETAIL
SCALE@22X34 1/4" = 1'-0"



2 CHAIN LINK FENCE
SCALE@22X34 1/2" = 1'-0"



3 NO CLIMB FENCE-TYPE 1
SCALE@22X34 1/2" = 1'-0"

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DEVELOPMENT DIVISION
One Capitol Mall
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REVISIONS
DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

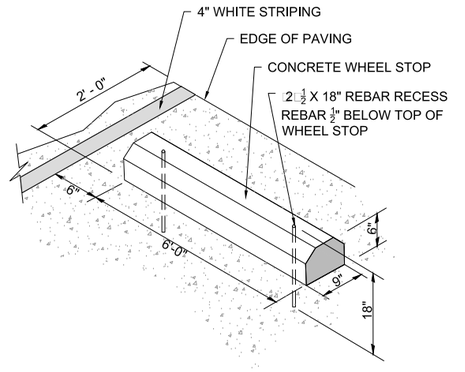
LANDSCAPE DETAILS 3

DRAWING NO.
016672.009

SHEET NO.
L1.2
009 OF 012

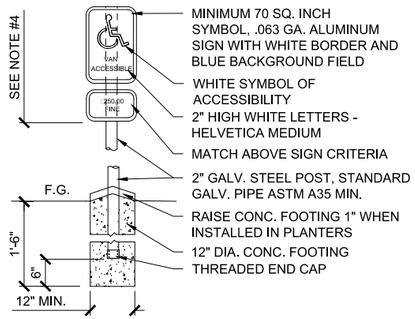
File: O:\carnegie_svra\016672-restroom_4_4_m_-_trac_-_area\05_drawings\Landscape\L2.2 LANDSCAPE DETAILS 3.dwg Layout: L2.2 LANDSCAPE DETAILS 3 Date: March 11 2013 - 10:30 am User: dmoffatt

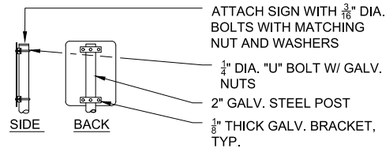
CONSTRUCTION DOCUMENTS



1 ADA-WHEEL STOP

SCALE@22X34 1' = 1'-0"

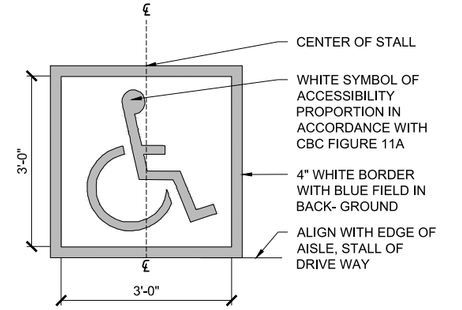




NOTES:
1. CENTER SIGNS ON PARKING STALLS.
2. VERIFY SIGN LOCATION PRIOR TO INSTALLATION WITH THE STATE REPRESENTATIVE.
3. BORDER SYMBOLS AND LETTERING TO BE REFLECTIVE.
4. IN LANDSCAPED AREAS: SET SIGN ELEVATION 5'-0" MIN. CLEAR FROM PARKING STALL FINISHED SURFACE GRADE TO BOTTOM OF SIGN. IN PEDESTRIAN CIRCULATION ROUTES: SET SIGN ELEVATION 88" FROM PARKING STALL TO BOTTOM OF SIGN.

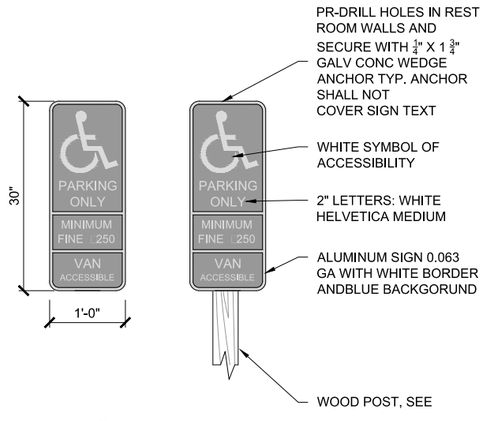
2 ADA SIGN POST

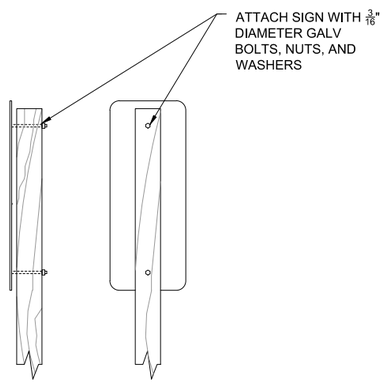
SCALE@22X34 3/4" = 1'-0"



3 ADA SYMBOL

SCALE@22X34 3/4" = 1'-0"

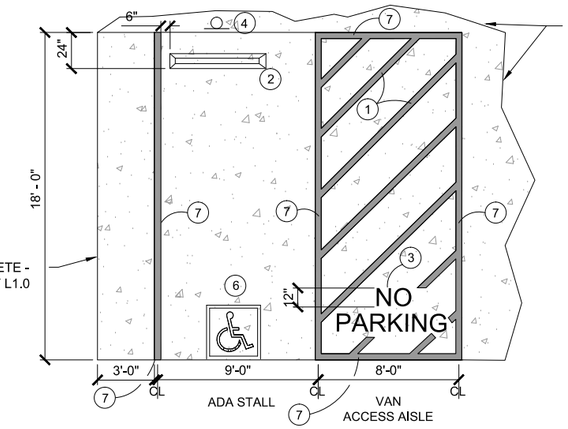




NOTES:
1. MIN. HEIGHT IS 60" FROM BOTTOM OF SIGN TO WALL SURFACE BASE. WHEN NOT PLACE IN CIRCULATION ROUTE.
2. MIN. HEIGHT IS 80" FROM BOTTOM OF SIGN TO PAVING WALKING SURFACE, IF FREE STANDING AND IN PATH OF TRAVEL.

4 ACCESSIBLE PARKING SIGN

SCALE@22X34 1" = 1'-0"



NOTES:

1. 4" WIDE PAINTED WHITE LINES, TYP. 45 DEGREE LINES SHALL BE 36" ON CENTER. "NO PARKING" TEXT SHALL BE HELVETICA NARROW FONT STYLE, WHITE LETTERING AT 12" TALL. CENTER TEXT AS DIAGRAMMED.
2. WHEEL STOP, SEE THIS SHEET.
3. PAINT "NO PARKING" IN 12" HIGH WHITE LETTERS.
4. ACCESSIBLE PARKING
5. ACCESSIBLE PARKING STALLS & AISLES TO HAVE 1.8□ MAX. SLOPE AS SHOWN ON PLANS.
6. SYMBOL DETAIL, SEE DETAIL 3, THIS SHEET.
7. 4" BLUE PAINTED LINE.

5 ADA AND STANDARD PARKING

SCALE@22X34 1/4" = 1'-0"

CALIFORNIA STATE PARKS SINCE 1864

ACQUISITION & DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

LICENSED LANDSCAPE ARCHITECT
DAVID R. MOFFATT #4823
signature 6-30-2013
renewal date 3-11-2013
date
STATE OF CALIFORNIA

CALIFORNIA STATE FIRE MARSHAL- APPROVED

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DESIGNED:	D. MOFFATT
DRAWN:	D. MOFFATT
CHECKED:	G. PANUSCHKA
DATE:	MARCH 11, 2013

REVISIONS

	DATE

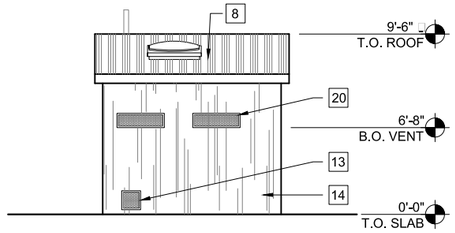
CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

LANDSCAPE DETAILS 4

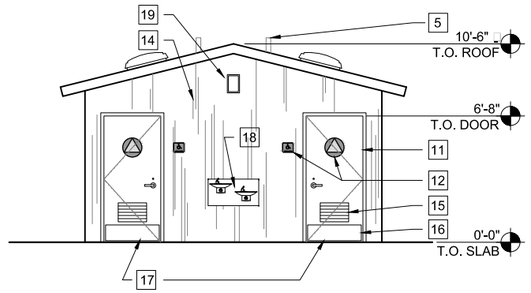
DRAWING NO.
016672.010

SHEET NO.
L1.3
010 OF 012

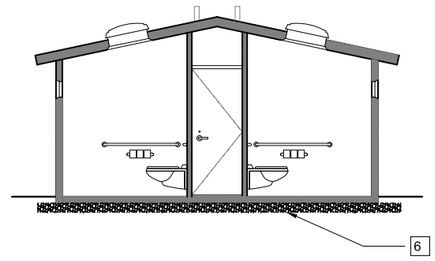
CONSTRUCTION DOCUMENTS



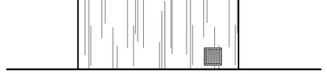
10 EAST ELEVATION
SCALE@22X34 1/4"=1'-0"



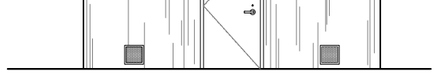
7 SOUTH ELEVATION
SCALE@22X34 1/4"=1'-0"



4 LONGITUDINAL SECTION
SCALE@22X34 1/4"=1'-0"

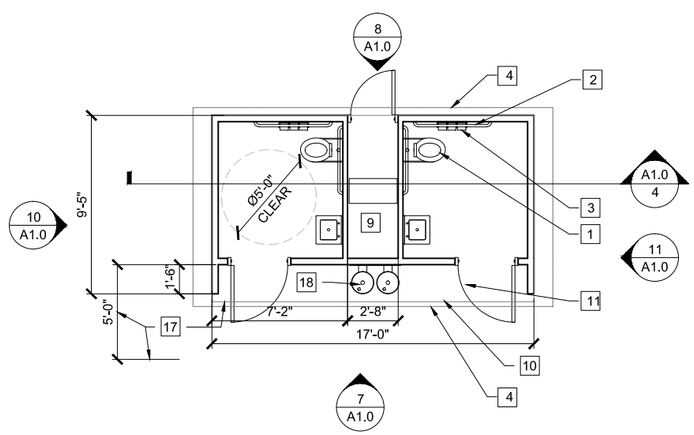


11 WEST ELEVATION
SCALE@22X34 1/4"=1'-0"



8 NORTH ELEVATION
SCALE@22X34 1/4"=1'-0"

5 ROOF PLAN
SCALE@22X34 1/4"=1'-0"



6 FLOOR PLAN
SCALE@22X34 1/4"=1'-0"

GENERAL NOTES:

1. RESTROOMS SHALL BE PRECAST CONCRETE TOILET MODULARS THAT PROVIDE A FULLY INTEGRAL, OPERATIONAL BUILDING. SEE SPECIFICATIONS FOR DEFERRED SUBMITTAL REQUIREMENTS.
2. BASIS OF DESIGN: THE FLOOR PLAN, ROOF PLAN, AND ELEVATIONS ARE BASED, IN GENERAL, ON THE CXT PRECAST PRODUCTS, MODEL: CORTE□ FLUSH RESTROOM BUILDING, WITH CHASE. EQUIVALENT PRODUCTS OF OTHER MANUFACTURER'S REVIEWED BY CALIFORNIA DEPARTMENT OF PARKS AND RECREATION, ACQUISITION AND DEVELOPMENT DIVISION, MAY BE SUBSTITUTED IN ACCORDANCE WITH PROVISIONS OF THE CONTRACT.
3. ALL DIMENSIONS SHOWN ARE MINIMUM REQUIRED DIMENSIONS. REFER TO SHEET A2.0 FOR ADA REQUIREMENTS.

KEYNOTES:

1	STAINESS STEEL TOILET
2	GRAB BARS
3	TOILET PAPER DISPENSER
4	ROOF ABOVE
5	SANITARY ROOF VENT
6	FOUNDATION PER MANUFACTURER
7	WALL BELOW
8	SIMULATED STANDING SEAM CONCRETE ROOF PATTERN
9	PIPE CHASE WITH CONCRETE SEALED WALLS/FLOORS
10	CONCRETE BUILDING SLAB BY MANUFACTURE OF PRE-CAST BUILDING. COORDINATE ELEVATION WITH CONCRETE WALK FOR ACCESSIBLE ENTRANCE.
11	3'-0" X 6'-8" FRP DOOR and FRAME WITH LOUVER
12	ACCESSIBLE TOILET SIGNAGE
13	WALL VENT, TYP.
14	WOOD SIDING PATTERN
15	DOOR LOUVER 18"X12"
16	KICK PLATE □BOTH SIDES□
17	SET BUILDING SLAB FLUSH, LEVEL and WITH SMOOTH TRANSITION AT CONCRETE WALKWAY, IN AREA 60" OUT IN FRONT OF SOUTH WALL. COORDINATE WITH SEE SHEET C-2 AND L1.0
18	HI-LOW STAINLESS STEEL DRINKING FOUNTAIN
19	PHOTO CONTROLLED LIGHT FIXTURE, TYP.
20	TRANSLUCENT POLYCARBONATE WINDOW GLA□ING WITH STEEL FRAME
21	TRANSLUCENT POLYCARBONATE SKYLIGHT, FRAME CAST INTO CONC. ROOF

CALIFORNIA STATE PARKS SINCE 1864

ACQUISITION & DEVELOPMENT DIVISION
One Capitol Mall
Sacramento, CA
95814-3229

LICENSED ARCHITECT
GIL DE LA PENA
No C21464
Ren 1.31.15
STATE OF CALIFORNIA
3.12.13

CALIFORNIA STATE FIRE MARSHAL- APPROVED

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DESIGNED:	STAFF
DRAWN:	GD
CHECKED:	G. PANUSCHKA
DATE:	MARCH 11, 2013

REVISIONS	
△	DATE

CARNEGIE SVRA
RESTROOM 4X4 MX TRACK AREA

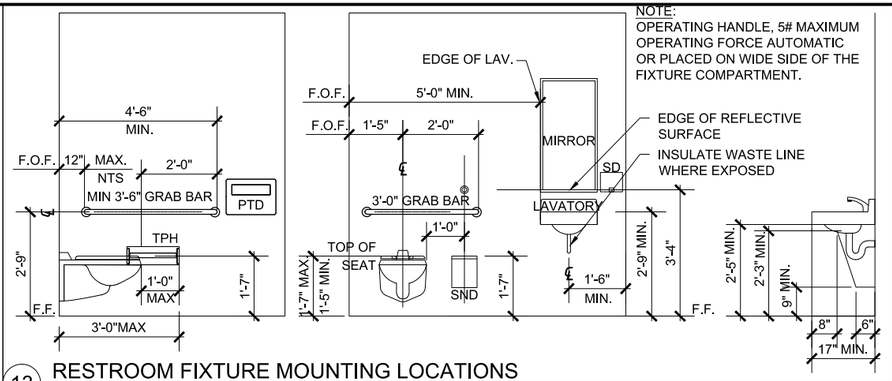
PRECAST RESTROOM BUILDING

DRAWING NO.
016672.011

SHEET NO.
A1.0
011 OF 012

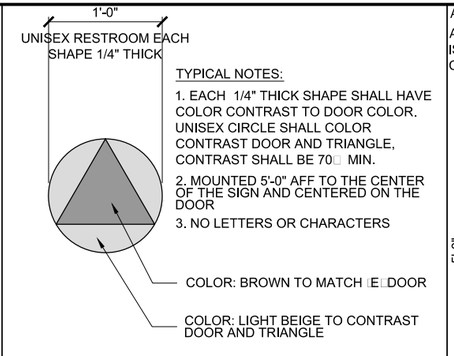
File: Q:\carnegie_svra\016672-restroom_4_4_m__trac~_area\05_drawings\Architectural\A1.0 FLOOR PLAN.dwg Layout: PRECAST RESTROOM BUILDING Date: March 13 2013 - 9:55 am User: dmoffatt

CONSTRUCTION DOCUMENTS



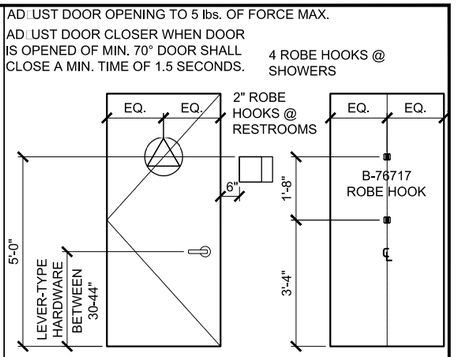
13 RESTROOM FIXTURE MOUNTING LOCATIONS

SCALE@22X34 1/2" = 1'-0" H-04E-81



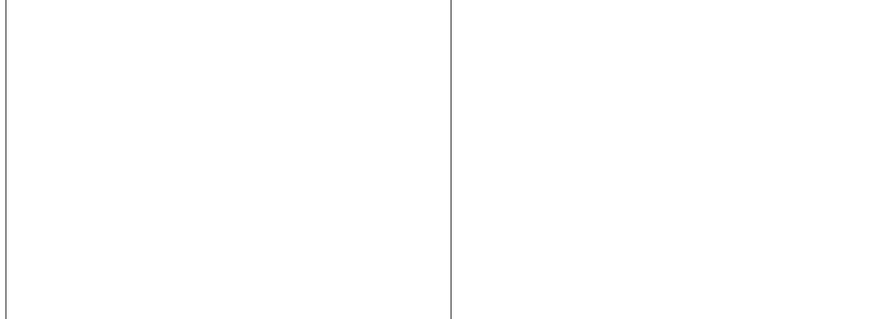
5 RESTROOM DOOR SIGNS

SCALE@22X34 1 1/2" = 1'-0" H-04S-12



1 RESTROOM SIGN LOCATIONS

SCALE@22X34 1/2" = 1'-0" H-04S-11



14 RESTROOM ACCESSORY LOCATIONS

SCALE@22X34 1/2" = 1'-0" H-04E-83

6 RESTROOM WALL SIGNS

SCALE@22X34 1 1/2" = 1'-0" H-04S-21

2 WALL SIGNS MOUNTING

SCALE@22X34 1 1/2" = 1'-0" H-04S-22

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LICENSED ARCHITECT
VIGIL DE LA PENA
No C21464
Ren 1.31.15
STATE OF CALIFORNIA
2.8.13

CALIFORNIA STATE FIRE MARSHAL- APPROVED

Approval of this plan does not authorize or approve any omission of deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

Reviewed by Date

DPR ACCESS COMPLIANCE REVIEW ACCESSIBILITY SECTION

CERTIFICATION #

Reviewed by Date

ACCESSIBILITY COMPLIANCE AND STATE FIRE MARSHAL SIGNED ORIGINALS ARE ON FILE AT THE DEPARTMENT OF PARKS AND RECREATION, NORTHERN SERVICE CENTER

DESIGNED:	STAFF
DRAWN:	GD
CHECKED:	G. PANUSCHKA
DATE:	MARCH 11, 2013

REVISIONS
DATE

CARLSBAD 4X4

RESTROOM 4X4 MX TRACK AREA

ARCHITECTURAL DETAILS

DRAWING NO.
016672.012

SHEET NO.
A2.0
012 OF 012

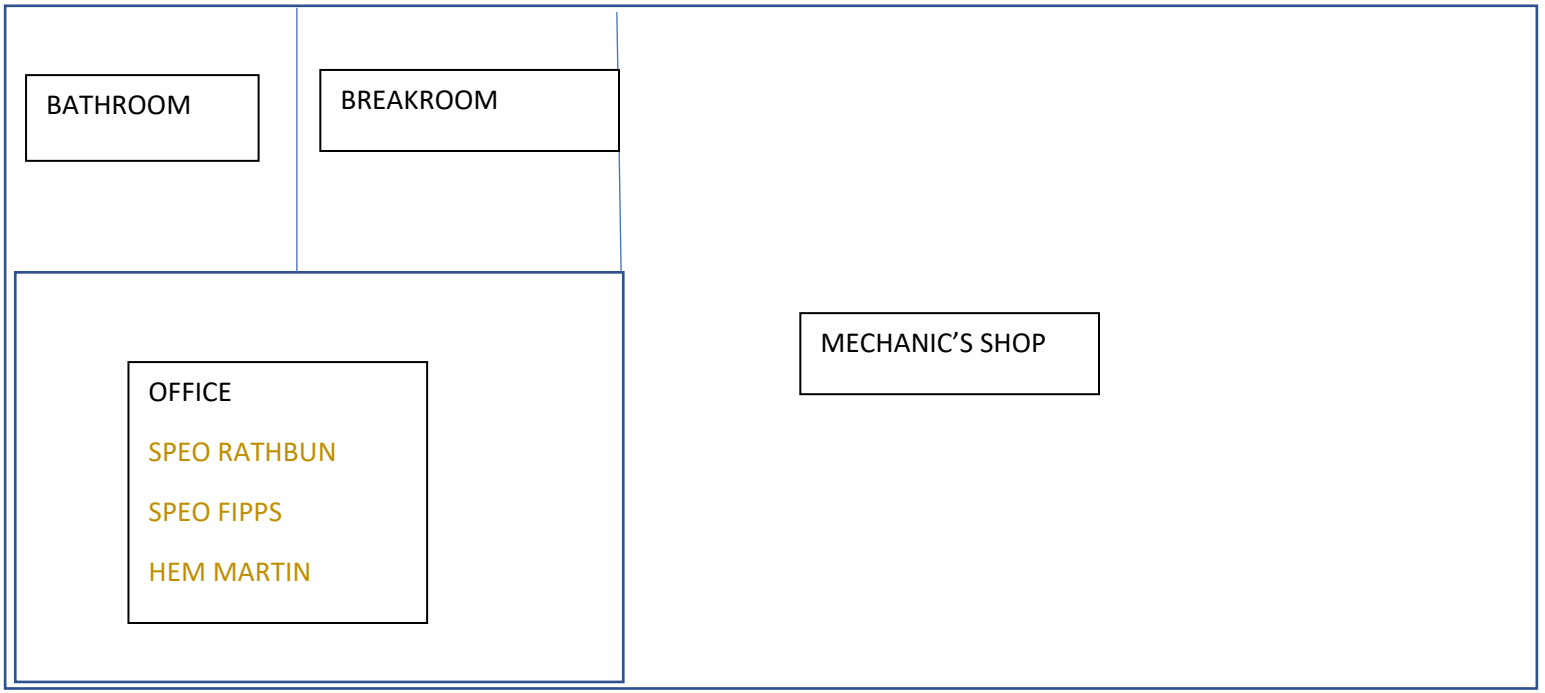
File: Q:\carnegie_svra\016672-restroom_4_4_m__trac__area\05_drawings\Architectural\A2.0 ARCHITECTURAL DETAILS.dwg Layout: ARCHITECTURAL DETAILS Date: March 13 2013 - 9:59 am User: dmoffatt

LONG TERM SOLUTION ALTERNATIVE 1-PURCHASE 2 BUILDINGS

Non-Safety Staff All buildings will be located in the maintenance yard.

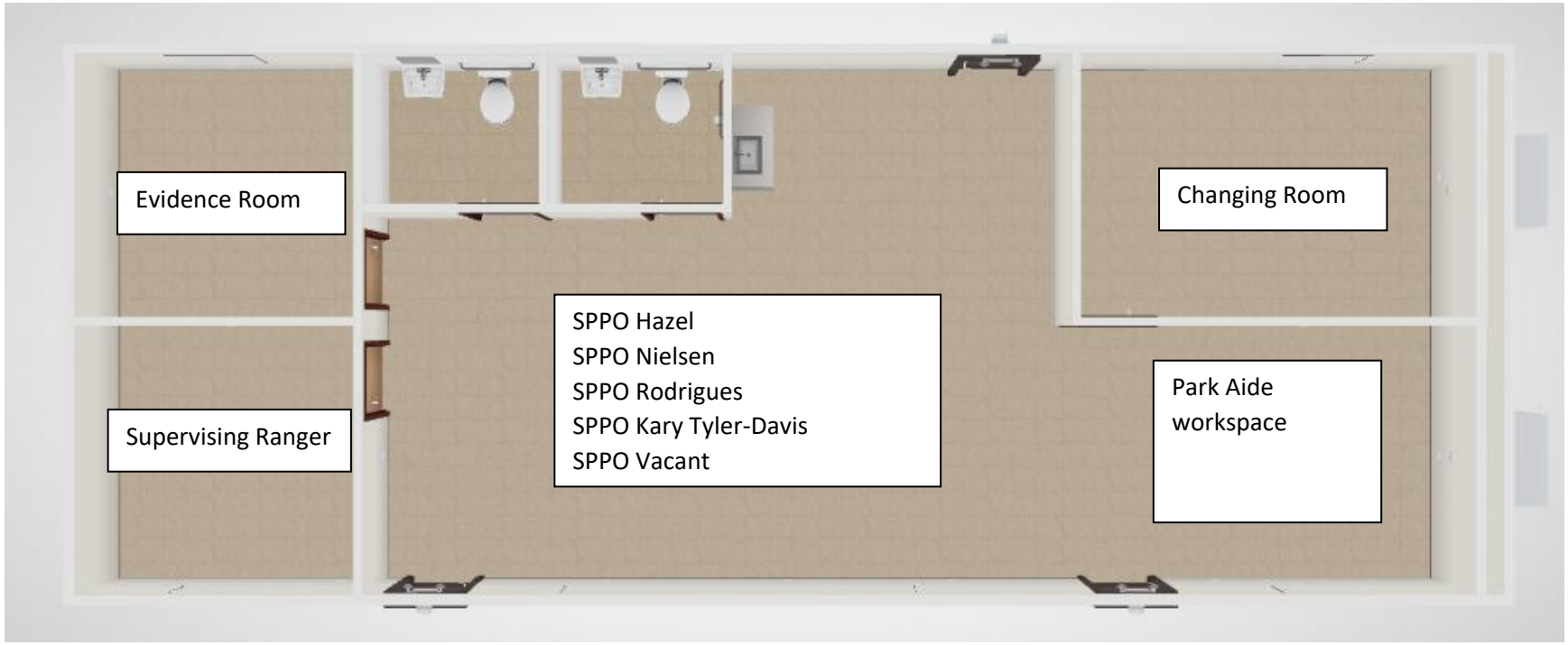
LONG TERM SOLUTION ALTERNATIVE 1 continued

EXISTING MAINTENANCE SHOP



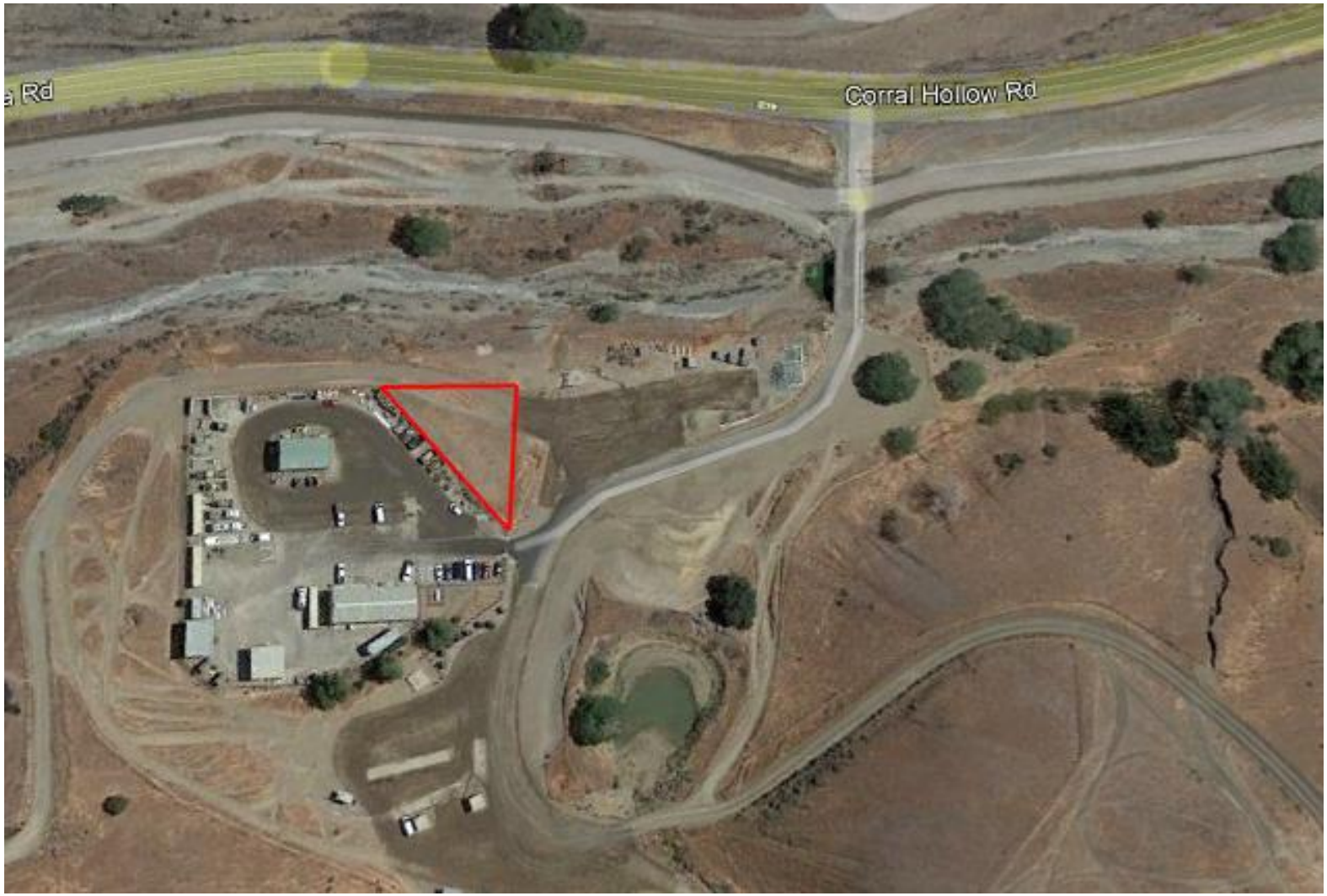
LONG TERM SOLUTION ALTERNATIVE 1 continued

Ranger's Office—controlled entry



SECTOR COMPOUND LONG TERM ALTERNATIVE 1

Adds approximately 9600 ft^2



SECTOR COMPOUND LONG TERM ALTERNATIVE 1 Closeup Current State

SECTOR COMPOUND LONG TERM ALTERNATIVE 1 Closeup Changes

The Cold Frame

Seasonal non-code structure by:

AGRATECH GREENHOUSE MANUFACTURERS

Our Cold Frame is known for being one of the strongest on the market.
It is best suited for over-winter crop protection for starter houses for new growers.

NATIONAL GREENHOUSE MANUFACTURERS ASSOCIATION
NGMA
MEETING THE CHALLENGES OF TODAY'S HORTICULTURAL INDUSTRY

Why a *Cold Frame*?

- Economical over wintering frame – used year around by many of our clients.
- All Galvanized Structural Steel Components.
- Quick and Easy Construction.
  - Assembles in a snap with our easy to follow instruction booklet.
  - Holes are pre-drilled.
  - Fasteners are included.
- Numerous choices available to fit your needs.
- Quick Shipping Schedules.
- Low Cost, High Return on investment.

Cold frame 20's with poly roof with Agra Tech' standard endwall options designed for corrugated polycarbonate.

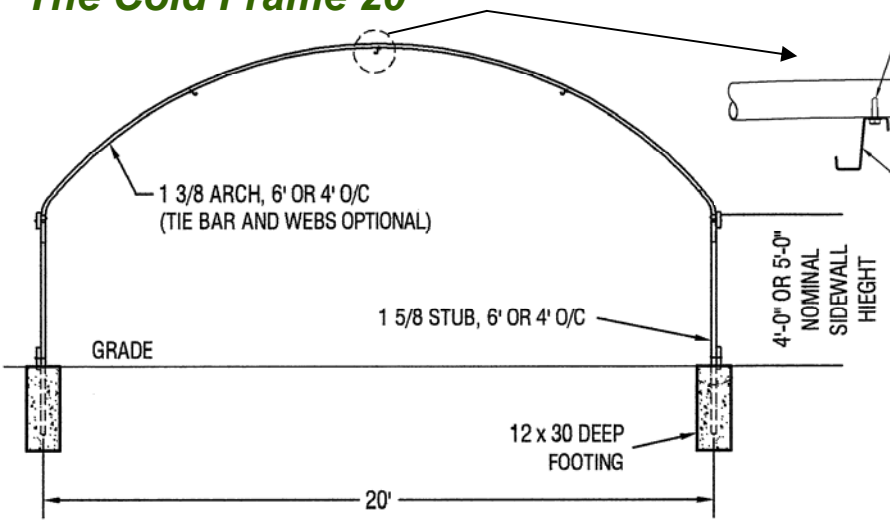
Cold Frame with double poly roof from ground to ground with Agra Tech's standard steel gable frames glazed with 8mm structured sheet.

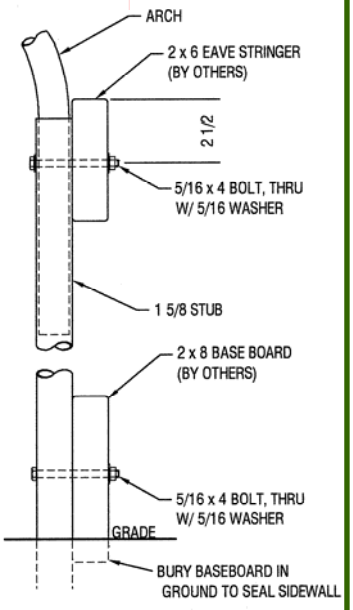
These Cold Frames are built in a snow area and equipped like a greenhouse.

Cold Frame 20' x 84' with arches 6' on center arch and 5' sidewalls Poly on Roof, Sides, and ends.

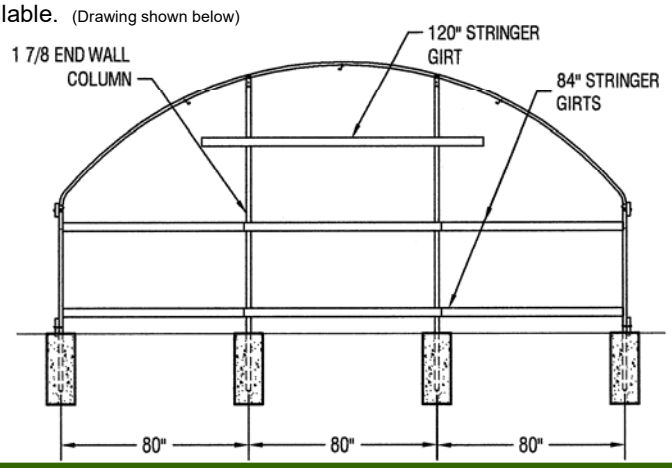
Cold Frame 16's with 4' on center arches and single poly roof from ground to ground.

The Cold Frame 20





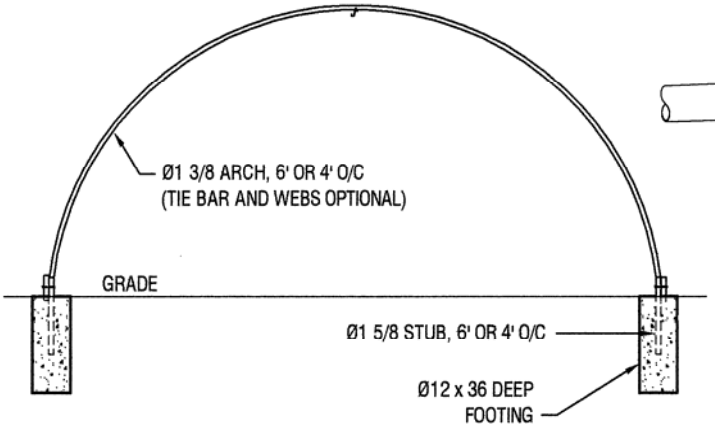
The Cold Frame arches and stubs are galvanized structural steel pipe.
The arches and stubs are available with 4' or 6' on center spacing.
Stubs available in 4' or 5' nominal heights, with an 8'6" or 9'6" overall peak heights.
One condensate purlin comes standard on all houses, with 3 runs optional.
Endwall framing set for poly, twin-wall polycarbonate, or corrugated polycarbonate are available. (Drawing shown below)

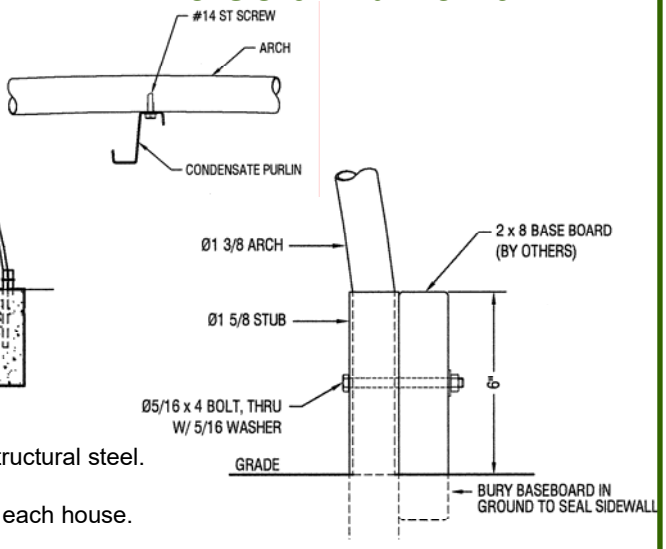


Standard structure braces are included:
1 3/8" pipe brace at corner columns,
1 3/8" pipe brace at endwall columns,

Some options available:
Tie Bar and Webs,
Equipment Mounts,
Agra Lock or Wiggle Wire,
Glazings,
Doors,
See back page for more details.

The Cold Frame 16





Cold frame 16 is constructed of galvanized structural steel.
Available in 4' or 6' on center spacing.
One Condensate purlin comes standard with each house.

Agra Tech, Inc. *"Best in the West"*

Agra Tech has been voted "*Best in the West*" by commercial greenhouse operators in all 6 categories surveyed:

- **Value for dollars spent**
- **Technical Competence**
- **Innovation in design**
- **Knowledge of sales personnel**
- **Overall reputation**
- **Service**

This is why 7 of the top 10 and 43 of the top 100 growers use Agra Tech products.

And, with 35 years experience building and supplying greenhouses, Agra Tech has formed solid relationships with the most desirable vendors in the industry. Take advantage this experience and buying power.

Equipment and Accessories to Complete your Growing System

Structures:

Greenhouses, Head Houses, Research Facilities, Retractable Roof Structures, Shade houses, Soil Storage, Screen Covers, Tunnels, and more.

Benching: Rolling, Stationary, Caster, and Tray benches with Expanded metal or Ebb & flow tops, for production, retail, or research.

Water Booms

Crop Transport

Installation

Control Systems: Ridder USA, MicroGrow, Argus Computers.

Natural Ventilation: Roof vents, wall vents, Roll up Walls, Drop walls.

Fan & Pad cooling: Acme Engineering

Heating: Unit heaters to boilers for overhead, bench top or under bench heating. Hot air or hot water.

Coverings: Poly, Polycarbonate or Acrylic. Corrugated, Twin walled, Triple walled. Painted Sheet Metal.

Curtains: Interior or Exterior.

2131 Piedmont Way, Pittsburg, CA 94565
Toll-Free Phone: (877) 432-3336 Fax: (925) 432-3521
Email: agratech@agratech.com
Web site: www.agratech.com

APPENDIX C

Criteria Air Pollutant & Greenhouse Gas Emissions Modeling & Energy Calculations

Carnegie State Vehicle Recreation Area General Plan
Energy Calculations

Operational Energy Consumption (Other than Mobile)

Conversion Factors			
Pacific Gas & Electric (PG&E)	10.459	MMBTU per MWh (or kBTU/kWh)	*Source: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/quarterly-fuel-and-energy-report-qfer-2*
Category	**Amount**	**Units**	
Diesel (heat content)	5.80	MMBtu/barrel	*https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf*
Motor Gasoline	5.25	MMBtu/barrel	*https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf*
Natural Gas	0.1	MMBtu/therm	*https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references*
LPG	0.092	MMBtu/gallon	*https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf*
Kerosene	0.135	MMBtu/gallon	*https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf*
Wood	20	MMBtu/cord	*https://www.eia.gov/energyexplained/index.cfm?page=about_btu*
Gallons per Barrel	42	gallons/barrel	*https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf*

Notes: kWh = kilowatt-hours; kBtu = thousand British thermal unit, MMBtu = million British thermal unit

Energy Demand by Land Use (CalEEMod output data)

Category	**Project**	**Electricity Demand (kWh/year)**	**Natural Gas Demand (kBTU/year)**	**Diesel Demand (kBTU/year)**
Visitor Facilities	Campground Remodel	0	0	-
Visitor Facilities	New Group Camping - Campsites for up to 30 people.	0	0	-
Visitor Facilities	New Group Camping - New Restrooms	41,859	57,738	-
Visitor Facilities	New Dump Station	54,026	216,829	-
Visitor Facilities	New Campfire Center - Amphitheater	0	0	-
Visitor Facilities	Other Visitor Facilities - New Restroom	36,459	50,290	-
Visitor Facilities	Concession Stand Relocation	163,147	513,289	-
Visitor Facilities	Visitor Vehicle/OHV Trips	0	0	-
Operations Facilities	SVRA Maintenance Area Improvements	99,168	398,003	-
Operations Facilities	Ranger Station Office and Yard Expansion - Ranger Station	89,996	124,137	-
Operations Facilities	Ranger Station Office and Yard Expansion - Operations Yard	73,253	101,042	-
Operations Facilities	Volunteer Training Area Enhancements	18,836	25,982	-
Operations Facilities	Campground Host Sites	0	0	-
Operations Facilities	Park Headquarters Area Improvements	48,137	66,399	-
Operations Facilities	Park Headquarters Area Improvements - Modular and Trailer Homes for	47,890	100,618	-
Operations Facilities	Water Plant Upgrade	7,231	29,021	1,960
Operations Facilities	Other Operations Facility Projects - ATV/MX Track Sprinkler System	0	0	113,970
Operations Facilities	Other Operations Facility Projects - Facilities for Communication or Techr	18,449	74,045	-
Operations Facilities	Additional Employment/Operations	0	0	-
		698,451	**1,757,391**	**115,929**

Construction Energy Consumption

Category	**Project**	**Year**	**GHG Emissions (MT CO2/Year)**	**Gallons Gasoline**	**Gallons Diesel**
Visitor Facilities	Campground Remodel	2026	158	776	14,934
Visitor Facilities	New Group Camping - Campsites for up to 30 people.	2023	38	219	3,545
Visitor Facilities	New Group Camping - New Restrooms	2023	116	35	11,384
Visitor Facilities	New Dump Station	2025	25	40	2,442
Visitor Facilities	New Campfire Center - Amphitheater	2024	39	9	3,791
Visitor Facilities	New Campfire Center - Relocating Water Tower	2023	6	0	626
Visitor Facilities	New Kid's Minibike Track	2024	40	0	3,909
Visitor Facilities	New Interpretive Loop Trails	2025	1	12	109
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	3	26	240
Visitor Facilities	New Front Hills Motorcycle Trail	2025	3	0	338
Visitor Facilities	New Visitor Recreation Area	2026	18	202	1,598
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	2	0	240
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	2	0	240
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	119	106	11,595
Visitor Facilities	4x4 Practice Area Improvements	2024	3	0	280
Visitor Facilities	Concession Stand Relocation	2024	151	377	14,573
Operations Facilities	SVRA Maintenance Area Improvements	2024	156	587	14,861
Operations Facilities	Ranger Station Office and Yard Expansion - Ranger Station	2027	147	341	14,179
Operations Facilities	Ranger Station Office and Yard Expansion - Operations Yard	2025	36	80	3,505
Operations Facilities	Emergency Helicopter Pad Relocation	2024	7	38	642
Operations Facilities	Volunteer Training Area Enhancements	2024	38	42	3,655
Operations Facilities	Campground Host Sites	2023	38	219	3,574
Operations Facilities	New Greenhouse	2023	5	0	487
Operations Facilities	Park Headquarters Area Improvements	2025	68	64	6,639
Operations Facilities	Park Headquarters Area Improvements - Modular and Trailer Homes for	2026	25	97	2,370
Operations Facilities	Water Plant Upgrade	2024	18	19	1,730
Operations Facilities	Other Operations Facility Projects - New Maintenance Area/Shop Concre	2026	23	253	2,033
Operations Facilities	Other Operations Facility Projects - New/Revamped Low Water Creek Cr	2026	68	810	6,026
Operations Facilities	Other Operations Facility Projects - ATV/MX Track Sprinkler System	2024	7	0	712
Operations Facilities	Other Operations Facility Projects - Facilities for Communication or Techr	2024	26	37	2,521
			Total Demand	**Diesel**	**132,777**
				Gasoline	**4,390**
			Average Annual Demands	**Diesel**	**4,426**
				Gasoline	**146**

Note: Total Potential Construction emissions are amortized over 30 years, typical life of a Parks General Plan.

Carnegie State Vehicle Recreation Area General Plan

Energy Consumption from Construction Activities

					Tons Per Year[a]											Metric Tons Per Year[a]						Emission Factor	
Category	Project	Year	Construction Phase	Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	Fuel	(lb CO_2/gallon)[b]	Gallons
Visitor Facilities	Campground Remodel	2026	Site Preparation	Off-Road Equipment	0.0266	0.022348	0.189815	0.192263	0.000407	0.007875		0.007875	0.007245		0.007245		39.91317	39.91317	0.001619	0.000324		40.0501	Diesel	22.45	3,919
Visitor Facilities	Campground Remodel	2026	Site Preparation	Worker	0.000548	0.0005	0.000391	0.005367	0	0	0.00115	0.00115	0	0.00027	0.00027		1.046641	1.046641	2.48E-05	4.37E-05	0.00167	1.06196	Gas	17.86	129
Visitor Facilities	Campground Remodel	2026	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Campground Remodel	2026	Site Preparation	Hauling	0.000136	5.78E-05	0.004206	0.000979	2.29E-05	6.55E-05	0.000915	0.00098	6.55E-05	0.000251	0.000316		3.081813	3.081813	4.95E-05	0.000487	0.00309	3.23129	Diesel	22.45	303
Visitor Facilities	Campground Remodel	2026	Grading	Off-Road Equipment	0.024429	0.020522	0.162547	0.188687	0.00042	0.006684		0.006684	0.006149		0.006149		41.08532	41.08532	0.001667	0.000333		41.2263	Diesel	22.45	4,035
Visitor Facilities	Campground Remodel	2026	Grading	Worker	0.000717	0.000654	0.000512	0.007026	0	0	0.001506	0.001506	0	0.000353	0.000353		1.370148	1.370148	3.24E-05	5.72E-05	0.00219	1.3902	Gas	17.86	169
Visitor Facilities	Campground Remodel	2026	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Campground Remodel	2026	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Campground Remodel	2026	Paving	Off-Road Equipment	0.035307	0.029632	0.214267	0.276819	0.000705	0.008315		0.008315	0.00765		0.00765		67.99591	67.99591	0.002758	0.000552		68.2293	Diesel	22.45	6,677
Visitor Facilities	Campground Remodel	2026	Paving	Worker	0.002026	0.001848	0.001448	0.019859	0	0	0.004256	0.004256	0	0.000997	0.000997		3.872572	3.872572	9.16E-05	0.000162	0.00619	3.92924	Gas	17.86	478
Visitor Facilities	Campground Remodel	2026	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Campground Remodel	2026	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - Campsites for up to	2023	Site Preparation	Off-Road Equipment	0.00269	0.00226	0.017929	0.017827	4.96E-05	0.000776		0.000776	0.000714		0.000714		4.838973	4.838973	0.000196	3.93E-05		4.85558	Diesel	22.45	475
Visitor Facilities	New Group Camping - Campsites for up to	2023	Site Preparation	Worker	9.37E-05	8.63E-05	7.63E-05	0.000944	0	0	0.000157	0.000157	0	3.68E-05	3.68E-05		0.152255	0.152255	8.58E-06	5.96E-06	0.0003	0.15424	Gas	17.86	19
Visitor Facilities	New Group Camping - Campsites for up to	2023	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - Campsites for up to	2023	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - Campsites for up to	2023	Grading	Off-Road Equipment	0.006701	0.005629	0.048803	0.044217	0.000102	0.002122		0.002122	0.001952		0.001952		10.0049	10.0049	0.000406	8.12E-05		10.0392	Diesel	22.45	982
Visitor Facilities	New Group Camping - Campsites for up to	2023	Grading	Worker	0.000187	0.000173	0.000153	0.001888	0	0	0.000314	0.000314	0	7.35E-05	7.35E-05		0.304509	0.304509	1.72E-05	1.19E-05	0.00061	0.30849	Gas	17.86	38
Visitor Facilities	New Group Camping - Campsites for up to	2023	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - Campsites for up to	2023	Grading	Hauling	2.43E-05	1.21E-05	0.000702	0.000159	6.78E-06	9.92E-06	0.000139	0.000149	9.92E-06	3.8E-05	4.79E-05		0.493904	0.493904	1.05E-05	7.7E-05	0.00051	0.5171	Diesel	22.45	49
Visitor Facilities	New Group Camping - Campsites for up to	2023	Paving	Off-Road Equipment	0.011665	0.009781	0.074988	0.075592	0.000219	0.003048		0.003048	0.002804		0.002804		20.76504	20.76504	0.000842	0.000168		20.8363	Diesel	22.45	2,039
Visitor Facilities	New Group Camping - Campsites for up to	2023	Paving	Worker	0.000812	0.000748	0.000662	0.008182	0	0	0.001359	0.001359	0	0.000319	0.000319		1.31954	1.31954	7.44E-05	5.16E-05	0.00264	1.33679	Gas	17.86	163
Visitor Facilities	New Group Camping - Campsites for up to	2023	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - Campsites for up to	2023	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - New Restrooms	2023	Site Preparation	Off-Road Equipment	0.000961	0.000807	0.006409	0.006452	1.72E-05	0.000275		0.000275	0.000253		0.000253		1.67722	1.67722	6.8E-05	1.36E-05		1.68298	Diesel	22.45	165
Visitor Facilities	New Group Camping - New Restrooms	2023	Site Preparation	Worker	3.75E-05	3.45E-05	3.05E-05	0.000378	0	0	6.27E-05	6.27E-05	0	1.47E-05	1.47E-05		0.060902	0.060902	3.43E-06	2.38E-06	0.00012	0.0617	Gas	17.86	8
Visitor Facilities	New Group Camping - New Restrooms	2023	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - New Restrooms	2023	Site Preparation	Hauling	4.05E-05	2.01E-05	0.001169	0.000264	1.13E-05	1.65E-05	0.000231	0.000248	1.65E-05	6.33E-05	7.98E-05		0.823173	0.823173	1.75E-05	0.000128	0.00084	0.86183	Diesel	22.45	81
Visitor Facilities	New Group Camping - New Restrooms	2023	Grading	Off-Road Equipment	0.001405	0.00118	0.010193	0.009353	2.11E-05	0.000441		0.000441	0.000406		0.000406		2.065209	2.065209	8.38E-05	1.68E-05		2.0723	Diesel	22.45	203
Visitor Facilities	New Group Camping - New Restrooms	2023	Grading	Worker	4.37E-05	4.03E-05	3.56E-05	0.000441	0	0	7.32E-05	7.32E-05	0	1.72E-05	1.72E-05		0.071052	0.071052	4.01E-06	2.78E-06	0.00014	0.07198	Gas	17.86	9
Visitor Facilities	New Group Camping - New Restrooms	2023	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - New Restrooms	2023	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - New Restrooms	2023	Building Construction	Off-Road Equipment	0.058411	0.049065	0.40486	0.422695	0.001136	0.016756		0.016756	0.015415		0.015415		110.9178	110.9178	0.004499	0.0009		111.298	Diesel	22.45	10,892
Visitor Facilities	New Group Camping - New Restrooms	2023	Building Construction	Worker	9.43E-05	8.69E-05	7.69E-05	0.000951	0	0	0.000158	0.000158	0	3.7E-05	3.7E-05		0.15331	0.15331	8.64E-06	6E-06	0.00031	0.15531	Gas	17.86	19
Visitor Facilities	New Group Camping - New Restrooms	2023	Building Construction	Vendor	1.61E-05	1.05E-05	0.000386	0.000131	1.94E-06	3.88E-06	7.36E-05	7.74E-05	3.88E-06	2.03E-05	2.42E-05		0.256098	0.256098	4.68E-06	3.85E-05	0.0003	0.26769	Diesel	22.45	25
Visitor Facilities	New Group Camping - New Restrooms	2023	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - New Restrooms	2023	Architectural Coating	Off-Road Equipment	0.000266	0.000219	0.001401	0.001732	2.59E-06	5.53E-05		5.53E-05	5.09E-05		5.09E-05		0.181683	0.181683	7.37E-06	1.47E-06		0.18231	Diesel	22.45	18
Visitor Facilities	New Group Camping - New Restrooms	2023	Architectural Coating	Worker	9.59E-07	8.83E-07	7.82E-07	9.67E-06	0	0	1.61E-06	1.61E-06	0	3.76E-07	3.76E-07		0.001559	0.001559	8.79E-08	6.10E-08	3.1E-06	0.00158	Gas	17.86	0
Visitor Facilities	New Group Camping - New Restrooms	2023	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Group Camping - New Restrooms	2023	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Dump Station	2025	Site Preparation	Off-Road Equipment	0.001093	0.000918	0.006897	0.008526	2.02E-05	0.00031		0.00031	0.000285		0.000285		1.987611	1.987611	8.06E-05	1.61E-05		1.99443	Diesel	22.45	195
Visitor Facilities	New Dump Station	2025	Site Preparation	Worker	3.17E-05	2.89E-05	2.36E-05	0.000318	0	0	6.27E-05	6.27E-05	0	1.47E-05	1.47E-05		0.058299	0.058299	1.5E-06	2.38E-06	0.0001	0.05915	Gas	17.86	7
Visitor Facilities	New Dump Station	2025	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Dump Station	2025	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Dump Station	2025	Grading	Off-Road Equipment	0.000913	0.000767	0.006402	0.006504	1.41E-05	0.00028		0.00028	0.000258		0.000258		1.381609	1.381609	5.6E-05	1.12E-05		1.38635	Diesel	22.45	136
Visitor Facilities	New Dump Station	2025	Grading	Worker	2.11E-05	1.93E-05	1.58E-05	0.000212	0	0	4.18E-05	4.18E-05	0	9.8E-06	9.8E-06		0.038866	0.038866	1E-06	1.59E-06	6.7E-05	0.03943	Gas	17.86	5
Visitor Facilities	New Dump Station	2025	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Dump Station	2025	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Dump Station	2025	Building Construction	Off-Road Equipment	0.00979	0.008226	0.066951	0.084132	0.000207	0.002674		0.002674	0.00246		0.00246		20.33245	20.33245	0.000825	0.000165		20.4022	Diesel	22.45	1,997
Visitor Facilities	New Dump Station	2025	Building Construction	Worker	7.89E-05	7.19E-05	5.89E-05	0.000791	0	0	0.000156	0.000156	0	3.66E-05	3.66E-05		0.145133	0.145133	3.73E-06	5.93E-06	0.00025	0.14725	Gas	17.86	18
Visitor Facilities	New Dump Station	2025	Building Construction	Vendor	1.07E-05	6.46E-06	0.000267	8.87E-05	1.46E-06	2.92E-06	5.54E-05	5.83E-05	2.92E-06	1.53E-05	1.82E-05		0.187205	0.187205	3.53E-06	2.77E-05	0.00022	0.19577	Diesel	22.45	18
Visitor Facilities	New Dump Station	2025	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Dump Station	2025	Paving	Off-Road Equipment	0.00057	0.000477	0.003555	0.004135	1.04E-05	0.000145		0.000145	0.000134		0.000134		0.977697	0.977697	3.97E-05	7.93E-06		0.98105	Diesel	22.45	96
Visitor Facilities	New Dump Station	2025	Paving	Worker	4.23E-05	3.85E-05	3.15E-05	0.000424	0	0	8.37E-05	8.37E-05	0	1.96E-05	1.96E-05		0.077732	0.077732	2E-06	3.18E-06	0.00013	0.07886	Gas	17.86	10
Visitor Facilities	New Dump Station	2025	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Dump Station	2025	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Amphitheater	2024	Site Preparation	Off-Road Equipment	0.00032	0.000269	0.002426	0.002885	4.23E-06	0.000125		0.000125	0.000115		0.000115		0.40477	0.40477	1.64E-05	3.28E-06		0.40616	Diesel	22.45	40
Visitor Facilities	New Campfire Center - Amphitheater	2024	Site Preparation	Worker	1.77E-05	1.54E-05	1.4E-05	0.000173	0	0	3.14E-05	3.14E-05	0	7.35E-06	7.35E-06		0.029779	0.029779	1.64E-06	1.19E-06	5.6E-05	0.03023	Gas	17.86	4
Visitor Facilities	New Campfire Center - Amphitheater	2024	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Amphitheater	2024	Site Preparation	Hauling	3.33E-05	1.93E-05	0.001085	0.000248	5.56E-06	1.59E-05	0.000222	0.000238	1.59E-05	6.07E-05	7.66E-05		0.777342	0.777342	1.68E-05	0.000123	0.0008	0.81526	Diesel	22.45	76
Visitor Facilities	New Campfire Center - Amphitheater	2024	Grading	Off-Road Equipment	0.000726	0.00061	0.00582	0.005468	8.17E-06	0.000272		0.000272	0.00025		0.00025		0.792723	0.792723	3.22E-05	6.43E-06		0.79544	Diesel	22.45	78
Visitor Facilities	New Campfire Center - Amphitheater	2024	Grading	Worker	2.37E-05	2.05E-05	1.87E-05	0.00023	0	0	4.18E-05	4.18E-05	0	9.8E-06	9.8E-06		0.039705	0.039705	2.19E-06	1.59E-06	7.4E-05	0.04031	Gas	17.86	5
Visitor Facilities	New Campfire Center - Amphitheater	2024	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Amphitheater	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Amphitheater	2024	Building Construction	Off-Road Equipment	0.021184	0.017783	0.175416	0.215617	0.000378	0.007952		0.007952	0.007316		0.007316		36.44815	36.44815	0.001478	0.000296		36.5732	Diesel	22.45	3,579
Visitor Facilities	New Campfire Center - Amphitheater	2024	Building Construction	Worker	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Gas	17.86	0

Category	Project	Year	Construction Phase	Location	Tons Per Year[a]											Metric Tons Per Year[a]							Emission Factor	
					TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	Fuel	(lb CO_2/gallon)[b]	Gallons
Visitor Facilities	New Campfire Center - Amphitheater	2024	Building Construction	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Amphitheater	2024	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Amphitheater	2024	Architectural Coating	Off-Road Equipment	0.000248	0.000205	0.001362	0.00172	2.59E-06	4.78E-05		4.78E-05	4.4E-05		4.4E-05	0.181694	0.181694	7.37E-06	1.47E-06		0.18232	Diesel	22.45	18
Visitor Facilities	New Campfire Center - Amphitheater	2024	Architectural Coating	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	New Campfire Center - Amphitheater	2024	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Amphitheater	2024	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Relocating Water T	2023	Site Preparation	Off-Road Equipment	0.001235	0.001038	0.008614	0.008833	2.08E-05	0.000397		0.000397	0.000365		0.000365	2.017629	2.017629	8.18E-05	1.64E-05		2.02455	Diesel	22.45	198
Visitor Facilities	New Campfire Center - Relocating Water T	2023	Site Preparation	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	New Campfire Center - Relocating Water T	2023	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Relocating Water T	2023	Site Preparation	Hauling	8.1E-06	4.02E-06	0.000234	5.29E-05	2.26E-06	3.31E-06	4.62E-05	4.95E-05	3.31E-06	1.27E-05	1.6E-05	0.164635	0.164635	3.5E-06	2.57E-05	0.00017	0.17253	Diesel	22.45	16
Visitor Facilities	New Campfire Center - Relocating Water T	2023	Grading	Off-Road Equipment	0.003183	0.002674	0.024273	0.021953	4.3E-05	0.001093		0.001093	0.001005		0.001005	4.190413	4.190413	0.00017	3.4E-05		4.20479	Diesel	22.45	412
Visitor Facilities	New Campfire Center - Relocating Water T	2023	Grading	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	New Campfire Center - Relocating Water T	2023	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Campfire Center - Relocating Water T	2023	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Kid's Minibike Track	2024	Demolition	Off-Road Equipment	0.011112	0.009315	0.070972	0.076762	0.000217	0.00267		0.00267	0.002456		0.002456	20.71	20.71	0.00084	0.000168		20.7811	Diesel	22.45	2,034
Visitor Facilities	New Kid's Minibike Track	2024	Demolition	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	New Kid's Minibike Track	2024	Demolition	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Kid's Minibike Track	2024	Demolition	Hauling	9.72E-06	5.63E-06	0.000316	7.25E-05	1.62E-06	4.63E-06	6.47E-05	6.93E-05	4.63E-06	1.77E-05	2.23E-05	0.226725	0.226725	4.9E-06	3.59E-05	0.00023	0.23778	Diesel	22.45	22
Visitor Facilities	New Kid's Minibike Track	2024	Site Preparation	Off-Road Equipment	0.0034	0.002857	0.021658	0.023162	6.5E-05	0.000928		0.000928	0.000854		0.000854	6.382554	6.382554	0.000259	5.18E-05		6.40446	Diesel	22.45	627
Visitor Facilities	New Kid's Minibike Track	2024	Site Preparation	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	New Kid's Minibike Track	2024	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Kid's Minibike Track	2024	Site Preparation	Hauling	2.5E-05	1.45E-05	0.000814	0.000186	4.17E-06	1.19E-05	0.000166	0.000178	1.19E-05	4.55E-05	5.75E-05	0.583007	0.583007	1.26E-05	9.23E-05	0.0006	0.61144	Diesel	22.45	57
Visitor Facilities	New Kid's Minibike Track	2024	Grading	Off-Road Equipment	0.007536	0.006332	0.052848	0.05024	0.000121	0.002272		0.002272	0.00209		0.00209	11.90155	11.90155	0.000483	9.66E-05		11.9424	Diesel	22.45	1,169
Visitor Facilities	New Kid's Minibike Track	2024	Grading	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	New Kid's Minibike Track	2024	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Kid's Minibike Track	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Interpretive Loop Trails	2025	Site Preparation	Off-Road Equipment	0.000153	0.000129	0.001725	0.003011	4.52E-06	5.22E-05		5.22E-05	4.8E-05		4.8E-05	0.444173	0.444173	1.8E-05	3.6E-06		0.4457	Diesel	22.45	44
Visitor Facilities	New Interpretive Loop Trails	2025	Site Preparation	Worker	2.11E-05	1.93E-05	1.58E-05	0.000212	0	0	4.18E-05	4.18E-05	0	9.8E-06	9.8E-06	0.038866	0.038866	1E-06	1.59E-06	6.7E-05	0.03943	Gas	17.86	5
Visitor Facilities	New Interpretive Loop Trails	2025	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Interpretive Loop Trails	2025	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Interpretive Loop Trails	2025	Grading	Off-Road Equipment	0.00023	0.000193	0.002588	0.004516	6.79E-06	7.83E-05		7.83E-05	7.2E-05		7.2E-05	0.66626	0.66626	2.7E-05	5.41E-06		0.66855	Diesel	22.45	65
Visitor Facilities	New Interpretive Loop Trails	2025	Grading	Worker	3.17E-05	2.89E-05	2.36E-05	0.000318	0	0	6.27E-05	6.27E-05	0	1.47E-05	1.47E-05	0.058299	0.058299	1.5E-06	2.38E-06	0.0001	0.05915	Gas	17.86	7
Visitor Facilities	New Interpretive Loop Trails	2025	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Interpretive Loop Trails	2025	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	Site Preparation	Off-Road Equipment	0.000295	0.000248	0.003349	0.006013	9.05E-06	9.53E-05		9.53E-05	8.77E-05		8.77E-05	0.888762	0.888762	3.61E-05	7.21E-06		0.89181	Diesel	22.45	87
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	Site Preparation	Worker	3.98E-05	3.63E-05	2.85E-05	0.00039	0	0	8.37E-05	8.37E-05	0	1.96E-05	1.96E-05	0.076119	0.076119	1.8E-06	3.18E-06	0.00012	0.07723	Gas	17.86	9
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	Grading	Off-Road Equipment	0.005985	0.005029	0.039346	0.016833	1.57E-05	0.003241		0.003241	0.002981		0.002981	1.552341	1.552341	6.3E-05	1.26E-05		1.55767	Diesel	22.45	152
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	Grading	Worker	6.97E-05	6.36E-05	4.98E-05	0.000683	0	0	0.000146	0.000146	0	3.43E-05	3.43E-05	0.133209	0.133209	3.15E-06	5.56E-06	0.00021	0.13516	Gas	17.86	16
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Front Hills Motorcycle Trail	2025	Site Preparation	Off-Road Equipment	0.000422	0.000355	0.004745	0.008279	1.24E-05	0.000143		0.000143	0.000132		0.000132	1.221476	1.221476	4.95E-05	9.91E-06		1.22567	Diesel	22.45	120
Visitor Facilities	New Front Hills Motorcycle Trail	2025	Site Preparation	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	New Front Hills Motorcycle Trail	2025	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Front Hills Motorcycle Trail	2025	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Front Hills Motorcycle Trail	2025	Grading	Off-Road Equipment	0.000767	0.000645	0.008627	0.015053	2.26E-05	0.000261		0.000261	0.00024		0.00024	2.220865	2.220865	9.01E-05	1.8E-05		2.22849	Diesel	22.45	218
Visitor Facilities	New Front Hills Motorcycle Trail	2025	Grading	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	New Front Hills Motorcycle Trail	2025	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Front Hills Motorcycle Trail	2025	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Visitor Recreation Area	2026	Site Preparation	Off-Road Equipment	0.001037	0.000872	0.007476	0.011088	1.59E-05	0.00037		0.00037	0.000341		0.000341	1.557542	1.557542	6.32E-05	1.26E-05		1.56289	Diesel	22.45	153
Visitor Facilities	New Visitor Recreation Area	2026	Site Preparation	Worker	3.98E-05	3.63E-05	2.85E-05	0.00039	0	0	8.37E-05	8.37E-05	0	1.96E-05	1.96E-05	0.076119	0.076119	1.8E-06	3.18E-06	0.00012	0.07723	Gas	17.86	9
Visitor Facilities	New Visitor Recreation Area	2026	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Visitor Recreation Area	2026	Site Preparation	Hauling	4.55E-05	1.93E-05	0.001402	0.000326	7.64E-06	2.18E-05	0.000305	0.000327	2.18E-05	8.35E-05	0.000105	1.027271	1.027271	1.65E-05	0.000162	0.00103	1.0771	Diesel	22.45	101
Visitor Facilities	New Visitor Recreation Area	2026	Grading	Off-Road Equipment	0.004877	0.004098	0.036762	0.038762	6.33E-05	0.001676		0.001676	0.001542		0.001542	6.220584	6.220584	0.000252	5.05E-05		6.24193	Diesel	22.45	611
Visitor Facilities	New Visitor Recreation Area	2026	Grading	Worker	0.000119	0.000109	8.54E-05	0.001171	0	0	0.000251	0.000251	0	5.88E-05	5.88E-05	0.228358	0.228358	5.4E-06	9.53E-06	0.00037	0.2317	Gas	17.86	28
Visitor Facilities	New Visitor Recreation Area	2026	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Visitor Recreation Area	2026	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Visitor Recreation Area	2026	Paving	Off-Road Equipment	0.005876	0.00491	0.042408	0.052994	8.57E-05	0.001791		0.001791	0.001647		0.001647	7.465825	7.465825	0.000303	6.06E-05		7.49145	Diesel	22.45	733
Visitor Facilities	New Visitor Recreation Area	2026	Paving	Worker	0.000697	0.000636	0.000498	0.006831	0	0	0.001464	0.001464	0	0.000343	0.000343	1.332089	1.332089	3.15E-05	5.56E-05	0.00213	1.35158	Gas	17.86	164
Visitor Facilities	New Visitor Recreation Area	2026	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	New Visitor Recreation Area	2026	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	Site Preparation	Off-Road Equipment	0.000307	0.000258	0.003451	0.006021	9.05E-06	0.000104		0.000104	9.6E-05		9.6E-05	0.888346	0.888346	3.6E-05	7.21E-06		0.89139	Diesel	22.45	87
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	Site Preparation	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	Grading	Off-Road Equipment	0.000537	0.000451	0.006039	0.010537	1.58E-05	0.000183		0.000183	0.000168		0.000168	1.554606	1.554606	6.31E-05	1.26E-05		1.55994	Diesel	22.45	153
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	Grading	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0

Category	Project	Year	Construction Phase	Location	Tons Per Year[a]											Metric Tons Per Year[a]							Emission Factor		
					TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	Fuel	(lb CO_2/gallon)[b]	Gallons
Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	Site Preparation	Off-Road Equipment	0.000307	0.000258	0.003451	0.006021	9.05E-06	0.000104		0.000104	9.6E-05		9.6E-05	0.888346	0.888346	3.6E-05	7.21E-06		0.89139	Diesel	22.45	87
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	Site Preparation	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	Grading	Off-Road Equipment	0.000537	0.000451	0.006039	0.010537	1.58E-05	0.000183		0.000183	0.000168		0.000168	1.554606	1.554606	6.31E-05	1.26E-05		1.55994	Diesel	22.45	153
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	Grading	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Reopening the Franciscan Riding Ares	2025	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Site Preparation	Off-Road Equipment	0.004316	0.003625	0.024771	0.031778	8.6E-05	0.000995		0.000995	0.000916		0.000916	8.394962	8.394962	0.000341	6.81E-05		8.42377	Diesel	22.45	824
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Site Preparation	Worker	0.000149	0.000136	0.000107	0.001464	0	0	0.000314	0.000314	0	7.35E-05	7.35E-05	0.285448	0.285448	6.75E-06	1.19E-05	0.00046	0.28962	Gas	17.86	35
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Site Preparation	Hauling	3.44E-05	1.46E-05	0.001062	0.000247	5.79E-06	1.65E-05	0.000231	0.000248	1.65E-05	6.33E-05	7.98E-05	0.778236	0.778236	1.25E-05	0.000123	0.00078	0.81598	Diesel	22.45	76
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Grading	Off-Road Equipment	0.008495	0.007136	0.053763	0.059001	0.000148	0.002212		0.002212	0.002035		0.002035	14.47026	14.47026	0.000587	0.000117		14.5199	Diesel	22.45	1,421
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Grading	Worker	0.000244	0.000223	0.000174	0.002391	0	0	0.000512	0.000512	0	0.00012	0.00012	0.466231	0.466231	1.1E-05	1.95E-05	0.00075	0.47305	Gas	17.86	58
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Building Construction	Off-Road Equipment	0.04489	0.037706	0.274407	0.351817	0.000963	0.010046		0.010046	0.009242		0.009242	94.06517	94.06517	0.003816	0.000763		94.388	Diesel	22.45	9,237
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Building Construction	Worker	5.55E-05	5.06E-05	3.97E-05	0.000544	0	0	0.000117	0.000117	0	2.73E-05	2.73E-05	0.10608	0.10608	2.51E-06	4.43E-06	0.00017	0.10763	Gas	17.86	13
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Building Construction	Vendor	1.03E-05	6.33E-06	0.000251	8.2E-05	1.43E-06	2.86E-06	5.43E-05	5.72E-05	2.86E-06	1.5E-05	1.79E-05	0.180086	0.180086	3.45E-06	2.71E-05	0.00019	0.18845	Diesel	22.45	18
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Architectural Coating	Off-Road Equipment	0.000218	0.00018	0.001285	0.001699	2.59E-06	3.47E-05		3.47E-05	3.2E-05		3.2E-05	0.18167	0.18167	7.37E-06	1.47E-06		0.18229	Diesel	22.45	18
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Architectural Coating	Worker	6.66E-07	6.08E-07	4.76E-07	6.53E-06	0	0	1.4E-06	1.4E-06	0	3.28E-07	3.28E-07	0.001273	0.001273	3.01E-08	5.31E-08	2E-06	0.00129	Gas	17.86	0
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	4x4 Practice Area Improvements	2024	Site Preparation	Off-Road Equipment	0.000314	0.000264	0.003555	0.006033	9.04E-06	0.00011		0.00011	0.000101		0.000101	0.888003	0.888003	3.6E-05	7.2E-06		0.89105	Diesel	22.45	87
Visitor Facilities	4x4 Practice Area Improvements	2024	Site Preparation	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	4x4 Practice Area Improvements	2024	Site Preparation	Vendor	6.66E-06	4.35E-06	0.000153	5.08E-05	8.02E-07	1.6E-06	3.04E-05	3.2E-05	1.6E-06	8.41E-06	1E-05	0.104517	0.104517	1.94E-06	1.59E-05	0.00012	0.10931	Diesel	22.45	10
Visitor Facilities	4x4 Practice Area Improvements	2024	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	4x4 Practice Area Improvements	2024	Grading	Off-Road Equipment	0.000588	0.000494	0.006666	0.011312	1.7E-05	0.000206		0.000206	0.000189		0.000189	1.665005	1.665005	6.75E-05	1.35E-05		1.67072	Diesel	22.45	164
Visitor Facilities	4x4 Practice Area Improvements	2024	Grading	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Visitor Facilities	4x4 Practice Area Improvements	2024	Grading	Vendor	1.25E-05	8.15E-06	0.000287	9.52E-05	1.5E-06	3.01E-06	5.7E-05	6.01E-05	3.01E-06	1.58E-05	1.88E-05	0.195969	0.195969	3.63E-06	2.99E-05	0.00023	0.20496	Diesel	22.45	19
Visitor Facilities	4x4 Practice Area Improvements	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Site Preparation	Off-Road Equipment	0.0006	0.000504	0.004601	0.005559	7.92E-06	0.000241		0.000241	0.000222		0.000222	0.778258	0.778258	3.16E-05	6.31E-06		0.78093	Diesel	22.45	76
Operations Facilities	SVRA Maintenance Area Improvements	2024	Site Preparation	Worker	2.37E-05	2.05E-05	1.87E-05	0.00023	0	0	4.18E-05	4.18E-05	0	9.8E-06	9.8E-06	0.039705	0.039705	2.19E-06	1.59E-06	7.4E-05	0.04031	Gas	17.86	5
Operations Facilities	SVRA Maintenance Area Improvements	2024	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Grading	Off-Road Equipment	0.003529	0.002966	0.02847	0.026812	3.95E-05	0.001335		0.001335	0.001228		0.001228	3.88541	3.88541	0.000158	3.15E-05		3.89874	Diesel	22.45	382
Operations Facilities	SVRA Maintenance Area Improvements	2024	Grading	Worker	8.87E-05	7.68E-05	7.02E-05	0.000864	0	0	0.000157	0.000157	0	3.68E-05	3.68E-05	0.148893	0.148893	8.21E-06	5.96E-06	0.00028	0.15115	Gas	17.86	18
Operations Facilities	SVRA Maintenance Area Improvements	2024	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Building Construction	Off-Road Equipment	0.076921	0.064635	0.646319	0.805808	0.001392	0.02948		0.02948	0.027122		0.027122	136.7123	136.7123	0.005546	0.001109		137.181	Diesel	22.45	13,425
Operations Facilities	SVRA Maintenance Area Improvements	2024	Building Construction	Worker	0.002203	0.001907	0.001743	0.02145	0	0	0.003896	0.003896	0	0.000913	0.000913	3.698067	3.698067	0.000204	0.000148	0.0069	3.75417	Gas	17.86	456
Operations Facilities	SVRA Maintenance Area Improvements	2024	Building Construction	Vendor	0.000302	0.000198	0.006963	0.002307	3.65E-05	7.29E-05	0.001382	0.001455	7.29E-05	0.000382	0.000455	4.748524	4.748524	8.8E-05	0.000724	0.00553	4.97191	Diesel	22.45	466
Operations Facilities	SVRA Maintenance Area Improvements	2024	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Paving	Off-Road Equipment	0.003788	0.003167	0.027138	0.031942	5.14E-05	0.001269		0.001269	0.001168		0.001168	4.481466	4.481466	0.000182	3.64E-05		4.49685	Diesel	22.45	440
Operations Facilities	SVRA Maintenance Area Improvements	2024	Paving	Worker	0.000497	0.00043	0.000393	0.004836	0	0	0.000878	0.000878	0	0.000206	0.000206	0.833799	0.833799	4.6E-05	3.34E-05	0.00156	0.84645	Gas	17.86	103
Operations Facilities	SVRA Maintenance Area Improvements	2024	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Architectural Coating	Off-Road Equipment	0.000991	0.000819	0.005448	0.00688	1.04E-05	0.000191		0.000191	0.000176		0.000176	0.726775	0.726775	2.95E-05	5.9E-06		0.72927	Diesel	22.45	71
Operations Facilities	SVRA Maintenance Area Improvements	2024	Architectural Coating	Worker	2.29E-05	1.98E-05	1.81E-05	0.000223	0	0	4.05E-05	4.05E-05	0	9.48E-06	9.48E-06	0.038421	0.038421	2.12E-06	1.54E-06	7.2E-05	0.039	Gas	17.86	5
Operations Facilities	SVRA Maintenance Area Improvements	2024	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	SVRA Maintenance Area Improvements	2024	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Demolition	Off-Road Equipment	0.005311	0.004434	0.041408	0.058276	9.21E-05	0.001246		0.001246	0.001146		0.001146	8.114229	8.114229	0.000329	6.58E-05		8.14208	Diesel	22.45	797
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Demolition	Worker	0.00037	0.000361	0.000267	0.003809	0	0	0.000878	0.000878	0	0.000206	0.000206	0.786817	0.786817	1.68E-05	3.34E-05	0.00115	0.79833	Gas	17.86	97
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Demolition	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Demolition	Hauling	1.52E-05	6.43E-06	0.000454	0.000106	2.55E-06	7.28E-06	0.000102	0.000109	7.28E-06	2.78E-05	3.51E-05	0.334498	0.334498	5.5E-06	5.19E-05	0.00032	0.35043	Diesel	22.45	33
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Site Preparation	Off-Road Equipment	0.000492	0.000413	0.003435	0.005556	7.93E-06	0.000166		0.000166	0.000153		0.000153	0.779152	0.779152	3.16E-05	6.32E-06		0.78183	Diesel	22.45	77
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Site Preparation	Worker	1.76E-05	1.72E-05	1.27E-05	0.000181	0	0	4.18E-05	4.18E-05	0	9.8E-06	9.8E-06	0.037467	0.037467	8.00E-07	1.59E-06	5.5E-05	0.03802	Gas	17.86	5
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Grading	Off-Road Equipment	0.002351	0.001976	0.017405	0.019129	3.17E-05	0.000782		0.000782	0.00072		0.00072	3.110886	3.110886	0.000126	2.52E-05		3.12156	Diesel	22.45	305
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Grading	Worker	5.28E-05	5.15E-05	3.81E-05	0.000544	0	0	0.000125	0.000125	0	2.94E-05	2.94E-05	0.112402	0.112402	2.4E-06	4.77E-06	0.00016	0.11405	Gas	17.86	14
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Building Construction	Off-Road Equipment	0.060052	0.050461	0.482897	0.731326	0.001277	0.017714		0.017714	0.016297		0.016297	125.4287	125.4287	0.005088	0.001018		125.859	Diesel	22.45	12,317
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Building Construction	Worker	0.000514	0.000501	0.000371	0.005291	0	0	0.00122	0.00122	0	0.000286	0.000286	1.092971	1.092971	2.33E-05	4.64E-05	0.0016	1.10896	Gas	17.86	135
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Building Construction	Vendor	0.000108	6.29E-05	0.002511	0.000823	1.5E-05	3E-05	0.000568	0.000598	3E-05	0.000157	0.000187	1.845434	1.845434	3.62E-05	0.000284	0.00175	1.93268	Diesel	22.45	181
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0

					Tons Per Year[a]											Metric Tons Per Year[a]							Emission Factor	
Category	Project	Year	Construction Phase	Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	Fuel	(lb CO_2/gallon)[b]	Gallons
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Paving	Off-Road Equipment	0.003164	0.002644	0.022837	0.029199	4.71E-05	0.000924		0.000924	0.00085		0.00085		4.106457	4.106457	0.000167	3.33E-05		4.12055	Diesel	22.45	403
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Paving	Worker	0.000339	0.000331	0.000245	0.003492	0	0	0.000805	0.000805	0	0.000189	0.000189		0.721249	0.721249	1.54E-05	3.06E-05	0.00105	0.7318	Gas	17.86	89
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Architectural Coating	Off-Road Equipment	0.000754	0.000623	0.004571	0.00619	9.49E-06	0.000105		0.000105	9.64E-05		9.64E-05		0.666165	0.666165	2.7E-05	5.4E-06		0.66845	Diesel	22.45	65
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Architectural Coating	Worker	5.33E-06	5.2E-06	3.85E-06	5.49E-05	0	0	1.27E-05	1.27E-05	0	2.97E-06	2.97E-06		0.011342	0.011342	2.42E-07	4.81E-07	1.7E-05	0.01151	Gas	17.86	1
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2027	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Demolition	Off-Road Equipment	0.001401	0.00117	0.010829	0.014124	2.19E-05	0.00039		0.00039	0.000359		0.000359		1.932787	1.932787	7.84E-05	1.57E-05		1.93942	Diesel	22.45	190
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Demolition	Worker	0.000106	9.63E-05	7.88E-05	0.00106	0	0	0.000209	0.000209	0	4.9E-05	4.9E-05		0.194329	0.194329	5E-06	7.95E-06	0.00034	0.19716	Gas	17.86	24
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Demolition	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Demolition	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Site Preparation	Off-Road Equipment	0.00056	0.000471	0.004161	0.005568	7.93E-06	0.000213		0.000213	0.000196		0.000196		0.779217	0.779217	3.16E-05	6.32E-06		0.78189	Diesel	22.45	77
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Site Preparation	Worker	2.11E-05	1.93E-05	1.58E-05	0.000212	0	0	4.18E-05	4.18E-05	0	9.8E-06	9.8E-06		0.038866	0.038866	1E-06	1.59E-06	6.7E-05	0.03943	Gas	17.86	5
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Grading	Off-Road Equipment	0.001293	0.001087	0.010067	0.01005	1.58E-05	0.000464		0.000464	0.000427		0.000427		1.554824	1.554824	6.31E-05	1.26E-05		1.56016	Diesel	22.45	153
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Grading	Worker	3.17E-05	2.89E-05	2.36E-05	0.000318	0	0	6.27E-05	6.27E-05	0	1.47E-05	1.47E-05		0.058299	0.058299	1.5E-06	2.38E-06	0.0001	0.05915	Gas	17.86	7
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Building Construction	Off-Road Equipment	0.015797	0.013274	0.13107	0.176947	0.000307	0.005549		0.005549	0.005105		0.005105		30.18328	30.18328	0.001224	0.000245		30.2869	Diesel	22.45	2,964
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Building Construction	Worker	0.000121	0.00011	9E-05	0.00121	0	0	0.000239	0.000239	0	5.6E-05	5.6E-05		0.222001	0.222001	5.71E-06	9.08E-06	0.00038	0.22523	Gas	17.86	27
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Building Construction	Vendor	2.14E-05	1.3E-05	0.000536	0.000178	2.93E-06	5.87E-06	0.000111	0.000117	5.87E-06	3.07E-05	3.66E-05		0.375842	0.375842	7.08E-06	5.56E-05	0.00045	0.39303	Diesel	22.45	37
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Paving	Off-Road Equipment	0.000607	0.000508	0.004374	0.005312	8.57E-06	0.000194		0.000194	0.000178		0.000178		0.747001	0.747001	3.03E-05	6.06E-06		0.74956	Diesel	22.45	73
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Paving	Worker	7.39E-05	6.74E-05	5.52E-05	0.000742	0	0	0.000146	0.000146	0	3.43E-05	3.43E-05		0.13603	0.13603	3.5E-06	5.56E-06	0.00024	0.13801	Gas	17.86	17
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Architectural Coating	Off-Road Equipment	0.000155	0.000128	0.000882	0.00114	1.73E-06	2.74E-05		2.74E-05	2.52E-05		2.52E-05		0.12113	0.12113	4.91E-06	9.83E-07		0.12155	Diesel	22.45	12
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Architectural Coating	Worker	9.47E-07	8.63E-07	7.06E-07	9.49E-06	0	0	1.87E-06	1.87E-06	0	4.39E-07	4.39E-07		0.001741	0.001741	4.48E-08	7.12E-08	3E-06	0.00177	Gas	17.86	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Ranger Station Office and Yard Expansion -	2025	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Site Preparation	Off-Road Equipment	0.00093	0.000781	0.005962	0.006402	1.72E-05	0.000251		0.000251	0.000231		0.000231		1.675556	1.675556	6.8E-05	1.36E-05		1.68131	Diesel	22.45	165
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Site Preparation	Worker	3.55E-05	3.07E-05	2.81E-05	0.000345	0	0	6.27E-05	6.27E-05	0	1.47E-05	1.47E-05		0.059557	0.059557	3.28E-06	2.38E-06	0.00011	0.06035	Gas	17.86	7
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Site Preparation	Hauling	1.39E-05	8.05E-06	0.000452	0.000104	2.31E-06	6.61E-06	9.24E-05	9.9E-05	6.61E-06	2.53E-05	3.19E-05		0.323893	0.323893	7E-06	5.13E-05	0.00033	0.33936	Diesel	22.45	32
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Grading	Off-Road Equipment	0.000706	0.000593	0.005694	0.005362	7.9E-06	0.000267		0.000267	0.000246		0.000246		0.777082	0.777082	3.15E-05	6.3E-06		0.77975	Diesel	22.45	76
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Grading	Worker	1.77E-05	1.54E-05	1.4E-05	0.000173	0	0	3.14E-05	3.14E-05	0	7.35E-06	7.35E-06		0.029779	0.029779	1.64E-06	1.19E-06	5.6E-05	0.03017	Gas	17.86	4
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Grading	Hauling	1.39E-05	8.05E-06	0.000452	0.000104	2.31E-06	6.61E-06	9.24E-05	9.9E-05	6.61E-06	2.53E-05	3.19E-05		0.323893	0.323893	7E-06	5.13E-05	0.00033	0.33936	Diesel	22.45	32
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Paving	Off-Road Equipment	0.001891	0.001586	0.011847	0.012569	3.5E-05	0.000473		0.000473	0.000435		0.000435		3.319764	3.319764	0.000135	2.69E-05		3.33116	Diesel	22.45	326
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Paving	Worker	0.00013	0.000113	0.000103	0.001267	0	0	0.00023	0.00023	0	5.39E-05	5.39E-05		0.218376	0.218376	1.2E-05	8.74E-06	0.00041	0.22128	Gas	17.86	27
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Architectural Coating	Off-Road Equipment	0.000165	0.000136	0.000908	0.001147	1.73E-06	3.19E-05		3.19E-05	2.93E-05		2.93E-05		0.121129	0.121129	4.91E-06	9.83E-07		0.12154	Diesel	22.45	12
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Architectural Coating	Worker	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Gas	17.86	0
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Emergency Helicopter Pad Relocation	2024	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Volunteer Training Area Enhancements	2024	Demolition	Off-Road Equipment	0.001523	0.001272	0.011727	0.014469	2.19E-05	0.000469		0.000469	0.000431		0.000431		1.932837	1.932837	7.84E-05	1.57E-05		1.93947	Diesel	22.45	190
Operations Facilities	Volunteer Training Area Enhancements	2024	Demolition	Worker	0.000118	0.000102	9.36E-05	0.001152	0	0	0.000209	0.000209	0	4.9E-05	4.9E-05		0.198524	0.198524	1.09E-05	7.95E-06	0.00037	0.20154	Gas	17.86	25
Operations Facilities	Volunteer Training Area Enhancements	2024	Demolition	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Volunteer Training Area Enhancements	2024	Demolition	Hauling	1.94E-05	1.13E-05	0.000633	0.000145	3.24E-06	9.26E-06	0.000129	0.000139	9.26E-06	3.54E-05	4.47E-05		0.45345	0.45345	9.8E-06	7.18E-05	0.00047	0.47557	Diesel	22.45	45
Operations Facilities	Volunteer Training Area Enhancements	2024	Site Preparation	Off-Road Equipment	0.0003	0.000252	0.0023	0.00278	3.96E-06	0.00012		0.00012	0.000111		0.000111		0.389129	0.389129	1.58E-05	3.16E-06		0.39046	Diesel	22.45	38
Operations Facilities	Volunteer Training Area Enhancements	2024	Site Preparation	Worker	1.18E-05	1.02E-05	9.36E-06	0.000115	0	0	2.09E-05	2.09E-05	0	4.9E-06	4.9E-06		0.019852	0.019852	1.09E-06	7.95E-07	3.7E-05	0.02015	Gas	17.86	2
Operations Facilities	Volunteer Training Area Enhancements	2024	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Volunteer Training Area Enhancements	2024	Site Preparation	Hauling	2.78E-05	1.61E-05	0.000904	0.000207	4.63E-06	1.32E-05	0.000185	0.000198	1.32E-05	5.06E-05	6.38E-05		0.647785	0.647785	1.4E-05	0.000103	0.00067	0.67938	Diesel	22.45	64
Operations Facilities	Volunteer Training Area Enhancements	2024	Grading	Off-Road Equipment	0.001412	0.001186	0.011388	0.010725	1.58E-05	0.000534		0.000534	0.000491		0.000491		1.554164	1.554164	6.3E-05	1.26E-05		1.5595	Diesel	22.45	153
Operations Facilities	Volunteer Training Area Enhancements	2024	Grading	Worker	3.55E-05	3.07E-05	2.81E-05	0.000345	0	0	6.27E-05	6.27E-05	0	1.47E-05	1.47E-05		0.059557	0.059557	3.28E-06	2.38E-06	0.00011	0.06046	Gas	17.86	7
Operations Facilities	Volunteer Training Area Enhancements	2024	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Volunteer Training Area Enhancements	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Volunteer Training Area Enhancements	2024	Building Construction	Off-Road Equipment	0.017981	0.015109	0.151088	0.188371	0.000325	0.006892		0.006892	0.00634		0.00634		31.95872	31.95872	0.001296	0.000259		32.0684	Diesel	22.45	3,138
Operations Facilities	Volunteer Training Area Enhancements	2024	Building Construction	Worker	3.68E-05	3.18E-05	2.91E-05	0.000358	0	0	6.5E-05	6.5E-05	0	1.52E-05	1.52E-05		0.061749	0.061749	3.4E-06	2.47E-06	0.00012	0.06269	Gas	17.86	8
Operations Facilities	Volunteer Training Area Enhancements	2024	Building Construction	Vendor	6.63E-06	4.33E-06	0.000153	5.05E-05	7.99E-07	1.6E-06	3.03E-05	3.19E-05	1.6E-06	8.37E-06	9.97E-06		0.104067	0.104067	1.93E-06	1.59E-05	0.00012	0.10896	Diesel	22.45	10
Operations Facilities	Volunteer Training Area Enhancements	2024	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Volunteer Training Area Enhancements	2024	Architectural Coating	Off-Road Equipment	0.000248	0.000205	0.001362	0.00172	2.59E-06	4.78E-05		4.78E-05	4.4E-05		4.4E-05		0.181694	0.181694	7.37E-06	1.47E-06		0.18232	Diesel	22.45	18
Operations Facilities	Volunteer Training Area Enhancements	2024	Architectural Coating	Worker	4.09E-07	3.54E-07	3.23E-07	3.98E-06	0	0	7.23E-07	7.23E-07	0	1.69E-07	1.69E-07		0.000686	0.000686	3.78E-08	2.75E-08	1.3E-06	0.0007	Gas	17.86	0
Operations Facilities	Volunteer Training Area Enhancements	2024	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Volunteer Training Area Enhancements	2024	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Campground Host Sites	2023	Site Preparation	Off-Road Equipment	0.00269	0.00226	0.017929	0.017827	4.96E-05	0.000776		0.000776	0.000714		0.000714		4.838973	4.838973	0.000196	3.93E-05		4.85558	Diesel	22.45	475

					Tons Per Year[a]												Metric Tons Per Year[a]							Emission Factor		
Category	Project	Year	Construction Phase	Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	Fuel	(lb CO_2/gallon) [b]	Gallons
Operations Facilities	Campground Host Sites	2023	Site Preparation	Worker	9.37E-05	8.63E-05	7.63E-05	0.000944	0	0	0.000157	0.000157	0	3.68E-05	3.68E-05		0.152255	0.152255	8.58E-06	5.96E-06	0.0003	0.15424	Gas	17.86	19
Operations Facilities	Campground Host Sites	2023	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Campground Host Sites	2023	Site Preparation	Hauling	3.89E-05	1.93E-05	0.001123	0.000254	1.08E-05	1.59E-05	0.000222	0.000238	1.59E-05	6.07E-05	7.66E-05		0.790246	0.790246	1.68E-05	0.000123	0.00081	0.82736	Diesel	22.45	78
Operations Facilities	Campground Host Sites	2023	Grading	Off-Road Equipment	0.006701	0.005629	0.048803	0.044217	0.000102	0.002122		0.002122	0.001952		0.001952		10.0049	10.0049	0.000406	8.12E-05		10.0392	Diesel	22.45	982
Operations Facilities	Campground Host Sites	2023	Grading	Worker	0.000187	0.000173	0.000153	0.001888	0	0	0.000314	0.000314	0	7.35E-05	7.35E-05		0.304509	0.304509	1.72E-05	1.19E-05	0.00061	0.30849	Gas	17.86	38
Operations Facilities	Campground Host Sites	2023	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Campground Host Sites	2023	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Campground Host Sites	2023	Paving	Off-Road Equipment	0.011665	0.009781	0.074988	0.075592	0.000219	0.003048		0.003048	0.002804		0.002804		20.76504	20.76504	0.000842	0.000168		20.8363	Diesel	22.45	2,039
Operations Facilities	Campground Host Sites	2023	Paving	Worker	0.000812	0.000748	0.000662	0.008182	0	0	0.001359	0.001359	0	0.000319	0.000319		1.31954	1.31954	7.44E-05	5.16E-05	0.00264	1.33679	Gas	17.86	163
Operations Facilities	Campground Host Sites	2023	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Campground Host Sites	2023	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	New Greenhouse	2023	Site Preparation	Off-Road Equipment	0.000319	0.000268	0.002511	0.002786	3.96E-06	0.000134		0.000134	0.000123		0.000123		0.388997	0.388997	1.58E-05	3.16E-06		0.39033	Diesel	22.45	38
Operations Facilities	New Greenhouse	2023	Site Preparation	Worker	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Gas	17.86	0
Operations Facilities	New Greenhouse	2023	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	New Greenhouse	2023	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	New Greenhouse	2023	Grading	Off-Road Equipment	0.002286	0.001921	0.018887	0.017061	2.37E-05	0.000898		0.000898	0.000826		0.000826		2.33096	2.33096	9.46E-05	1.89E-05		2.33896	Diesel	22.45	229
Operations Facilities	New Greenhouse	2023	Grading	Worker	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Gas	17.86	0
Operations Facilities	New Greenhouse	2023	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	New Greenhouse	2023	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	New Greenhouse	2023	Paving	Off-Road Equipment	0.001914	0.0016	0.01382	0.01595	2.57E-05	0.000656		0.000656	0.000603		0.000603		2.239903	2.239903	9.09E-05	1.82E-05		2.24759	Diesel	22.45	220
Operations Facilities	New Greenhouse	2023	Paving	Worker	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Gas	17.86	0
Operations Facilities	New Greenhouse	2023	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	New Greenhouse	2023	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Site Preparation	Off-Road Equipment	0.00078	0.000655	0.006052	0.006071	9.53E-06	0.000281		0.000281	0.000258		0.000258		0.936469	0.936469	3.8E-05	7.6E-06		0.93968	Diesel	22.45	92
Operations Facilities	Park Headquarters Area Improvements	2025	Site Preparation	Worker	1.58E-05	1.44E-05	1.18E-05	0.000159	0	0	3.14E-05	3.14E-05	0	7.35E-06	7.35E-06		0.029149	0.029149	7.50E-07	1.19E-06	5E-05	0.02952	Gas	17.86	4
Operations Facilities	Park Headquarters Area Improvements	2025	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Grading	Off-Road Equipment	0.001799	0.001512	0.014065	0.014513	2.27E-05	0.000643		0.000643	0.000592		0.000592		2.226801	2.226801	9.03E-05	1.81E-05		2.23444	Diesel	22.45	219
Operations Facilities	Park Headquarters Area Improvements	2025	Grading	Worker	4.23E-05	3.85E-05	3.15E-05	0.000424	0	0	8.37E-05	8.37E-05	0	1.96E-05	1.96E-05		0.077732	0.077732	2E-06	3.18E-06	0.00013	0.07873	Gas	17.86	10
Operations Facilities	Park Headquarters Area Improvements	2025	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Building Construction	Off-Road Equipment	0.048705	0.040516	0.339912	0.381261	0.000738	0.012473		0.012473	0.011475		0.011475		62.09325	62.09325	0.002519	0.000504		62.3063	Diesel	22.45	6,098
Operations Facilities	Park Headquarters Area Improvements	2025	Building Construction	Worker	0.000118	0.000108	8.82E-05	0.001185	0	0	0.000234	0.000234	0	5.48E-05	5.48E-05		0.2174	0.2174	5.59E-06	8.89E-06	0.00038	0.22019	Gas	17.86	27
Operations Facilities	Park Headquarters Area Improvements	2025	Building Construction	Vendor	2.1E-05	1.27E-05	0.000525	0.000174	2.87E-06	5.75E-06	0.000109	0.000115	5.75E-06	3.01E-05	3.59E-05		0.368051	0.368051	6.93E-06	5.44E-05	0.00044	0.38445	Diesel	22.45	36
Operations Facilities	Park Headquarters Area Improvements	2025	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Paving	Off-Road Equipment	0.001177	0.000988	0.009264	0.012999	1.88E-05	0.000406		0.000406	0.000373		0.000373		1.799355	1.799355	7.3E-05	1.46E-05		1.80553	Diesel	22.45	177
Operations Facilities	Park Headquarters Area Improvements	2025	Paving	Worker	0.000106	9.63E-05	7.88E-05	0.00106	0	0	0.000209	0.000209	0	4.9E-05	4.9E-05		0.194329	0.194329	5E-06	7.95E-06	0.00034	0.19682	Gas	17.86	24
Operations Facilities	Park Headquarters Area Improvements	2025	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Architectural Coating	Off-Road Equipment	0.000232	0.000192	0.001323	0.00171	2.59E-06	4.11E-05		4.11E-05	3.78E-05		3.78E-05		0.181694	0.181694	7.37E-06	1.47E-06		0.18232	Diesel	22.45	18
Operations Facilities	Park Headquarters Area Improvements	2025	Architectural Coating	Worker	9.33E-07	8.51E-07	6.96E-07	9.36E-06	0	0	1.85E-06	1.85E-06	0	4.33E-07	4.33E-07		0.001716	0.001716	4.42E-08	7.02E-08	3E-06	0.00174	Gas	17.86	0
Operations Facilities	Park Headquarters Area Improvements	2025	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements	2025	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements - N	2026	Site Preparation	Off-Road Equipment	0.000259	0.000218	0.001869	0.002772	3.96E-06	9.25E-05		9.25E-05	8.51E-05		8.51E-05		0.389386	0.389386	1.58E-05	3.16E-06		0.39072	Diesel	22.45	38
Operations Facilities	Park Headquarters Area Improvements - N	2026	Site Preparation	Worker	9.96E-06	9.08E-06	7.12E-06	9.76E-05	0	0	2.09E-05	2.09E-05	0	4.9E-06	4.9E-06		0.01903	0.01903	4.50E-07	7.95E-07	3E-05	0.01928	Gas	17.86	2
Operations Facilities	Park Headquarters Area Improvements - N	2026	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements - N	2026	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements - N	2026	Grading	Off-Road Equipment	0.00061	0.000512	0.004595	0.004845	7.91E-06	0.000209		0.000209	0.000193		0.000193		0.777573	0.777573	3.15E-05	6.31E-06		0.78024	Diesel	22.45	76
Operations Facilities	Park Headquarters Area Improvements - N	2026	Grading	Worker	1.49E-05	1.36E-05	1.07E-05	0.000146	0	0	3.14E-05	3.14E-05	0	7.35E-06	7.35E-06		0.028545	0.028545	6.75E-07	1.19E-06	4.6E-05	0.02892	Gas	17.86	4
Operations Facilities	Park Headquarters Area Improvements - N	2026	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements - N	2026	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements - N	2026	Building Construction	Off-Road Equipment	0.011169	0.009385	0.091314	0.131207	0.000229	0.003586		0.003586	0.003299		0.003299		22.48447	22.48447	0.000912	0.000182		22.5616	Diesel	22.45	2,208
Operations Facilities	Park Headquarters Area Improvements - N	2026	Building Construction	Worker	0.000381	0.000348	0.000273	0.003738	0	0	0.000801	0.000801	0	0.000188	0.000188		0.728919	0.728919	1.72E-05	3.04E-05	0.00117	0.73842	Gas	17.86	90
Operations Facilities	Park Headquarters Area Improvements - N	2026	Building Construction	Vendor	2.05E-05	1.26E-05	0.000499	0.000163	2.85E-06	5.7E-06	0.000108	0.000114	5.7E-06	2.99E-05	3.56E-05		0.358709	0.358709	6.88E-06	5.4E-05	0.00038	0.37498	Diesel	22.45	35
Operations Facilities	Park Headquarters Area Improvements - N	2026	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements - N	2026	Architectural Coating	Off-Road Equipment	0.000146	0.00012	0.000856	0.001133	1.73E-06	2.32E-05		2.32E-05	2.13E-05		2.13E-05		0.121113	0.121113	4.91E-06	9.83E-07		0.12153	Diesel	22.45	12
Operations Facilities	Park Headquarters Area Improvements - N	2026	Architectural Coating	Worker	4.01E-06	3.66E-06	2.87E-06	3.93E-05	0	0	8.43E-06	8.43E-06	0	1.98E-06	1.98E-06		0.007673	0.007673	1.81E-07	3.20E-07	1.2E-05	0.00777	Gas	17.86	1
Operations Facilities	Park Headquarters Area Improvements - N	2026	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Park Headquarters Area Improvements - N	2026	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Site Preparation	Off-Road Equipment	0.0003	0.000252	0.0023	0.00278	3.96E-06	0.00012		0.00012	0.000111		0.000111		0.389129	0.389129	1.58E-05	3.16E-06		0.39046	Diesel	22.45	38
Operations Facilities	Water Plant Upgrade	2024	Site Preparation	Worker	1.18E-05	1.02E-05	9.36E-06	0.000115	0	0	2.09E-05	2.09E-05	0	4.9E-06	4.9E-06		0.019852	0.019852	1.09E-06	7.95E-07	3.7E-05	0.02015	Gas	17.86	2
Operations Facilities	Water Plant Upgrade	2024	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Grading	Off-Road Equipment	0.000706	0.000593	0.005694	0.005362	7.9E-06	0.000267		0.000267	0.000246		0.000246		0.777082	0.777082	3.15E-05	6.3E-06		0.77975	Diesel	22.45	76
Operations Facilities	Water Plant Upgrade	2024	Grading	Worker	1.77E-05	1.54E-05	1.4E-05	0.000173	0	0	3.14E-05	3.14E-05	0	7.35E-06	7.35E-06		0.029779	0.029779	1.64E-06	1.19E-06	5.6E-05	0.03023	Gas	17.86	4
Operations Facilities	Water Plant Upgrade	2024	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Building Construction	Off-Road Equipment	0.008991	0.007555	0.075544	0.094185	0.000163	0.003446		0.003446	0.00317		0.00317		15.97936	15.97936	0.000648	0.00013		16.0342	Diesel	22.45	1,569
Operations Facilities	Water Plant Upgrade	2024	Building Construction	Worker	1.88E-05	1.63E-05	1.49E-05	0.000183	0	0	3.32E-05	3.32E-05	0	7.78E-06	7.78E-06		0.031518	0.031518	1.74E-06	1.26E-06	5.9E-05	0.032	Gas	17.86	4

Category	Project	Year	Construction Phase	Location	Tons Per Year[a]											Metric Tons Per Year[a]							Emission Factor		
					TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	Fuel	(lb CO_2/gallon)[b]	Gallons
Operations Facilities	Water Plant Upgrade	2024	Building Construction	Vendor	2.58E-06	1.68E-06	5.93E-05	1.97E-05	3.11E-07	6.21E-07	1.18E-05	1.24E-05	6.21E-07	3.26E-06	3.88E-06	0.04047	0.04047	7.50E-07	6.17E-06	4.7E-05	0.04237	Diesel	22.45	4
Operations Facilities	Water Plant Upgrade	2024	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Paving	Off-Road Equipment	0.000316	0.000264	0.002261	0.002662	4.29E-06	0.000106		0.000106	9.73E-05		9.73E-05	0.373456	0.373456	1.51E-05	3.03E-06		0.37474	Diesel	22.45	37
Operations Facilities	Water Plant Upgrade	2024	Paving	Worker	4.14E-05	3.58E-05	3.28E-05	0.000403	0	0	7.32E-05	7.32E-05	0	1.72E-05	1.72E-05	0.069483	0.069483	3.83E-06	2.78E-06	0.00013	0.07054	Gas	17.86	9
Operations Facilities	Water Plant Upgrade	2024	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Architectural Coating	Off-Road Equipment	8.25E-05	6.82E-05	0.000454	0.000573	8.63E-07	1.59E-05		1.59E-05	1.47E-05		1.47E-05	0.060565	0.060565	2.46E-06	4.91E-07		0.06077	Diesel	22.45	6
Operations Facilities	Water Plant Upgrade	2024	Architectural Coating	Worker	1.39E-07	1.20E-07	1.10E-07	1.35E-06	0	0	2.46E-07	2.46E-07	0	5.76E-08	5.76E-08	0.000233	0.000233	1.29E-08	9.34E-09	4.36E-07	0.00024	Gas	17.86	0
Operations Facilities	Water Plant Upgrade	2024	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Water Plant Upgrade	2024	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New M	2026	Site Preparation	Off-Road Equipment	0.001297	0.001089	0.009345	0.01386	1.98E-05	0.000463		0.000463	0.000426		0.000426	1.946928	1.946928	7.9E-05	1.58E-05		1.95361	Diesel	22.45	191
Operations Facilities	Other Operations Facility Projects - New M	2026	Site Preparation	Worker	4.98E-05	4.54E-05	3.56E-05	0.000488	0	0	0.000105	0.000105	0	2.45E-05	2.45E-05	0.095149	0.095149	2.25E-06	3.97E-06	0.00015	0.09654	Gas	17.86	12
Operations Facilities	Other Operations Facility Projects - New M	2026	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New M	2026	Site Preparation	Hauling	6.89E-07	2.92E-07	2.12E-05	4.94E-06	1.16E-07	3.31E-07	4.62E-06	4.95E-06	3.31E-07	1.27E-06	1.6E-06	0.015565	0.015565	2.50E-07	2.46E-06	1.6E-05	0.01632	Diesel	22.45	2
Operations Facilities	Other Operations Facility Projects - New M	2026	Grading	Off-Road Equipment	0.006096	0.005123	0.045953	0.048452	7.91E-05	0.002095		0.002095	0.001927		0.001927	7.775731	7.775731	0.000315	6.31E-05		7.80241	Diesel	22.45	764
Operations Facilities	Other Operations Facility Projects - New M	2026	Grading	Worker	0.000149	0.000136	0.000107	0.001464	0	0	0.000314	0.000314	0	7.35E-05	7.35E-05	0.285448	0.285448	6.75E-06	1.19E-05	0.00046	0.28962	Gas	17.86	35
Operations Facilities	Other Operations Facility Projects - New M	2026	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New M	2026	Grading	Hauling	1.38E-06	5.84E-07	4.25E-05	9.89E-06	2.31E-07	6.61E-07	9.24E-06	9.9E-06	6.61E-07	2.53E-06	3.19E-06	0.031129	0.031129	5.00E-07	4.92E-06	3.1E-05	0.03264	Diesel	22.45	3
Operations Facilities	Other Operations Facility Projects - New M	2026	Paving	Off-Road Equipment	0.007345	0.006138	0.05301	0.066243	0.000107	0.002238		0.002238	0.002059		0.002059	9.332281	9.332281	0.000379	7.57E-05		9.36431	Diesel	22.45	916
Operations Facilities	Other Operations Facility Projects - New M	2026	Paving	Worker	0.000871	0.000795	0.000623	0.008539	0	0	0.00183	0.00183	0	0.000429	0.000429	1.665111	1.665111	3.94E-05	6.95E-05	0.00266	1.68947	Gas	17.86	206
Operations Facilities	Other Operations Facility Projects - New M	2026	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New M	2026	Paving	Hauling	3.44E-06	1.46E-06	0.000106	2.47E-05	5.79E-07	1.65E-06	2.31E-05	2.48E-05	1.65E-06	6.33E-06	7.98E-06	0.077824	0.077824	1.25E-06	1.23E-05	7.8E-05	0.0816	Diesel	22.45	8
Operations Facilities	Other Operations Facility Projects - New M	2026	Architectural Coating	Off-Road Equipment	0.001747	0.001444	0.010277	0.013594	2.07E-05	0.000278		0.000278	0.000256		0.000256	1.453361	1.453361	5.9E-05	1.18E-05		1.45835	Diesel	22.45	143
Operations Facilities	Other Operations Facility Projects - New M	2026	Architectural Coating	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Operations Facilities	Other Operations Facility Projects - New M	2026	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New M	2026	Architectural Coating	Hauling	3.31E-06	1.4E-06	0.000102	2.37E-05	5.56E-07	1.59E-06	2.22E-05	2.38E-05	1.59E-06	6.07E-06	7.66E-06	0.074711	0.074711	1.2E-06	1.18E-05	7.5E-05	0.07833	Diesel	22.45	7
Operations Facilities	Other Operations Facility Projects - New/R	2026	Site Preparation	Off-Road Equipment	0.004408	0.003704	0.031775	0.047124	6.74E-05	0.001573		0.001573	0.001447		0.001447	6.619555	6.619555	0.000269	5.37E-05		6.64227	Diesel	22.45	650
Operations Facilities	Other Operations Facility Projects - New/R	2026	Site Preparation	Worker	0.000169	0.000154	0.000121	0.001659	0	0	0.000356	0.000356	0	8.33E-05	8.33E-05	0.323507	0.323507	7.65E-06	1.35E-05	0.00052	0.32824	Gas	17.86	40
Operations Facilities	Other Operations Facility Projects - New/R	2026	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New/R	2026	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New/R	2026	Grading	Off-Road Equipment	0.019508	0.016392	0.147048	0.155047	0.000253	0.006704		0.006704	0.006167		0.006167	24.88234	24.88234	0.001009	0.000202		24.9677	Diesel	22.45	2,443
Operations Facilities	Other Operations Facility Projects - New/R	2026	Grading	Worker	0.000478	0.000436	0.000342	0.004684	0	0	0.001004	0.001004	0	0.000235	0.000235	0.913432	0.913432	2.16E-05	3.81E-05	0.00146	0.9268	Gas	17.86	113
Operations Facilities	Other Operations Facility Projects - New/R	2026	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New/R	2026	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New/R	2026	Paving	Off-Road Equipment	0.023505	0.019641	0.169632	0.211976	0.000343	0.007163		0.007163	0.00659		0.00659	29.8633	29.8633	0.001211	0.000242		29.9658	Diesel	22.45	2,933
Operations Facilities	Other Operations Facility Projects - New/R	2026	Paving	Worker	0.002788	0.002543	0.001993	0.027324	0	0	0.005856	0.005856	0	0.001372	0.001372	5.328354	5.328354	0.000126	0.000222	0.00852	5.40632	Gas	17.86	658
Operations Facilities	Other Operations Facility Projects - New/R	2026	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - New/R	2026	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Site Preparation	Off-Road Equipment	0.0006	0.000504	0.004601	0.005559	7.92E-06	0.000241		0.000241	0.000222		0.000222	0.778258	0.778258	3.16E-05	6.31E-06		0.78093	Diesel	22.45	76
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Site Preparation	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Grading	Off-Road Equipment	0.002823	0.002372	0.022776	0.021449	3.16E-05	0.001068		0.001068	0.000983		0.000983	3.108328	3.108328	0.000126	2.52E-05		3.119	Diesel	22.45	305
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Grading	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Paving	Off-Road Equipment	0.002841	0.002375	0.020353	0.023956	3.86E-05	0.000952		0.000952	0.000876		0.000876	3.3611	3.3611	0.000136	2.73E-05		3.37263	Diesel	22.45	330
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Paving	Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Gas	17.86	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Paving	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - ATV/M	2024	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Site Preparation	Off-Road Equipment	0.0003	0.000252	0.0023	0.00278	3.96E-06	0.00012		0.00012	0.000111		0.000111	0.389129	0.389129	1.58E-05	3.16E-06		0.39046	Diesel	22.45	38
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Site Preparation	Worker	1.18E-05	1.02E-05	9.36E-06	0.000115	0	0	2.09E-05	2.09E-05	0	4.9E-06	4.9E-06	0.019852	0.019852	1.09E-06	7.95E-07	3.7E-05	0.02015	Gas	17.86	2
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Site Preparation	Vendor	1.66E-06	1.09E-06	3.83E-05	1.27E-05	2.01E-07	4.01E-07	7.61E-06	8.01E-06	4.01E-07	2.1E-06	2.5E-06	0.026129	0.026129	4.84E-07	3.98E-06	3E-05	0.02736	Diesel	22.45	3
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Grading	Off-Road Equipment	0.000706	0.000593	0.005694	0.005362	7.9E-06	0.000267		0.000267	0.000246		0.000246	0.777082	0.777082	3.15E-05	6.3E-06		0.77975	Diesel	22.45	76
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Grading	Worker	1.77E-05	1.54E-05	1.4E-05	0.000173	0	0	3.14E-05	3.14E-05	0	7.35E-06	7.35E-06	0.029779	0.029779	1.64E-06	1.19E-06	5.6E-05	0.03023	Gas	17.86	4
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Grading	Vendor	1.66E-06	1.09E-06	3.83E-05	1.27E-05	2.01E-07	4.01E-07	7.61E-06	8.01E-06	4.01E-07	2.1E-06	2.5E-06	0.026129	0.026129	4.84E-07	3.98E-06	3E-05	0.02736	Diesel	22.45	3
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Building Construction	Off-Road Equipment	0.012654	0.010633	0.106321	0.132557	0.000229	0.00485		0.00485	0.004462		0.004462	22.48947	22.48947	0.000912	0.000182		22.5666	Diesel	22.45	2,208
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Building Construction	Worker	6.74E-05	5.84E-05	5.33E-05	0.000656	0	0	0.000119	0.000119	0	2.79E-05	2.79E-05	0.113177	0.113177	6.24E-06	4.53E-06	0.00021	0.11489	Gas	17.86	14
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Building Construction	Vendor	6.33E-05	4.13E-05	0.001456	0.000482	7.62E-06	1.52E-05	0.000289	0.000304	1.52E-05	7.99E-05	9.51E-05	0.99291	0.99291	1.84E-05	0.000151	0.00116	1.03962	Diesel	22.45	98
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Paving	Off-Road Equipment	0.000631	0.000528	0.004523	0.005324	8.57E-06	0.000212		0.000212	0.000195		0.000195	0.746911	0.746911	3.03E-05	6.06E-06		0.74947	Diesel	22.45	73
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Paving	Worker	8.28E-05	7.17E-05	6.55E-05	0.000806	0	0	0.000146	0.000146	0	3.43E-05	3.43E-05	0.138967	0.138967	7.66E-06	5.56E-06	0.00026	0.14107	Gas	17.86	17
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Paving	Vendor	3.33E-06	2.17E-06	7.66E-05	2.54E-05	4.01E-07	8.02E-07	1.52E-05	1.6E-05	8.02E-07	4.2E-06	5.01E-06	0.052258	0.052258	9.68E-07	7.96E-06	6.1E-05	0.05472	Diesel	22.45	5
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Paving	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Architectural Coating	Off-Road Equipment	0.000165	0.000136	0.000908	0.001147	1.73E-06	3.19E-05		3.19E-05	2.93E-05		2.93E-05	0.121129	0.121129	4.91E-06	9.83E-07		0.12154	Diesel	22.45	12
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Architectural Coating	Worker	7.10E-07	6.14E-07	5.62E-07	6.91E-06	0	0	1.25E-06	1.25E-06	0	2.94E-07	2.94E-07	0.001191	0.001191	6.57E-08	4.77E-08	2.2E-06	0.00121	Gas	17.86	0
Operations Facilities	Other Operations Facility Projects - Faciliti	2024	Architectural Coating	Vendor	3.33E-06	2.17E-06	7.66E-05	2.54E-05	4.01E-07	8.02E-07	1.52E-05	1.6E-05	8.02E-07	4.2E-06	5.01E-06	0.052258	0.052258	9.68E-07	7.96E-06	6.1E-05	0.05472	Diesel	22.45	5

Category	Project	Year	Construction Phase	Location	Tons Per Year[a] TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	Metric Tons Per Year[a] BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e	Emission Factor Fuel	(lb CO_2/gallon) [b]	Gallons
Operations Facilities	Other Operations Facility Projects - Facilitie	2024	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Concession Stand Relocation	2024	Demolition	Off-Road Equipment	0.006703	0.005595	0.051597	0.063665	9.65E-05	0.002062		0.002062	0.001897		0.001897	8.504482	8.504482	0.000345	6.9E-05		8.53367	Diesel	22.45	835
Visitor Facilities	Concession Stand Relocation	2024	Demolition	Worker	0.00052	0.000451	0.000412	0.005067	0	0	0.00092	0.00092	0	0.000216	0.000216	0.873504	0.873504	4.82E-05	3.5E-05	0.00163	0.88513	Gas	17.86	108
Visitor Facilities	Concession Stand Relocation	2024	Demolition	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Concession Stand Relocation	2024	Demolition	Hauling	5.69E-05	3.3E-05	0.001853	0.000424	9.49E-06	2.71E-05	0.000379	0.000406	2.71E-05	0.000104	0.000131	1.32796	1.32796	2.87E-05	0.00021	0.00137	1.39136	Diesel	22.45	130
Visitor Facilities	Concession Stand Relocation	2024	Site Preparation	Off-Road Equipment	0.0006	0.000504	0.004601	0.005559	7.92E-06	0.000241		0.000241	0.000222		0.000222	0.778258	0.778258	3.16E-05	6.31E-06		0.78093	Diesel	22.45	76
Visitor Facilities	Concession Stand Relocation	2024	Site Preparation	Worker	2.37E-05	2.05E-05	1.87E-05	0.00023	0	0	4.18E-05	4.18E-05	0	9.8E-06	9.8E-06	0.039705	0.039705	2.19E-06	1.59E-06	7.4E-05	0.04023	Gas	17.86	5
Visitor Facilities	Concession Stand Relocation	2024	Site Preparation	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Concession Stand Relocation	2024	Site Preparation	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Concession Stand Relocation	2024	Grading	Off-Road Equipment	0.002823	0.002372	0.022776	0.021449	3.16E-05	0.001068		0.001068	0.000983		0.000983	3.108328	3.108328	0.000126	2.52E-05		3.119	Diesel	22.45	305
Visitor Facilities	Concession Stand Relocation	2024	Grading	Worker	7.1E-05	6.14E-05	5.61E-05	0.000691	0	0	0.000125	0.000125	0	2.94E-05	2.94E-05	0.119114	0.119114	6.57E-06	4.77E-06	0.00022	0.1207	Gas	17.86	15
Visitor Facilities	Concession Stand Relocation	2024	Grading	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Concession Stand Relocation	2024	Grading	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Concession Stand Relocation	2024	Building Construction	Off-Road Equipment	0.073924	0.062116	0.621138	0.774413	0.001337	0.028332		0.028332	0.026065		0.026065	131.3858	131.3858	0.00533	0.001066		131.837	Diesel	22.45	12,902
Visitor Facilities	Concession Stand Relocation	2024	Building Construction	Worker	0.001191	0.001031	0.000942	0.011596	0	0	0.002106	0.002106	0	0.000493	0.000493	1.999117	1.999117	0.00011	8E-05	0.00373	2.02571	Gas	17.86	247
Visitor Facilities	Concession Stand Relocation	2024	Building Construction	Vendor	0.000164	0.000107	0.003764	0.001247	1.97E-05	3.94E-05	0.000747	0.000787	3.94E-05	0.000207	0.000246	2.566978	2.566978	4.75E-05	0.000391	0.00299	2.68474	Diesel	22.45	252
Visitor Facilities	Concession Stand Relocation	2024	Building Construction	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Concession Stand Relocation	2024	Architectural Coating	Off-Road Equipment	0.000991	0.000819	0.005448	0.00688	1.04E-05	0.000191		0.000191	0.000176		0.000176	0.726775	0.726775	2.95E-05	5.9E-06		0.72927	Diesel	22.45	71
Visitor Facilities	Concession Stand Relocation	2024	Architectural Coating	Worker	1.29E-05	1.11E-05	1.02E-05	0.000125	0	0	2.28E-05	2.28E-05	0	5.33E-06	5.33E-06	0.021612	0.021612	1.19E-06	8.65E-07	4E-05	0.0219	Gas	17.86	3
Visitor Facilities	Concession Stand Relocation	2024	Architectural Coating	Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0
Visitor Facilities	Concession Stand Relocation	2024	Architectural Coating	Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Diesel	22.45	0

= CO2e calculated, as it was not included in the CalEEMod output files.

Sources:

[a] Modeled by AECOM in 2023.

[b] U.S. Energy Information Administration released October 5, 2022 (https://www.eia.gov/environment/emissions/co2_vol_mass.php)

Carnegie State Vehicle Recreation Area General Plan

Operational Transportation Energy Consumption

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Statewide
Region: California

Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Onroad Annual VMT: **753,450**

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consumpti	Fuel Consump	Kwh/mile	% VMT	Project Annual VMT	Project Annual Fuel Consumption (gallons)	Project Annual Electricity Consumption
Statewide Totals	2050	LDA	Aggregate	Aggregate	Gasoline	12955078.89	1.73685E+11	1.73685E+11	0	20917198249	0	4728524.26		44.66%	336495.16	9161.009849	0
Statewide Totals	2050	LDA	Aggregate	Aggregate	Diesel	8270.794529	101449790.4	101449790.4	0	12856194.49	0	1833.84072		0.03%	196.55	3.552870199	0
Statewide Totals	2050	LDA	Aggregate	Aggregate	Electricity	1802523.436	24641975251	0	24641975251	2930239206	9513836260	0	0.3860825	6.34%	47741.19	0	18432.03988
Statewide Totals	2050	LDA	Aggregate	Aggregate	Plug-in Hybrid	610876.9213	8261768124	3365033279	4896734845	876513696.1	1478959869	117861.624	0.3020298	2.12%	16006.29	228.3442867	4834.377195
Statewide Totals	2050	LDT1	Aggregate	Aggregate	Gasoline	976830.1073	12058031165	12058031165	0	1530006771	0	379962.677		3.10%	23361.15	736.1370357	0
Statewide Totals	2050	LDT1	Aggregate	Aggregate	Diesel	11.27726334	143883.3962	143883.3962	0	17999.86446	0	4.86952922		0.00%	0.28	0.009434192	0
Statewide Totals	2050	LDT1	Aggregate	Aggregate	Electricity	30411.55048	401647768.8	0	401647768.8	49044927.98	155069188.6	0	0.3860825	0.10%	778.15	0	300.4299622
Statewide Totals	2050	LDT1	Aggregate	Aggregate	Plug-in Hybrid	23138.66513	301209231.3	122553517	178655714.3	33200397.97	53959350.51	4344.72012	0.3020298	0.08%	583.56	8.417430396	176.2527121
Statewide Totals	2050	LDT2	Aggregate	Aggregate	Gasoline	7787615.711	1.00244E+11	1.00244E+11	0	1245610478	0	3276888.05		25.78%	194212.26	6348.620014	0
Statewide Totals	2050	LDT2	Aggregate	Aggregate	Diesel	29899.69571	384777030.3	384777030.3	0	47835190.96	0	9631.42571		0.10%	745.46	18.65985686	0
Statewide Totals	2050	LDT2	Aggregate	Aggregate	Electricity	316975.8993	2947273434	0	2947273434	514292095.7	1137890797	0	0.3860825	0.76%	5710.03	0	2204.541678
Statewide Totals	2050	LDT2	Aggregate	Aggregate	Plug-in Hybrid	215228.8062	2793514227	1137681305	1655832922	308819976.4	500110894.2	40398.5949	0.3020298	0.72%	5412.13	78.26795537	1634.62606
Statewide Totals	2050	MCY	Aggregate	Aggregate	Gasoline	751898.9766	1423731635	1423731635	0	521817889.8	0	33266.7615		0.37%	2758.33	64.45079126	0
Statewide Totals	2050	MDV	Aggregate	Aggregate	Gasoline	4525945.345	56393080673	56393080673	0	7187126648	0	2233764.92		14.50%	109255.56	4327.680541	0
Statewide Totals	2050	MDV	Aggregate	Aggregate	Diesel	50618.16341	615061664.9	615061664.9	0	79437368.28	0	20041.0401		0.16%	1191.62	38.82737112	0
Statewide Totals	2050	MDV	Aggregate	Aggregate	Electricity	291460.9114	2673707337	0	2673707337	470592767.8	1032271705	0	0.3860825	0.69%	5180.02	0	1999.915988
Statewide Totals	2050	MDV	Aggregate	Aggregate	Plug-in Hybrid	137244.3216	1725306359	702789165.4	1022517194	196924328.6	308830668.5	25321.9878	0.3020298	0.44%	3342.60	49.0586421	1009.563763
Statewide Totals	2050	MH	Aggregate	Aggregate	Gasoline	45271.3367	157906067.8	157906067.8	0	1480964.859	0	34001.6786		0.04%	305.93	65.87461444	0
Statewide Totals	2050	MH	Aggregate	Aggregate	Diesel	29447.47369	89927267.71	89927267.71	0	962932.3898	0	9284.48811		0.02%	174.22	17.98770238	0
																	10,915,130,936

Category	Amount	Units
Diesel (heat content)	5.8	MMBtu/barrel
Motor Gasoline	5.25	MMBtu/barrel
Gallons per Barrel	42	gallons/barrel
		MMBtu/KWh

Source: The Climate Registry. 2021. 2021 Climate Registry Default Emission Factors: Table 2.1 (https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf)

Project Mobile Energy		
Gallons/year, Diesel	**79**	**Diesel**
Gallons/year, Gasoline	20,704	Gasoline
KWh/year, Electricity	22,937	Electricity
Gallons/year, Gasoline, Plug-in Hybrid	364	Plug-in Hybrid
KWh/year, Electricity, Plug-in Hybrid	7,655	Plug-in Hybrid
KWh/year, EV and Hybrid	**30,592**	**EV + Hybrid**
Gallons/year, Gasoline + Hybrid	**23,183**	**Gasoline + Hybrid**
Gallons/year, Natural Gas	-	Natural Gas

OHV Type	CO2e MT/yr	Fuel	Emission Factor (lb CO_2/gallon) [a]	Gallons
OHMC	13.84	Gas	17.86	1,708
ATV	2.54	Gas	17.86	313
4X4	0.75	Gas	17.86	93

a) U.S. Energy Information Administration released October 5, 2022 (https://www.eia.gov/environment/emissions/co2_vol_mass.php)

Carnegie State Vehicle Recreation Area General Plan

Construction-Related Emissions:

Number	Category	Component	Construction Start Year	Construction Duration / Operational	Start of Operation Year	ROG Max lb/day	ROG tpy	NO_x Max lb/day	NO_x tpy	PM_{10} (Exhaust) Max lb/day	PM_{10} (Exhaust) tpy	PM_{10} (total) Max lb/day	PM_{10} (total) tpy	$PM_{2.5}$ (Exhaust) Max lb/day	$PM_{2.5}$ (Exhaust) tpy	$PM_{2.5}$ (total) Max lb/day	$PM_{2.5}$ (total) tpy	CO Max lb/day	CO tpy	SO_2 Max lb/day	SO_2 tpy
2	Visitor Facilities	Campground Remodel	2026	3 months	2026	4.16	0.08	35.37	0.57	1.44	0.02	9.49	0.10	1.33	0.02	5.36	0.06	36.09	0.69	0.08	0.00
3a	Visitor Facilities	New Group Camping - Campsites for up to 30 people.	2023	1 month	2024	2.33	0.02	19.88	0.14	0.85	0.01	3.11	0.01	0.78	0.01	1.83	0.01	18.49	0.15	0.04	0.00
3b	Visitor Facilities	New Group Camping - New Restrooms	2023	3 months	2024	3.24	0.06	20.47	0.42	0.88	0.02	3.10	0.02	0.81	0.02	1.85	0.02	19.57	0.44	0.06	0.00
4	Visitor Facilities	New Dump Station	2025	1 month	2025	1.57	0.01	12.84	0.08	0.56	0.00	2.72	0.01	0.52	0.00	1.54	0.00	13.42	0.11	0.03	0.00
5	Visitor Facilities	New Campfire Center - Amphitheater	2024	3 months	2024	1.26	0.02	11.68	0.19	0.54	0.01	2.70	0.01	0.50	0.01	1.52	0.01	11.39	0.23	0.02	0.00
6	Visitor Facilities	New Campfire Center - Relocating Water Tower	2023	1 week	--	1.78	0.00	16.18	0.03	0.73	0.00	2.80	0.00	0.67	0.00	1.67	0.00	14.64	0.03	0.03	0.00
7	Visitor Facilities	New Kid's Minibike Track	2024	1 month	--	2.11	0.02	17.62	0.15	0.76	0.01	6.07	0.02	0.70	0.01	3.27	0.01	16.75	0.15	0.04	0.00
8	Visitor Facilities	New Interpretive Loop Trails	2025	2 weeks	--	0.07	0.00	0.87	0.00	0.03	0.00	2.60	0.01	0.02	0.00	1.34	0.01	1.61	0.01	0.00	0.00
9	Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	1 month	--	0.73	0.01	5.63	0.04	0.46	0.00	3.04	0.03	0.43	0.00	1.74	0.02	2.50	0.02	0.00	0.00
10	Visitor Facilities	New Front Hills Motorcycle Trail	2025	6 weeks	--	0.06	0.00	0.86	0.01	0.03	0.00	2.58	0.04	0.02	0.00	1.34	0.02	1.51	0.02	0.00	0.00
11	Visitor Facilities	New Visitor Recreation Area	2026	6 weeks	--	1.05	0.01	9.21	0.09	0.42	0.00	2.55	0.01	0.39	0.00	1.40	0.01	9.98	0.11	0.02	0.00
12	Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	1 month	--	0.06	0.00	0.86	0.01	0.03	0.00	2.58	0.03	0.02	0.00	1.34	0.01	1.51	0.02	0.00	0.00
13	Visitor Facilities	Reopening the Franciscan Riding Ares	2025	1 month	--	0.06	0.00	0.86	0.01	0.03	0.00	2.58	0.03	0.02	0.00	1.34	0.01	1.51	0.02	0.00	0.00
14	Visitor Facilities	Other Visitor Facilities - New Restroom	2026	3 months	2026	2.81	0.05	15.42	0.36	0.63	0.01	2.85	0.02	0.58	0.01	1.62	0.02	17.52	0.45	0.04	0.00
15	Visitor Facilities	4x4 Practice Area Improvements	2024	1 month	--	0.07	0.00	0.93	0.01	0.03	0.00	2.59	0.03	0.03	0.00	1.34	0.02	1.52	0.02	0.00	0.00
33	Visitor Facilities	Concession Stand Relocation	2024	12 months	2025	2.22	0.09	11.42	0.71	0.53	0.03	2.67	0.04	0.49	0.03	1.51	0.03	11.06	0.89	0.02	0.00
16	Operations Facilities	SVRA Maintenance Area Improvements	2024	12 months	2025	3.95	0.10	11.42	0.72	0.53	0.03	2.67	0.04	0.49	0.03	1.51	0.03	11.06	0.91	0.02	0.00
17	Operations Facilities	Ranger Station Office and Yard Expansion - Ranger Station	2027	12 months	2028	1.93	0.07	8.72	0.58	0.39	0.02	2.53	0.03	0.36	0.02	1.38	0.02	9.83	0.86	0.02	0.00
18	Operations Facilities	Ranger Station Office and Yard Expansion - Operations Yard	2025	3 months	2025	9.22	0.03	10.10	0.16	0.46	0.01	2.60	0.01	0.43	0.01	1.44	0.01	10.36	0.22	0.02	0.00
19	Operations Facilities	Emergency Helicopter Pad Relocation	2024	1 week	--	2.87	0.00	25.25	0.03	1.06	0.00	3.91	0.00	0.98	0.00	2.15	0.00	24.95	0.03	0.06	0.00
20	Operations Facilities	Volunteer Training Area Enhancements	2024	3 months	2024	1.53	0.02	11.42	0.18	0.53	0.01	2.67	0.01	0.49	0.01	1.51	0.01	11.06	0.22	0.02	0.00
21	Operations Facilities	Campground Host Sites	2023	1 month	2024	2.32	0.02	19.59	0.14	0.85	0.01	3.05	0.01	0.78	0.01	1.81	0.01	18.42	0.15	0.04	0.00
22	Operations Facilities	New Greenhouse	2023	4 weeks	--	1.28	0.00	12.59	0.04	0.60	0.00	2.67	0.00	0.55	0.00	1.55	0.00	11.37	0.04	0.02	0.00
23	Operations Facilities	Park Headquarters Area Improvements	2025	4 months	2025	7.91	0.06	14.10	0.37	0.64	0.01	3.49	0.02	0.59	0.01	1.95	0.01	14.93	0.42	0.02	0.00
24	Operations Facilities	Park Headquarters Area Improvements - Modular and Trailer Homes for SVRA Staff	2026	2 months	2026	28.60	0.04	9.21	0.10	0.42	0.00	2.55	0.01	0.39	0.00	1.40	0.00	9.98	0.14	0.02	0.00
25	Operations Facilities	Water Plant Upgrade	2024	6 weeks	2024	1.22	0.01	11.42	0.09	0.53	0.00	2.67	0.01	0.49	0.00	1.51	0.00	11.06	0.11	0.02	0.00
26	Operations Facilities	Other Operations Facility Projects - New Maintenance Area/Shop Concrete Bridge	2026	3 months	--	1.05	0.02	9.22	0.12	0.42	0.01	2.56	0.02	0.39	0.00	1.40	0.01	9.98	0.15	0.02	0.00
27	Operations Facilities	Other Operations Facility Projects - New/Revamped Low Water Creek Crossings	2026	6 months	--	1.05	0.04	9.21	0.35	0.42	0.02	2.55	0.06	0.39	0.01	1.40	0.03	9.98	0.45	0.02	0.00
28	Operations Facilities	Other Operations Facility Projects - Staff and Public EV Charging Stations	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Operations Facilities	Other Operations Facility Projects - ATV/MX Track Sprinkler System	2024	3 weeks	2024	1.19	0.01	11.39	0.05	0.53	0.00	2.61	0.01	0.49	0.00	1.49	0.00	10.72	0.05	0.02	0.00
30	Operations Facilities	Other Operations Facility Projects - Facilities for Communication or Technology Support	2024	2 months	2024	4.28	0.02	11.50	0.12	0.53	0.01	2.68	0.01	0.49	0.01	1.51	0.01	11.09	0.15	0.02	0.00
32	Operations Facilities	Additional Employment/Operations	N/A	N/A	2024	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
				Maximum Daily Emissions (lb/day)[1]		38.74	--	88.88	--	3.97	--	23.04	--	3.65	--	12.93	--	93.52	--	0.19	--
				2023 Total Emissions (tpy)		--	0.10	--	0.78	--	0.03	--	0.06	--	0.03	--	0.04	--	0.81	--	0.00
				2023 Average Daily (lb/day)[2]		3.17	--	24.37	--	1.02	--	1.75	--	0.94	--	1.24	--	25.21	--	0.06	--
				2024 Total Emissions (tpy)		--	0.28	--	2.24	--	0.10	--	0.18	--	0.09	--	0.13	--	2.75	--	0.00
				2024 Average Daily (lb/day)[2]		2.15	--	17.22	--	0.77	--	1.41	--	0.71	--	0.99	--	21.13	--	0.04	--
				2025 Total Emissions (tpy)		--	0.10	--	0.65	--	0.03	--	0.14	--	0.02	--	0.08	--	0.81	--	0.00
				2025 Average Daily (lb/day)[2]		2.25	--	15.22	--	0.59	--	3.33	--	0.54	--	1.93	--	18.75	--	0.04	--
				2026 Total Emissions (tpy)		--	0.24	--	1.63	--	0.07	--	0.25	--	0.06	--	0.14	--	2.02	--	0.00
				2026 Average Daily (lb/day)[2]		3.76	--	25.28	--	1.05	--	3.81	--	0.97	--	2.23	--	31.32	--	0.06	--
				2027 Total Emissions (tpy)		--	0.07	--	0.58	--	0.02	--	0.03	--	0.02	--	0.02	--	0.86	--	0.00
				2027 Average Daily (lb/day)[2]		0.55	--	4.43	--	0.16	--	0.23	--	0.15	--	0.17	--	6.65	--	0.01	--
				SJVAPCD AAQA Threshold (Maximum lb/day)		100	--	100	--	--	--	100	--	--	--	100	--	100	--	100	--
				Threshold Exceeded (in any year)?		N	--	N	--	--	--	N	--	--	--	N	--	N	--	N	--
				BAAQMD Significance Threshold (Average lb/day)		54	--	54	--	82	--	--	--	54	--	--	--	--	--	--	--
				Threshold Exceeded (in any year)?		N	--	N	--	N	--	--	--	N	--	--	--	--	--	--	--
				SJVAPCD Significance Threshold (tpy)		--	10	--	10	--	--	--	15	--	--	--	15	--	100	--	27
				Threshold Exceeded (in any year)?		--	N	--	N	--	--	--	N	--	--	--	N	--	N	--	N

1. Determined by summing maximum lb/day from each project within same year and determining the year with the highest maximum lb/day.

2. Determined by taking tpy, converting to lb/year, and dividing by number of construction days in year.

Notes: SJVAPCD = San Joaquin Valley Air Pollution Control District; BAAQMD = Bay Area Air Quality Management District; AAQA = Ambient Air Quality Analysis; ROG = reactive organic gases; NOx = oxides of nitrogen; PM2.5 = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM10 = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; CO

Year	Days of Construction
2023	64
2024	260
2025	86
2026	129
2027	260

Total Days (no overlap unless exceed max pot):	*Lowest Potential if max overlap:*
132.50	*64.50*
	260.71
260.00	*86.00*
260.00	*129.00*
	260.71

Operational Emissions:

Number	Category	Component	Construction Start Year	Construction Duration / Operational	Start of Operation Year	ROG Max lb/day	ROG tpy	NO_x Max lb/day	NO_x tpy	PM_{10} (Exhaust) Max lb/day	PM_{10} (Exhaust) tpy	PM_{10} (total) Max lb/day	PM_{10} (total) tpy	$PM_{2.5}$ (Exhaust) Max lb/day	$PM_{2.5}$ (Exhaust) tpy	$PM_{2.5}$ (total) Max lb/day	$PM_{2.5}$ (total) tpy	CO Max lb/day	CO tpy	SO_2 Max lb/day	SO_2 tpy
2	Visitor Facilities	Campground Remodel	2026	Operational	2026	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
3a	Visitor Facilities	New Group Camping - Campsites for up to 30 people.	2023	Operational	2024	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
3b	Visitor Facilities	New Group Camping - New Restrooms	2023	Operational	2024	0.06	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01	0.00	0.00
4	Visitor Facilities	New Dump Station	2025	Operational	2025	0.12	0.02	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00
5	Visitor Facilities	New Campfire Center - Amphitheater	2024	Operational	2024	0.01	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
14	Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Operational	2026	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
33	Visitor Facilities	Concession Stand Relocation	2024	Operational	2025	0.17	0.03	0.14	0.03	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.35	0.04	0.00	0.00
N/A	Visitor Facilities	Visitor Vehicle/OHV Trips	N/A	Operational	2054	4.66	0.85	0.72	0.13	0.16	0.03	85.99	15.69	0.09	0.02	8.51	1.55	28.68	5.23	0.00	0.00
16	Operations Facilities	SVRA Maintenance Area Improvements	2024	Operational	2025	0.22	0.04	0.11	0.02	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.09	0.02	0.00	0.00
17	Operations Facilities	Ranger Station Office and Yard Expansion - Ranger Station	2027	Operational	2028	0.13	0.02	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.02	0.00	0.00
18	Operations Facilities	Ranger Station Office and Yard Expansion - Operations Yard	2025	Operational	2025	0.08	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
20	Operations Facilities	Volunteer Training Area Enhancements	2024	Operational	2024	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
21	Operations Facilities	Campground Host Sites	2023	Operational	2024	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
23	Operations Facilities	Park Headquarters Area Improvements	2025	Operational	2025	0.08	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.01	0.00	0.00
24	Operations Facilities	Park Headquarters Area Improvements - Modular and Trailer Homes for SVRA Staff	2026	Operational	2026	0.42	0.05	0.11	0.01	0.23	0.01	0.23	0.01	0.22	0.01	0.22	0.01	2.01	0.10	0.01	0.00
25	Operations Facilities	Water Plant Upgrade	2024	Operational	2024	0.08	0.01	0.32	0.02	0.03	0.00	0.03	0.00	0.03	0.00	0.03	0.00	0.24	0.01	0.00	0.00
29	Operations Facilities	Other Operations Facility Projects - ATV/MX Track Sprinkler System	2024	Operational	2024	0.94	0.17	4.91	0.90	0.55	0.10	0.55	0.10	0.55	0.10	0.55	0.10	4.55	0.83	0.00	0.00
30	Operations Facilities	Other Operations Facility Projects - Facilities for Communication or Technology Support	2024	Operational	2024	0.04	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
32	Operations Facilities	Additional Employment/Operations	N/A	N/A	2024	0.15	0.026	0.22	0.04	0.00	0.00	0.33	0.06	0.00	0.00	0.09	0.02	1.78	0.27	0.00	0.00
				Maximum Daily Emissions (lb/day)[1]		7.23	--	6.73	--	1.00	--	87.17	--	0.93	--	9.44	--	38.23	--	0.02	--
					Total Annual Emissions	--	1.27	--	1.17	--	0.15	--	15.87	--	0.14	--	1.69	--	6.57	--	0.00
					Average Daily (lb/day)[2]	6.97	--	6.42	--	0.81	--	86.97	--	0.74	--	9.24	--	36.03	--	0.01	--
				SJVAPCD AAQA Threshold (Max lb/day)		100	--	100	--	--	--	100	--	--	--	100	--	100	--	100	--
					Threshold Exceeded?	N	--	N	--	--	--	N	--	--	--	N	--	N	--	N	--
				BAAQMD Significance Threshold (Average lb/day and tpy)		54	10	54	10	82	15	--	--	54	10	--	--	--	--	--	--
					Threshold Exceeded?	N	N	N	N	N	N	--	--	N	N	--	--	--	--	--	--
				SJVAPCD Significance Threshold (tpy)		--	10	--	10	--	--	--	15	--	--	--	15	--	100	--	27
					Threshold Exceeded?	--	N	--	N	--	--	--	Y	--	--	--	N	--	N	--	N

1. Determined by summing maximum lb/day from each project.

2. Determined by taking tpy, converting to lb/year, and dividing by number of operation days in year (365).

Notes: SJVAPCD = San Joaquin Valley Air Pollution Control District; BAAQMD = Bay Area Air Quality Management District; AAQA = Ambient Air Quality Analysis; ROG = reactive organic gases; NOx = oxides of nitrogen; PM2.5 = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM10 = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; CO

General Plan components without any expected operational emissions are not included within this table.

Carnegie State Vehicle Recreation Area General Plan

GHG Construction-Related Emissions:

Number	Category	Component	Construction Start Year	Construction Duration / Operational	Start of Operation Year (Earliest Possible)	GHG Emissions (Metric Tons CO_2e)
2	Visitor Facilities	Campground Remodel	2026	3 months	2026	159.12
3a	Visitor Facilities	New Group Camping - Campsites for up to 30 people.	2023	1 month	2024	38.05
3b	Visitor Facilities	New Group Camping - New Restrooms	2023	3 months	2024	116.66
4	Visitor Facilities	New Dump Station	2025	1 month	2025	25.28
5	Visitor Facilities	New Campfire Center - Amphitheater	2024	3 months	2024	38.84
6	Visitor Facilities	New Campfire Center - Relocating Water Tower	2023	1 week	--	6.40
7	Visitor Facilities	New Kid's Minibike Track	2024	1 month	--	39.98
8	Visitor Facilities	New Interpretive Loop Trails	2025	2 weeks	--	1.21
9	Visitor Facilities	New Front Hills/ Riparian Pedestrian Trail	2026	1 month	--	2.66
10	Visitor Facilities	New Front Hills Motorcycle Trail	2025	6 weeks	--	3.45
11	Visitor Facilities	New Visitor Recreation Area	2026	6 weeks	--	18.03
12	Visitor Facilities	Reopening the Waterfall Canyon Areas	2025	2 months	--	2.45
13	Visitor Facilities	Reopening the Franciscan Riding Ares	2025	2 months	--	2.45
14	Visitor Facilities	Other Visitor Facilities - New Restroom	2026	3 months	2026	119.39
15	Visitor Facilities	4x4 Practice Area Improvements	2024	1 month	--	2.88
33	Visitor Facilities	Concession Stand Relocation	2024	12 months	2025	152.18
16	Operations Facilities	SVRA Maintenance Area Improvements	2024	12 months	2025	156.89
17	Operations Facilities	Ranger Station Office and Yard Expansion - Ranger Station	2027	12 months	2028	147.78
18	Operations Facilities	Ranger Station Office and Yard Expansion - Operations Yard	2025	3 months	2025	36.49
19	Operations Facilities	Emergency Helicopter Pad Relocation	2024	1 week	--	6.91
20	Operations Facilities	Volunteer Training Area Enhancements	2024	3 months	2024	37.75
21	Operations Facilities	Campground Host Sites	2023	1 month	2024	38.36
22	Operations Facilities	New Greenhouse	2023	4 weeks	--	4.98
23	Operations Facilities	Park Headquarters Area Improvements	2025	4 months	2025	68.38
24	Operations Facilities	Park Headquarters Area Improvements - Modular and Trailer Homes for SVRA Staff	2026	2 months	2026	25.03
25	Operations Facilities	Water Plant Upgrade	2024	6 weeks	2024	17.84
26	Operations Facilities	Other Operations Facility Projects - New Maintenance Area/Shop Concrete Bridge	2026	3 months	--	22.86
27	Operations Facilities	Other Operations Facility Projects - New/Revamped Low Water Creek Crossings	2026	6 months	--	68.24
28	Operations Facilities	Other Operations Facility Projects - Staff and Public EV Charging Stations	N/A	--	--	--
29	Operations Facilities	Other Operations Facility Projects - ATV/MX Track Sprinkler System	2024	3 weeks	2024	7.27
30	Operations Facilities	Other Operations Facility Projects - Facilities for Communication or Technology Support	2024	2 months	2024	26.12
32	Operations Facilities	Additional Employment/Operations	N/A	N/A	2024	--
					Total Greenhouse Gas Emissions:	**1393.94**
					2023 GHG Emissions:	204
					2024 GHG Emissions:	487
					2025 GHG Emissions:	140
					2026 GHG Emissions:	415
					2027 GHG Emissions:	148
				Amortized Greenhouse Gas Emissions (over 30 years)		***46.46***

Note: 30 years represents the typical life of a State Parks General Plan.

Overall GHG Emissions:

Number	Category	Component	Construction Start Year	Construction Duration / Operational	Start of Operation Year (Earliest Possible)	Metric Tons CO_2e per Year
					Amortized Construction Emissions	**46.46**
Operational GHG Emissions						
2	Visitor Facilities	Campground Remodel	2026	Operational	2026	0.00
					Area	0.00
					Energy	0.00
					Waste	0.00
					Water	0.00
					Refrigerant	0.00
3a	Visitor Facilities	New Group Camping - Campsites for up to 30 people.	2023	Operational	2024	0.00
					Area	0.00
					Energy	0.00
					Waste	0.00
					Water	0.00
					Refrigerant	0.00
3b	Visitor Facilities	New group Camping = New Restrooms	2023	Operational	2024	48.97
					Area	0.36
					Energy	42.18
					Waste	2.92
					Water	3.51
					Refrigerant	0.00
4	Visitor Facilities	New Dump Station	2025	Operational	2025	20.25
					Area	0.00
					Energy	16.58
					Waste	1.64
					Water	2.02
					Refrigerant	0.00
5	Visitor Facilities	New Campfire Center - Amphitheater	2024	Operational	2024	0.00
					Area	0.00
					Energy	0.00
					Waste	0.00
					Water	0.00
					Refrigerant	0.00
14	Visitor Facilities	Other Visitor Facilities - New Restroom	2026	Operational	2026	7.01
					Area	0.00
					Energy	6.08
					Waste	0.42
					Water	0.51
					Refrigerant	0.00
33	Visitor Facilities	Concession Stand Relocation	2024	Operational	2025	59.34
					Area	0.08
					Energy	42.56
					Waste	2.05
					Water	13.64
					Refrigerant	1.01
N/A	Visitor Facilities	Visitor Vehicles	N/A	Operational	2054	162.90
					Mobile	162.90
					Area	0.00
					Energy	0.00
					Waste	0.00
					Water	0.00
					Refrigerant	0.00
16	Operations Facilities	SVRA Maintenance Area Improvements	2024	Operational	2025	37.59
					Area	0.00
					Energy	30.44
					Waste	3.02
					Water	3.72
					Refrigerant	0.41
17	Operations Facilities	Ranger Station Office and Yard Expansion - Ranger Station	2027	Operational	2028	23.42
					Area	0.06
					Energy	15.01
					Waste	3.79
					Water	4.55
					Refrigerant	0.00
18	Operations Facilities	Ranger Station Office and Yard Expansion - Operations Yard	2025	Operational	2025	16.16
					Area	0.00
					Energy	12.22
					Waste	1.79
					Water	2.15
					Refrigerant	0.00
20	Operations Facilities	Volunteer Training Area Enhancements	2024	Operational	2024	9.17
					Area	0.00
					Energy	3.14
					Waste	2.74
					Water	3.29
					Refrigerant	0.00
21	Operations Facilities	Campground Host Sites	2023	Operational	2024	0.00
					Area	0.00
					Energy	0.00
					Waste	0.00
					Water	0.00
					Refrigerant	0.00
23	Operations Facilities	Park Headquarters Area Improvements	2025	Operational	2025	9.29
					Area	0.03
					Energy	8.03
					Waste	0.56
					Water	0.67
					Refrigerant	0.00
24	Operations Facilities	Park Headquarters Area Improvements - Modular and Trailer Homes for SVRA Staff	2026	Operational	2026	16.28
					Area	4.41
					Energy	9.83
					Waste	0.39
					Water	1.64

					Refrigerant	0.01
25	Operations Facilities	Water Plant Upgrade	2024	Operational	2024	4.85
					Area	
					Energy	2.22
					Waste	0.55
					Water	0.67
					Refrigerant	0.03
					Stationary	1.38
29	Operations Facilities	Other Operations Facility Projects - ATV/MX Track Sprinkler System	2024	Operational	2024	79.99
					Area	0.00
					Energy	0.00
					Waste	0.00
					Water	0.00
					Refrigerant	79.99
					Stationary	
30	Operations Facilities	Other Operations Facility Projects - Facilities for Communication or Technology Support	2024	Operational	2024	6.99
					Area	
					Energy	5.66
					Waste	0.56
					Water	0.69
					Refrigerant	0.08
32	Operations Facilities	Additional Employment/Operations	N/A	Operational	2024	65.77
					Mobile	65.77
					Area	0.00
					Energy	0.00
					Waste	0.00
					Water	0.00
					Refrigerant	0.00
				Totals	**Mobile**	**229**
					Area	**5**
					Energy	**194**
					Waste	**20**
					Water	**37**
					Refrigerant	**82**
					Stationary	**1**
					Total Operational Emissions	**568.00**
					Total Annual Construction+Operational Emissions	**614.46**

Carnegie State Vehicle Recreation Area General Plan

Operational Mobile Energy Consumption

Projected Future Year (2054) Net Increase in Mobile Source Operational Emissions

													Emission Factors (g/mile)							Emissions (lb/year)						Emissions (tons/year)						Emissions (metric tons/year)	
	Vehicles	Vistors	OHVs	OHV Counts	Avg Activity Distance		Avg Activity Time		Avg Speed		Total VMT		Vehicle Type	Tech Group	HC	CO	NOX	Total PM	PM2.5	CO2	HC	CO	NOX	PM10	PM2.5	CO2	HC	CO	NOX	PM10	PM2.5	CO2	CO2e
On-Site OHV Activity	9,442	23,604	14,163	OHMC										G2	34.2	54.1	0.01	0.42	-	79.58	1246	1971	0	14	10	2899	6.23E-01	9.85E-01	1.82E-04	6.88E-03	5.20E-03	1.31	1.38
				11,107	14.9	miles	3.4	hours	4.366102	mi/hr	165,225	mi/yr	OHMC	G4 Pre-1998	3.59	39.1	0.49	0.06	-	79.58	24	256	3	0	0	522	1.18E-02	1.28E-01	1.61E-03	1.77E-04	1.34E-04	0.24	0.25
														G4 1998+	0.68	19.8	0.64	0.06	-	79.58	218	6361	206	17	13	25567	1.09E-01	3.18E+00	1.03E-01	8.67E-03	6.55E-03	11.60	12.21
				ATV										G2	34.2	54.1	0.01	0.42	-	109.63	166	262	0	2	1	532	8.29E-02	1.31E-01	2.42E-05	9.17E-04	6.93E-04	0.24	0.25
				2,444	9	miles	3.2	hours	2.8	mi/hr	21,998	mi/yr	ATV	G4 Pre-1998	3.59	39.1	0.64	0.06	-	109.63	3	34	1	0	0	96	1.57E-03	1.71E-02	2.79E-04	2.36E-05	1.78E-05	0.04	0.05
														G4 1998+	0.68	19.8	0.49	0.06	-	109.63	29	847	21	2	2	4689	1.45E-02	4.23E-01	1.05E-02	1.15E-03	8.73E-04	2.13	2.24
				4X4										LDT1/LDT2	0.004	0.54	0.02	0.0005	0.0005	260.33	0.02	3.30	0.13	0.003	0.003	1578	1.19E-05	1.65E-03	6.29E-05	1.57E-06	1.44E-06	0.72	0.75
				611	4.5	miles	1.2	hours	3.857143	mi/hr	2,750	mi/yr	4X4																				

					Emission Factors (lb/VMT)						Emissions (lb/year)						Emissions (tons/year)						Emissions (metric tons/year)	
	OHVs	Mean OHV Speed		Mean OHV VMT		HC	CO	NOX	PM10	PM2.5	CO2	HC	CO	NOX	PM10	PM2.5	CO2	HC	CO	NOX	PM10	PM2.5	CO2	CO2e
On-Site Fugitive Dust	14,163	4.1	mi/hr	13.4	miles	-	-	-	0.164922	0.016179	-	-	-	-	31330.63	3073.602	-	-	-	-	15.66531	1.536801	-	-

					Emissions Factors (g/mi for RunEx, BW, TW and g/trip for StartEx)															Emissions (lb/year)						Emissions (tons/year)						Emissions (metric tons/year)	
	Vehicles	Average Miles Driven Roundtrip	VMT		NOx_RUNEX	NOx_STREX	PM2.5_RUNEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_STREX	ROG_RUNEX	ROG_STREX	CO_RUNEX	CO_STREX	ROG	CO	NOX	PM10	PM2.5	CO2	ROG	CO	NOX	PM10	PM2.5	CO2	CO2e
On-Road Vehicles	9,442	62	585,391	mi/yr	0.02068	0.1605661	0.0004	0.0007	0.001997	0.002797	0.00048407	0.000759	0.007989	0.007990146	234.745	55.99214	0.0062	0.131717	0.512773	1.686446	13.48553	731.9766	33.37866	21.27853	6.790853	305284.81	6.74E-03	3.66E-01	1.67E-02	1.06E-02	3.40E-03	138.48	145.76

Total OHMC Emissions =	0.74	4.3	0.10	0.02	0.01	13.1	13.8
Total ATV Emissions =	0.10	0.57	0.01	0.00	0.00	2.41	2.54
Total 4x4 Emissions =	0.00	0.00	0.00	0.00	0.00	0.72	0.75
On-Site Fugitive Dust Emissions =	-	-	-	15.7	1.5	-	-
On-Road Vehicle Emissions =	0.01	0.37	0.02	0.01	0.00	138	146
On-Road Fugitive Dust Emissions =	-	-	-	0.07	0.02	-	-
OHV Emissions (tons/year) =	0.84	4.9	0.12	0.02	0.01	16.3	17.1
Fugitive Dust Emissions (tons/year) =	-	-	-	16	1.6	-	-
On-Road Vehicle Emissions (tons/year) =	0.01	0.37	0.02	0.01	0.00	138	146
2054 Total Increase (tons/year) =	**0.85**	**5.2**	**0.13**	**16**	**1.6**	**155**	**163**
OHV Emissions (lb/day) =	4.6	27	0.63	0.10	0.07	89	94
Fugitive Dust Emissions (lb/day) =	-	-	-	86	8.4	-	-
On-Road Vehicle Emissions (lb/day) =	0.04	2.0	0.09	0.06	0.02	759	799
2054 Total Increase (lb/day) =	**4.7**	**29**	**0.7**	**86**	**8.5**	**934.7**	**983.9**

Conversion Factors and Assumptions:

1 metric ton =	2204.6	pounds
% of G2 vehicles in 2054 =	10%	* Based on DMV vehicle registration data in 2010
% of G4 Pre-1998 vehicles in 2054 =	2%	* Estimated based on the very old age of pre-1998 vehicles in 2054
% of G4 1998+ vehicles in 2054 =	88%	

AP-42, Section 13.2.2 - Unpaved Road Fugitive Dust Equation Inputs

surface material silt content - public (%) =	5	
surface material silt content - industrial (%) =	13.5	
surface material moisture content (%) =	6.515	
emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear (PM2.5) =	0.0004	lb/VMT
emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear (PM10) =	0.0005	lb/VMT
fugitive dust constant k (PM2.5) =	0.18	lb/VMT
fugitive dust constant k (PM10) =	1.8	lb/VMT
fugitive dust constant a =	1	
fugitive dust constant c =	0.2	
fugitive dust constant d =	0.5	

Carnegie State Vehicle Recreation Area General Plan

Paved Roads Fugitive Dust Emissions

Paved Roads (Visitor Trips)	100%

Notes/Assumptions:

Assumes 100% paved roads in Alameda/San Joaquin Counties.

Paved Road Dust $EF_{DUST} = [(k(sL)^{0.91} \times (W)^{1.02}](1 - P/4N))$

Source: AP-42 Section 13.2.1 (Paved Roads) - http://www.epa.gov/ttnchie1/ap42/ch13/final/c13s0201.pdf

Variable	Value	Description
k (PM10)	0.0022	particle size multiplier for particle size range and units of interest (lb/VMT)
k (PM2.5)	0.00054	particle size multiplier for particle size range and units of interest (lb/VMT)
sL	0.032	road surface silt loading (g/m^2) default for collector streets (https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf, Table 4)
W	2.40	average weight of vehicles (https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf, Table 4)
P	65	number of "wet" days with at least 0.254 mm (0.01 inches) of precipitation (https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf, Table 5)
N	365	number of days in averaging period

All Vehicle Trip Types

EF (PM10)	0.1016	g/mi
EF (PM2.5)	0.0249	g/mi

		Paved Road Dust Emissions	
Vehicle Type	**Total VMT**	**PM_{10} (tons)**	**$PM_{2.5}$ (tons)**
Visitor Trips	585,391	6.55E-02	1.61E-02
Total Paved Road Dust Emissions (tons)		**0.0655**	**0.0161**

San Joaquin County annual growth rate (2020-2060)	0.71%	*Updated from PD dated 071923*	
Alameda County growth rate (2020-2060)	0.43%	*Updated from PD dated 071923*	
Average attendance	55,742	OHVs	*Assumes 1.5 OHVs per vehicle, based on Clay Pit DEIR*
Average attendance	37,162	vehicles	*Assumes 2.5 people per vehicle, based on Clay Pit DEIR*
Average attendance	92,904	people	*From "Carnegie SVRA - Annual.pdf"*

Looked at highest attendance and lowest attendance for years 2009-2019.

	Base year	Base Attendance (vehicles)	Base Attendance (people)	Base Attendance (OHVs)	Annual Growth Rate	Future year	Future Attendance (vehicles)	Future Attendance (people)	Future Attendance (OHVs)	Change in Attendance (vehicles)	Change in Attendance (people)	Change in Attendance (OHVs)
Estimate	**2022**	**37,162**	**92,904**	**55,742**	**0.71%**	**2054**	**46,603**	**116,508**	**69,905**	**9,442**	**23,604**	**14,163**

Note: Future buildout year provided by Parks. Base year of 2022 is the NOP date.

Carnegie SVRA Off-Highway Vehical Field Data Collected October 4 - October 20, 2014

Date	Visitor Info	Vehicle Type	2- or 4-Stroke Engine	Time In	Mileage In	Time Out	Mileage Out	Total Time	Total Mileage
10/4/2014	Yamaha 450	OHMC	4	8:15	-	11:50	-	3:35	17
10/4/2014	YZ250	OHMC	4	8:00	-	13:30	-	5:30	4
10/4/2014	YZ250	OHMC	4	8:00	-	13:45	-	5:45	12
10/4/2014	Kawasaki 450	OHMC	4	8:15	-	13:50	-	5:35	6
10/4/2014	XR250	OHMC	4	9:00	-	14:00	-	5:00	37
10/4/2014	XR250	OHMC	4	9:00	-	14:00	-	5:00	37
10/4/2014	KTX200	OHMC	2	10:30	-	14:20	-	3:50	40
10/4/2014	KTX200	OHMC	2	10:30	-	14:20	-	3:50	40
10/4/2014	KTM300	OHMC	-	10:30	-	13:45	-	3:15	2.9
10/4/2014	-	OHMC	4	10:30	-	14:15	-	3:45	31
10/4/2014	KTM400	OHMC	4	10:30	-	17:00	-	6:30	29
10/4/2014	KTM400	OHMC	4	10:30	-	17:00	-	6:30	29
10/4/2014	150	OHMC	2	10:45	-	13:15	-	2:30	9
10/4/2014	450	OHMC	4	10:50	-	12:00	-	1:10	20
10/4/2014	KTM	OHMC	4	11:00	-	14:15	-	3:15	25
10/4/2014	KTM	OHMC	4	11:00	-	14:15	-	3:15	25
10/4/2014	450	OHMC	4	11:15	-	13:20	-	2:05	3
10/4/2014	KTM	OHMC	4	11:15	-	13:20	-	2:05	2.5
10/4/2014	Honda	OHMC	2	11:15	-	13:20	-	2:05	3
10/4/2014	Honda 70	OHMC	4	11:15	-	13:20	-	2:05	1
10/4/2014	Honda	ATV	-	11:30	-	17:20	-	5:50	10
10/4/2014	Yamaha 450	ATV	-	11:30	-	17:20	-	5:50	10
10/4/2014	XR200	OHMC	4	11:30	-	18:00	-	6:30	10
10/4/2014	XR150	OHMC	4	11:30	-	18:00	-	6:30	4
10/4/2014	XR250	OHMC	4	11:30	-	18:00	-	6:30	4
10/4/2014	Honda	OHMC	2	11:35	-	13:40	-	2:05	2.5
10/4/2014	Honda	OHMC	4	11:35	-	13:40	-	2:05	1.5
10/4/2014	KTM	OHMC	4	11:35	-	18:30	-	6:55	22
10/4/2014	KTM300	OHMC	4	12:00	-	19:00	-	7:00	10
10/4/2014	KTM450	OHMC	4	12:00	-	17:00	-	5:00	15
10/4/2014	Honda	ATV	-	12:00	-	16:30	-	4:30	12
10/4/2014	230	OHMC	4	12:00	-	16:30	-	4:30	8.4
10/5/2014	CRF250	OHMC	4	9:00	-	12:30	-	3:30	15
10/5/2014	CRF450	OHMC	4	9:00	-	12:30	-	3:30	15
10/5/2014	-	OHMC	2	9:00	-	11:00	-	2:00	6.2
10/5/2014	DR150	OHMC	4	9:30	-	12:45	-	3:15	15
10/5/2014	Kawasaki 450	OHMC	4	9:30	-	15:00	-	5:30	3.8
10/5/2014	-	OHMC	4	9:30	-	11:00	-	1:30	3
10/5/2014	CRF250	OHMC	4	9:45	-	10:30	-	0:45	3
10/5/2014	KTM	OHMC	4	9:45	-	12:30	-	2:45	17
10/5/2014	Quad	ATV	-	9:45	-	12:30	-	2:45	7
10/5/2014	KDX	OHMC	4	10:00	-	14:00	-	4:00	17
10/5/2014	Dirt bike	OHMC	4	10:15	-	12:50	-	2:35	8
10/5/2014	XR250	OHMC	4	11:20	-	16:00	-	4:40	16
10/10/2014	KTM	OHMC	2	8:21	1200	10:08	1215.4	1:47	15.4
10/10/2014	Yamaha 450	OHMC	4	8:25	-	10:51	-	2:26	15
10/10/2014	Beta 520	OHMC	4	8:46	9955	-	10003	-	48
10/10/2014	Honda 450	OHMC	4	8:53	-	10:44	-	1:51	3.5
10/10/2014	Honda 250	OHMC	4	8:54	-	9:43	-	0:49	5
10/10/2014	450X	OHMC	4	9:02	-	-	-	-	22.8
10/10/2014	Kawasaki 450	OHMC	4	9:03	-	-	-	-	22.8
10/10/2014	KLX250	OHMC	4	9:22	4216	10:20	4231	0:58	15
10/10/2014	Kawasaki 110	OHMC	4	9:40	100	12:22	105	2:42	5
10/10/2014	Honda 50	OHMC	4	9:40	100	11:05	114	1:25	14
10/10/2014	KX250	OHMC	4	10:12	-	12:42	-	2:30	8
10/10/2014	Yamaha 250	OHMC	4	10:25	-	12:21	-	1:56	5
10/10/2014	Honda 450	OHMC	4	10:45	-	14:02	-	3:17	4.2
10/10/2014	CR250	OHMC	2	10:55	1500	13:00	1506.8	2:05	6.8
10/10/2014	TXC250	OHMC	4	11:15	-	12:35	-	1:20	34.4
10/10/2014	KTM150	OHMC	2	11:17	-	13:44	-	2:27	9
10/10/2014	Honda 450	OHMC	4	9:30	-	11:25	-	1:55	4.5
10/10/2014	CR250	OHMC	2	13:27	-	17:35	-	4:08	15
10/10/2014	KTM	OHMC	2	10:20	-	13:14	-	2:54	12
10/10/2014	KTM	OHMC	2	14:10	45	17:06	60	2:56	15
10/11/2014	KTM	OHMC	4	8:00	-	10:47	-	2:47	16.8
10/11/2014	YZ450	OHMC	4	8:00	-	11:07	-	3:07	4
10/11/2014	KTM300	OHMC	2	9:00	-	11:20	-	2:20	11
10/11/2014	Honda 50	OHMC	4	10:20	-	11:30	-	1:10	2
10/11/2014	Yamaha YZ450	OHMC	4	9:45	-	11:45	-	2:00	30
10/11/2014	Honda	OHMC	4	8:00	-	11:15	-	3:15	25
10/11/2014	42F	OHMC	4	9:15	-	11:07	-	1:52	20
10/12/2014	CRF450	OHMC	4	7:41	-	-	-	-	
10/12/2014	KTM300	OHMC	2	7:45	-	11:36	-	3:51	3
10/12/2014	Honda	OHMC	2	9:10	-	10:00	-	0:50	1.5
10/12/2014	Honda	OHMC	4	9:10	-	10:00	-	0:50	2
10/12/2014	Honda 70	OHMC	4	8:30	-	11:21	-	2:51	5
10/12/2014	KTM450	OHMC	4	9:00	-	12:38	-	3:38	15
10/12/2014	KTM450	OHMC	4	9:00	-	15:30	-	6:30	27
10/12/2014	Kawasaki	OHMC	4	9:00	-	12:30	-	3:30	15
10/12/2014	KTM450	OHMC	4	10:00	-	12:47	-	2:47	15
10/12/2014	KTM	OHMC	2	10:30	-	12:50	-	2:20	20

Carnegie SVRA Off-Highway Vehical Field Data Collected October 4 - October 20, 2014

Date	Visitor Info	Vehicle Type	2- or 4-Stroke Engine	Time In	Mileage In	Time Out	Mileage Out	Total Time	Total Mileage
10/12/2014	Honda 230	OHMC	4	10:00	-	12:55	-	2:55	12
10/12/2014	CRF150	OHMC	4	10:30	-	13:30	-	3:00	2
10/12/2014	KDT140	OHMC	4	10:30	-	13:30	-	3:00	2
10/12/2014	DRZ125	OHMC	4	10:30	-	13:30	-	3:00	2
10/12/2014	TR100	OHMC	4	10:30	-	13:30	-	3:00	2
10/12/2014	KTM575	OHMC	4	10:15	-	13:10	-	2:55	10
10/12/2014	CRF250	OHMC	4	8:30	-	13:20	-	4:50	35
10/12/2014	CRF450	OHMC	4	8:30	-	13:20	-	4:50	32
10/12/2014	KTM	OHMC	4	8:16	-	13:45	-	5:29	18
10/12/2014	Honda CRF450R	OHMC	4	8:00	-	13:45	-	5:45	18
10/12/2014	Yamaha YZ450F	OHMC	4	8:00	-	13:50	-	5:50	23
10/12/2014	Yamaha YZ250F	OHMC	4	8:00	-	13:50	-	5:50	23
10/12/2014	Honda XR600	OHMC	4	9:00	-	14:00	-	5:00	18
10/12/2014	Suzuki RMX250	OHMC	2	9:00	-	14:00	-	5:00	20
10/12/2014	Kawasaki KTX200	OHMC	2	9:00	-	14:20	-	5:20	19
10/12/2014	Yamaha 450F	OHMC	2	10:30	-	14:23	-	3:53	30
10/12/2014	Yamaha WR426	OHMC	4	8:30	-	13:30	-	5:00	32
10/12/2014	Honda CRF450	OHMC	4	13:00	-	14:45	-	1:45	10
10/12/2014	Honda RSOXR	OHMC	4	13:00	-	14:45	-	1:45	3
10/12/2014	Honda CR250	OHMC	4	13:00	-	14:45	-	1:45	3
10/12/2014	Chevy	4X4	-	15:00	-	16:00	-	1:00	4
10/12/2014	Dodge	4X4	-	15:00	-	16:00	-	1:00	4
10/12/2014	Kawasaki KLR650	OHMC	4	14:30	-	15:30	-	1:00	12
10/12/2014	Suzuki 400	OHMC	4	14:30	-	15:30	-	1:00	12
10/15/2014	KTM 250XCW	OHMC	4	12:00	-	13:56	-	1:56	23
10/15/2014	Kawasaki	OHMC	4	12:15	-	14:32	-	2:17	14
10/15/2014	KTM	OHMC	2	12:00	-	14:33	-	2:33	35
10/15/2014	Honda	OHMC	2	12:00	-	14:44	-	2:44	20
10/15/2014	Kawasaki	ATV	4	12:00	-	14:44	-	2:44	20
10/15/2014	Honda Foreman	ATV	4	11:21	-	14:54	-	3:33	15
10/15/2014	Scrambler	ATV	4	11:21	-	14:54	-	3:33	15
10/15/2014	Kawasaki 250F	OHMC	4	17:00	-	19:00	-	2:00	10
10/16/2014	KTM SXF	OHMC	4	9:00	-	12:05	-	3:05	30
10/16/2014	KTM	OHMC	4	9:30	-	12:30	-	3:00	20
10/16/2014	Honda 450R	OHMC	4	10:00	-	12:35	-	2:35	23.5
10/16/2014	Honda	OHMC	4	10:30	-	12:35	-	2:05	23.5
10/16/2014	KTM450	OHMC	4	10:30	-	13:00	-	2:30	18
10/16/2014	Yamaha	OHMC	4	11:00	-	14:20	-	3:20	16
10/16/2014	KX250F	OHMC	4	9:30	-	14:25	-	4:55	18
10/16/2014	DRZ	OHMC	4	12:00	-	14:25	-	2:25	21.5
10/17/2014	Yamaha	OHMC	4	9:00	-	14:00	-	5:00	30
10/17/2014	CR450	OHMC	4	13:00	-	16:30	-	3:30	35
10/17/2014	KTM	OHMC	4	14:00	-	18:30	-	4:30	26
10/17/2014	Honda	OHMC	4	14:00	-	18:30	-	4:30	26
10/18/2014	Kawasaki	OHMC	2	9:00	-	13:40	-	4:40	15
10/18/2014	Honda	OHMC	2	9:00	-	13:40	-	4:40	15
10/18/2014	Kawasaki	OHMC	2	9:00	-	13:40	-	4:40	4
10/18/2014	KTM	OHMC	2	8:30	-	13:45	-	5:15	20
10/18/2014	KTM50	OHMC	2	8:30	-	13:45	-	5:15	4
10/18/2014	Suzuki50	OHMC	2	8:30	-	13:45	-	5:15	5
10/18/2014	K250F	OHMC	4	10:30	-	16:00	-	5:30	30
10/19/2014	KTM	OHMC	4	10:40	-	16:40	-	6:00	15.8
10/19/2014	Yamaha	OHMC	4	11:00	-	11:40	-	0:40	3
10/19/2014	CRF450	OHMC	4	9:00	-	12:10	-	3:10	5
10/19/2014	Yamaha	OHMC	4	10:15	-	12:10	-	1:55	8
10/19/2014	Yamaha 450F	OHMC	4	10:00	-	12:15	-	2:15	2
10/19/2014	3 wheeler	ATV	2	10:00	-	12:20	-	2:20	10
10/19/2014	KTM	OHMC	4	8:45	-	12:25	-	3:40	12
10/19/2014	YZ450F	OHMC	4	8:00	-	12:45	-	4:45	4
10/19/2014	CRF450	OHMC	4	8:00	-	12:45	-	4:45	4
10/19/2014	CRF500	OHMC	2	8:00	-	12:45	-	4:45	4
10/19/2014	Honda 450R	OHMC	4	9:00	-	12:45	-	3:45	12
10/19/2014	Honda 450R	OHMC	4	8:45	-	12:45	-	4:00	25
10/19/2014	Yamaha 250	OHMC	4	8:35	-	12:50	-	4:15	8
10/19/2014	Honda 450	OHMC	2	8:35	-	12:50	-	4:15	8
10/19/2014	Honda 450	OHMC	4	9:15	-	13:00	-	3:45	20
10/19/2014	KTM200	OHMC	4	10:00	-	13:00	-	3:00	5
10/19/2014	Suzuki 250	OHMC	2	10:00	-	13:00	-	3:00	5
10/19/2014	YZ	OHMC	4	12:30	-	13:40	-	1:10	11
10/19/2014	YZ	OHMC	4	12:30	-	13:55	-	1:25	9
10/19/2014	ROV	ATV	2	12:35	-	13:55	-	1:20	5
10/19/2014	Jeep	4X4	-	12:35	-	13:55	-	1:20	5
10/19/2014	Dodge	4X4	-	12:35	-	13:55	-	1:20	5
10/19/2014	KTM	OHMC	4	12:35	-	14:40	-	2:05	10
10/19/2014	KTM	OHMC	4	12:36	-	14:40	-	2:04	10
10/19/2014	CLF	OHMC	4	12:36	-	14:40	-	2:04	10
10/19/2014	KTM450	OHMC	4	12:38	-	13:40	-	1:02	3
10/19/2014	KTM450	OHMC	4	12:38	-	13:40	-	1:02	3
10/19/2014	KTM450	OHMC	4	12:40	-	13:58	-	1:18	16
10/19/2014	450	ATV	2	12:40	-	14:45	-	2:05	4.5
10/19/2014	450	ATV	2	12:40	-	14:45	-	2:05	4.5

Carnegie SVRA Off-Highway Vehical Field Data Collected October 4 - October 20, 2014

Date	Visitor Info	Vehicle Type	2- or 4-Stroke Engine	Time In	Mileage In	Time Out	Mileage Out	Total Time	Total Mileage
10/19/2014	KTM	OHMC	4	12:45	-	15:00	-	2:15	10
10/19/2014	YZ	OHMC	4	12:45	-	15:00	-	2:15	10
10/19/2014	YZ	OHMC	4	12:45	-	15:00	-	2:15	10
10/19/2014	Honda	OHMC	4	12:45	-	16:10	-	3:25	17
10/19/2014	Yamaha	OHMC	4	12:50	-	16:10	-	3:20	17
10/19/2014	Kawasaki	OHMC	2	12:50	-	15:15	-	2:25	13
10/19/2014	Kawasaki	OHMC	2	12:50	-	15:15	-	2:25	13
10/19/2014	Yamaha	OHMC	4	12:50	-	15:35	-	2:45	8
10/19/2014	200	OHMC	4	12:50	-	15:35	-	2:45	8
10/19/2014	-	OHMC	4	12:52	-	15:40	-	2:48	8
10/19/2014	-	OHMC	4	12:52	-	17:10	-	4:18	24
10/19/2014	450	OHMC	4	12:52	-	17:00	-	4:08	24
10/19/2014	Yamaha	ATV	2	12:55	-	15:10	-	2:15	6
10/19/2014	RMZ450	OHMC	4	10:20	-	13:00	-	2:40	30
10/19/2014	CR125	OHMC	2	11:00	-	13:05	-	2:05	10
10/19/2014	WR250	OHMC	2	9:45	-	13:07	-	3:22	10
10/19/2014	Yamaha 250	OHMC	4	10:15	-	13:30	-	3:15	12
10/19/2014	KTM450	OHMC	4	8:10	-	13:40	-	5:30	30
10/19/2014	KX250	OHMC	4	11:00	-	13:40	-	2:40	5
10/19/2014	Honda 350	OHMC	4	8:15	-	13:42	-	5:27	31.1
10/19/2014	Honda	OHMC	2	9:10	-	13:43	-	4:33	20
10/19/2014	Honda 450	OHMC	2	12:15	-	13:45	-	1:30	10
10/19/2014	50 CRF	OHMC	2	11:00	-	13:45	-	2:45	3
10/19/2014	KTM	OHMC	2	12:30	-	13:46	-	1:16	4
10/20/2014	250	OHMC	4	12:55	-	15:50	-	2:55	11
10/20/2014	450	OHMC	4	12:56	-	17:00	-	4:04	14
10/20/2014	Honda 450	OHMC	4	12:56	-	17:10	-	4:14	14
10/20/2014	Honda 450	OHMC	4	12:59	-	18:00	-	5:01	26
10/20/2014	KX250	OHMC	4	12:59	-	18:00	-	5:01	26
10/20/2014	KX250	OHMC	4	13:00	-	18:00	-	5:00	26
10/20/2014	KTM	OHMC	4	13:00	-	18:00	-	5:00	26
10/20/2014	KTM	OHMC	2	13:10	-	18:00	-	4:50	26
10/20/2014	KTM	OHMC	2	13:10	-	18:00	-	4:50	26
10/20/2014	Honda	OHMC	4	13:11	-	16:20	-	3:09	18
10/20/2014	3 wheeler	ATV	2	13:15	-	16:20	-	3:05	3.5
10/20/2014	ROV	ATV	2	13:15	-	16:20	-	3:05	3.5
10/20/2014	KTM	OHMC	4	13:15	-	16:25	-	3:10	28
10/20/2014	CRF	OHMC	4	13:25	-	17:30	-	4:05	11
10/20/2014	450F	OHMC	4	13:25	-	17:30	-	4:05	11
10/20/2014	-	OHMC	4	13:26	-	18:40	-	5:14	22
10/20/2014	Honda 200	OHMC	4	13:26	-	18:40	-	5:14	22
10/20/2014	Yamaha 25	OHMC	4	13:26	-	18:40	-	5:14	22
10/20/2014									

Total:	195	Average:	3:20	14.3
Total 2-Stroke:	47	Avg OHMC:	3:24	14.9
Total 4-Stroke:	148	Avg ATV:	3:12	9.0
% 2-Stroke:	24.1%	Avg 4X4:	1:10	4.5
% 4-Stroke:	75.9%			

From *"3 yr attendance by type.xlsx"* , provided July 3, 2023 by Parks.

2020	MC	ATV	4X4	ROV
Jan	4815	1787	28	20
Feb	4706	559	119	15
Mar	4030	832	184	48
Apr				
May	1648	429	149	30
Jun	2179	966	196	78
Jul	1380	384	149	21
Aug	652	319	88	35
Sep	1328	374	143	18
Oct				
Nov	5686	1743	279	72
Dec	4735	709	148	30
	31,159	8,102	1,483	367
3 yr avg	30974	6985	1759	424

2021	MC	ATV	4X4	ROV
Jan	6186	1605	241	83
Feb	5723	1543	283	91
Mar	5272	1088	198	67
Apr	3876	787	169	63
May	1648	429	149	30
Jun	1042	314	158	21
Jul	1011	403	153	43
Aug	1114	264	126	33
Sep	1157	311	104	25
Oct				
Nov	4943	689	190	45
Dec	2960	619	234	34
	34,932	8,052	2,005	535

2022	MC	ATV	4X4	ROV
Jan	5330	850	602	69
Feb	4400	489	152	57
Mar	3585	944	231	62
Apr	3149	943	144	26
May	1120	375	148	27
Jun	936	179	95	16
Jul				
Aug	1092	335	110	19
Sep	1026	163	96	25
Oct	3553	394	118	46
Nov				
Dec	2639	128	92	24
	26,830	4,800	1,788	371

	3-year Average Monthly Vehicles					Percentage of Total			
	Vehicles	M/C	ATV	4x4	ROV	M/C	ATV	4x4	ROV
January	7148	5444	1414	290		76.2%	19.8%	4.1%	
February	5991	4943	864	185		82.5%	14.4%	3.1%	
March	5455	4296	955	204		78.8%	17.5%	3.7%	
April	4534	3513	865	157		77.5%	19.1%	3.5%	
May	2032	1472	411	149		72.5%	20.2%	7.3%	
June	2022	1386	486	150		68.5%	24.1%	7.4%	
July	1740	1196	394	151		68.7%	22.6%	8.7%	
August	1367	953	306	108		69.7%	22.4%	7.9%	
September	1567	1170	283	114		74.7%	18.0%	7.3%	
October	4065	3553	394	118		87.4%	9.7%	2.9%	
November	6765	5315	1216	235		78.6%	18.0%	3.5%	
December	4088	3445	485	158		84.3%	11.9%	3.9%	
Monthly Average	3898	3057	673	168		78.4%	17.3%	4.3%	
Annual Total	40141	30974	6985	1759		**78.0%**	**17.6%**	**4.4%**	

Note: *Not including ROVs in percentage breakdown because they are assumed to have minimal to no emissions and only represent approximately 1% of total vehicles.*

Assumptions:

OHVs per vehicle	**1.5**
People per vehicle	2.5
Miles driven per OHV per day (per State Parks)	5.5

http://carnegiegeneralplan.com/system/assets/36/original/carnegie_general_plan_survey_summary_20130314.pdf?1363281075

Carnegie SVRA General Plan Online Survey Results

Median distance traveled by visitors	31 miles

Primary reason to visit:	
Ride dirt bikes	76%
Operate recreation utility vehicles/side-by-sides/UTVs	1%
Drive 4-wheel drive	3%
Attend a race/special event	2%

OHMCs: http://powersports.honda.com/OFFROAD.ASPX and http://www.kawasaki.com/
ATVs: http://powersports.honda.com/ATV.ASPX and http://www.kawasaki.com/
Accessed on 10/13/2014

Note: Weights include all necessary materials and fluids to operate correctly, full tank of fuel (more than 90 percent capacity) and tool kit (if supplied).

OHMCs

Company	Model	Class	Weight (pounds)
Honda	XR650L	Dual Sport	346
Honda	CRF250L	Dual Sport	320
Honda	CRF450X	Dual Sport	269
Honda	CRF250X	Dual Sport	254
Honda	CRF450R	Trail	243
Honda	CRF230F	Trail	249
Honda	CRF150F	Trail	234
Honda	CRF125F	Trail	192
Honda	CRF110F	Trail	163
Honda	CRF250R	Competition	231
Honda	CRF150R	Competition	185
Kawasaki	KLX140	Offroad	205
Kawasaki	KLX140L	Offroad	209
Kawasaki	KLX110	Offroad	168
Kawasaki	KLX110L	Offroad	168
Kawasaki	KX100	Motocross	170
Kawasaki	KX250F	Motocross	234
Yamaha	YZ450F	Motocross	245
Yamaha	YZ250F	Motocross	231
Yamaha	YZ85	Motocross	157
Yamaha	WR450F	Offroad	273
Yamaha	WR250F	Offroad	254
Yamaha	TT-R230	Offroad	251
Yamaha	TT-R125LE	Offroad	198
		Average	227

ATV

Company	Model	Class	Weight (pounds)
Honda	TRX400X	ATV	408
Honda	TRX450R	ATV	388
Honda	TRX250X	ATV	379
Honda	TRX90X	ATV	262
Kawasaki	KFX90	ATV	262
Kawasaki	KFX450R	ATV	393
Kawasaki	KFX50	ATV	240
Yamaha	Raptor 700	ATV	422
Yamaha	YFZ450	ATV	385
Yamaha	Raptor 350	ATV	396
Yamaha	Raptor 250	ATV	330
		Average	351

UTV

Company	Model	Class	Weight (pounds)
Honda	FourTrax Rincon	UTV	657
Honda	FourTrax Foreman 4x4	UTV	646
Honda	FourTrax Foreman Rubicon	UTV	640
Honda	FourTrax Rancher	UTV	573
Kawasaki	BRUTE FORCE 300	UTV	536
Kawasaki	BRUTE FORCE 750 4x4i	UTV	684
Kawasaki	BRUTE FORCE 750 4x4i EPS	UTV	695
Kawasaki	BRUTE FORCE® 750 4x4i EPS CAMO	UTV	695
		Average	641

http://www.arb.ca.gov/msei/categories.htm
http://www.arb.ca.gov/regact/2013/ohrv2013/ohrvattachc.pdf
Off-Highway Gasoline-Fuled Equipment - Recreational Vehicles: Inventory Documentation (Attachment C)

Table III-5. Exhaust Emission Factors for RV2013

Vehicle Type	Tech Group	HP	Model Year	HC	CO	NOX	PM	CO2
OHMC (g/mile)	G2	All	All	34.2	54.1	0.01	0.42	79.58
	G4	All	1997 and before	3.59	39.1	0.49	0.06	79.58
			1998 and later	0.68	19.8	0.64	0.06	79.58
ATV (g/mile)	G2	All	All	34.2	54.1	0.01	0.42	109.63
	G4	All	1997 and before	3.59	39.1	0.64	0.06	109.63
			1998 and later	0.68	19.8	0.49	0.06	109.63
Mini Bike (g/mile)	G2	All	All	34.2	54.1	0.01	0.42	109.63
	G4	All	1994 and before	24.25	488.1	2.03	0.71	79.58
			1995-1998	8.68	300	2.8	0.75	79.58
			1999 and later	0.47	100	2.7	0.25	79.58

Note that CARB and FI are included in both G2 and G4

Table III-7. Annual Activity for OHRVs (CSUS phone survey of 1,123 OHV owners)

Vehicle Type	Activity Range	Average
OMCs (miles/year)	717 to 20	350
ATVs (miles/year)	687 to 5	303
Mini Bikes (miles/year)	233 to 10	56

The text noted that minibikes are used sparingly

Additional Notes from Documentation
- Because of a lack of data on what fraction of engines are fuel-injects, staff assumed that for both G2 or G4 technology types, 50% of engines are carbureted and 50% are fuel-injected

G2 engine fraction 2002 = 30%
G2 engine fraction 2010 = 10%

* Based on DMV registration data

South Coast AQMD - "Final –Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds", Appendix A, October 2006
http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/final_pm2_5methodology.pdf

Table A - Updated CEIDARS Table with PM2.5 Fractions

SCC MAIN CATEGORY	SCC SUBCATEGORY	PM2.5 Fraction of Total PM	PM10 Fraction of Total PM	PM2.5 Fraction of PM10
FUGITIVE DUST	AGRICULTURAL TILLING DUST	0.101	0.454	0.222
	CONSTRUCTION AND DEMOLITION	0.102	0.489	0.208
	LANDFILL DUST	0.102	0.489	0.208
	LIVESTOCK DUST	0.055	0.482	0.114
	PAVED ROAD DUST	0.077	0.457	0.169
	UNPAVED ROAD DUST	0.126	0.594	0.212
OFF-ROAD EQUIPMENT	DIESEL	0.92	1	0.92
	GASEOUS FUEL	0.992	0.994	0.998
	GASOLINE	0.68	0.9	0.756
ON-ROAD VEHICLES	BRAKE WEAR	0.42	0.98	0.429
	DIESEL	0.92	1	0.92
	GASOLINE-CATALYST	0.9	0.97	0.928
	GASOLINE-NO CATALYST	0.68	0.9	0.756
	HEAVY, MEDIUM, LIGHT DUTY TRUCKS AND VEHICLES, MOTORHOMES, BUSES, MOTORCYCLES	0.925	0.96	0.964
	TIRE WEAR	0.25	1	0.25

Source: EMFAC2021 (v1.0.2) Emission Rates
Region Type: Statewide
Region: California
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	% VMT	% Trips	NOx_RUNEX	NOx_STREX	PM2.5_RUNEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_REX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_STREX	ROG_RUNEX	ROG_STREX	CO_RUNEX	CO_STREX
Statewide Totals	2050	LDA	Aggregate	Aggregate	Gasoline	12955078.89	500531731.4	500531731.4	0	60280110.23	44.66%	43.46%	0.019353	0.157406	0.00047	0.000721	0.002	0.002679	0.00051	0.000784	0.008	0.007653	227.8088	53.21283	0.002976	0.1149	0.488649	1.571068
Statewide Totals	2050	LDA	Aggregate	Aggregate	Diesel	8270.794529	292362.5082	292362.5082	0	37049.55185	0.03%	0.03%	0.010573	0	0.00087	0	0.002	0.002683	0.00091	0	0.008	0.007664	183.5739	0	0.004888	0	0.15552	0
Statewide Totals	2050	LDA	Aggregate	Aggregate	Electricity	1802523.436	71014337.9	0	71014337.9	8444493.388	6.34%	6.09%	0	0	0	0	0.002	0.001538	0	0	0.008	0.004393	0	0	0	0	0	0
Statewide Totals	2050	LDA	Aggregate	Aggregate	Plug-in Hybrid	610876.9213	23809130.04	9697502.244	14111627.79	2525976.069	2.12%	1.82%	0.002702	0.113547	0.00019	0.000753	0.002	0.001413	0.00021	0.000819	0.008	0.004038	116.8623	55.31552	0.001237	0.168282	0.188444	1.292411
Statewide Totals	2050	LDT1	Aggregate	Aggregate	Gasoline	976830.1073	34749369.35	34749369.35	0	4409241.416	3.10%	3.18%	0.020807	0.172089	0.00051	0.000779	0.002	0.00325	0.00055	0.000847	0.008	0.009285	263.2414	61.88196	0.003273	0.123616	0.524465	1.642915
Statewide Totals	2050	LDT1	Aggregate	Aggregate	Diesel	11.27726334	414.6495567	414.6495567	0	51.87280823	0.00%	0.00%	0.029363	0	0.00415	0	0.002	0.003233	0.00434	0	0.008	0.009236	343.6978	0	0.015085	0	0.161263	0
Statewide Totals	2050	LDT1	Aggregate	Aggregate	Electricity	30411.55048	1157486.365	0	1157486.365	141339.8501	0.10%	0.10%	0	0	0	0	0.002	0.001539	0	0	0.008	0.004398	0	0	0	0	0	0
Statewide Totals	2050	LDT1	Aggregate	Aggregate	Plug-in Hybrid	23138.66513	868038.1304	353180.1642	514857.9662	95678.38031	0.08%	0.07%	0.002705	0.113401	0.00019	0.000732	0.002	0.001418	0.00021	0.000796	0.008	0.004052	117.0965	63.47751	0.001245	0.167858	0.188911	1.288461
Statewide Totals	2050	LDT2	Aggregate	Aggregate	Gasoline	7787615.711	288887957.9	288887957.9	0	35896548.93	25.78%	25.88%	0.021951	0.199112	0.00048	0.000739	0.002	0.003202	0.00053	0.000804	0.008	0.009147	273.1255	65.1996	0.004178	0.155055	0.577648	2.027367
Statewide Totals	2050	LDT2	Aggregate	Aggregate	Diesel	29899.69571	1108867.522	1108867.522	0	137853.5763	0.10%	0.10%	0.029478	0	0.00409	0	0.002	0.003201	0.00427	0	0.008	0.009146	254.2037	0	0.014888	0	0.156929	0
Statewide Totals	2050	LDT2	Aggregate	Aggregate	Electricity	316975.8993	8493583.383	0	8493583.383	1482109.786	0.76%	1.07%	0	0	0	0	0.002	0.001539	0	0	0.008	0.004396	0	0	0	0	0	0
Statewide Totals	2050	LDT2	Aggregate	Aggregate	Plug-in Hybrid	215228.8062	8050473.278	3278620.476	4771852.801	889971.1136	0.72%	0.64%	0.002706	0.113525	0.00019	0.000742	0.002	0.001417	0.00021	0.000807	0.008	0.004047	117.044	66.66877	0.001241	0.168203	0.188796	1.291729
Statewide Totals	2050	MCY	Aggregate	Aggregate	Gasoline	751898.9766	4102973.011	4102973.011	0	1503797.953	0.37%	1.08%	0.461291	0.055104	0.00216	0.003336	0.001	0.0042	0.00232	0.003579	0.004	0.012	188.376	34.49485	0.815016	0.829152	9.860482	7.466971
Statewide Totals	2050	MDV	Aggregate	Aggregate	Gasoline	4525945.345	162516082.6	162516082.6	0	20712180.54	14.50%	14.93%	0.022743	0.209102	0.00049	0.000744	0.002	0.003246	0.00053	0.000809	0.008	0.009275	330.6646	79.31983	0.004321	0.159351	0.595804	2.061873
Statewide Totals	2050	MDV	Aggregate	Aggregate	Diesel	50618.16341	1772512.003	1772512.003	0	228926.1334	0.16%	0.17%	0.010838	0	0.00091	0	0.002	0.003253	0.00095	0	0.008	0.009295	330.904	0	0.005252	0	0.169612	0
Statewide Totals	2050	MDV	Aggregate	Aggregate	Electricity	291460.9114	7705208.465	0	7705208.465	1356175.123	0.69%	0.98%	0	0	0	0	0.002	0.001541	0	0	0.008	0.004402	0	0	0	0	0	0
Statewide Totals	2050	MDV	Aggregate	Aggregate	Plug-in Hybrid	137244.3216	4972064.436	2025329.007	2946735.43	567505.2696	0.44%	0.41%	0.002704	0.113503	0.00019	0.000751	0.002	0.001417	0.00021	0.000816	0.008	0.00405	117.006	81.12797	0.00124	0.168139	0.188733	1.291156
Statewide Totals	2050	MH	Aggregate	Aggregate	Gasoline	45271.3367	482893.1737	482893.1737	0	4528.944523	0.04%	0.00%	0.209012	0.334924	0.00118	0.000347	0.003	0.015395	0.00128	0.000377	0.012	0.043986	1852.217	29.17829	0.006897	0.110083	0.139558	2.042924
Statewide Totals	2050	MH	Aggregate	Aggregate	Diesel	29447.47369	275006.9349	275006.9349	0	2944.747369	0.02%	0.00%	2.126773	0	0.01695	0	0.004	0.015328	0.01772	0	0.016	0.043795	1048.497	0	0.057444	0	0.165023	0
							1,120,790,493			**138,716,483**																		
Visitor Vehicle Weighted Average Emission Factors													0.02068	0.16057	0.00045	0.00070	0.00200	0.00280	0.00048	0.00076	0.00799	0.00799	234.7450	55.99214	0.00620	0.13172	0.51277	1.68645
4X4 Weighted Average Emission Factors													0.02074	0.18624	0.00048	0.00071	0.00200	0.00311	0.00052	0.00078	0.00800	0.00890	260.3316	62.21895	0.00393	0.14579	0.54457	1.88820

APPENDIX D

Noise Modeling

Measurement Report

Report Summary

Meter's File Name	831_Data.001.s	Computer's File Name	831_0003940-20230621 142304-831_Data.001.ldbin
Meter	831 0003940	Firmware	2.403
User		Location	
Job Description			
Note			

Start Time	2023-06-21 14:23:04	Duration	0:15:00.7		
End Time	2023-06-21 14:38:05	Run Time	0:15:00.7	Pause Time	0:00:00.0
Pre-Calibration	2023-06-21 14:02:42	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	50.6 dB		
LAE	80.1 dB	SEA	--- dB
EA	11.5 µPa²h		
LA_{peak}	84.7 dB	2023-06-21 14:34:32	
LAS_{max}	63.0 dB	2023-06-21 14:34:32	
LAS_{min}	31.2 dB	2023-06-21 14:38:03	
LA_{eq}	50.6 dB		
LC_{eq}	63.5 dB	LC_{eq} - LA_{eq}	12.9 dB
LAI_{eq}	54.4 dB	LAI_{eq} - LA_{eq}	3.8 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	0	0:00:00.0
LAS > 85.0 dB	0	0:00:00.0
LApeak > 100.0 dB	0	0:00:00.0
LApeak > 120.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
50.6 dB	50.6 dB	0.0 dB

LDEN	LDay	LEve	LNight
50.6 dB	50.6 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	50.6 dB		63.5 dB		77.9 dB	
$Ls_{(max)}$	63.0 dB	2023-06-21 14:34:32	73.7 dB	2023-06-21 14:31:03	90.0 dB	2023-06-21 14:31:05
$LF_{(max)}$	67.7 dB	2023-06-21 14:34:32	80.2 dB	2023-06-21 14:30:27	94.9 dB	2023-06-21 14:23:44
$LI_{(max)}$	71.2 dB	2023-06-21 14:34:32	83.5 dB	2023-06-21 14:30:27	96.8 dB	2023-06-21 14:23:44
$LS_{(min)}$	31.2 dB	2023-06-21 14:38:03	48.6 dB	2023-06-21 14:35:57	63.3 dB	2023-06-21 14:23:04
$LF_{(min)}$	27.8 dB	2023-06-21 14:37:36	42.2 dB	2023-06-21 14:37:39	55.2 dB	2023-06-21 14:35:57
$LI_{(min)}$	30.8 dB	2023-06-21 14:38:03	48.8 dB	2023-06-21 14:35:57	65.3 dB	2023-06-21 14:27:02
$L_{Peak(max)}$	84.7 dB	2023-06-21 14:34:32	88.1 dB	2023-06-21 14:30:27	100.9 dB	2023-06-21 14:30:27

Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 2.0	58.5 dB
LAS 8.0	55.0 dB
LAS 25.0	51.1 dB
LAS 50.0	47.3 dB
LAS 90.0	42.1 dB
LAS 95.0	38.5 dB

Measurement Report

Report Summary

Meter's File Name	831_Data.002.s	Computer's File Name	831_0003940-20230621 144700-831_Data.002.ldbin
Meter	831 0003940	Firmware	2.403
User		Location	
Job Description			
Note			

Start Time	2023-06-21 14:47:00	Duration	0:15:30.5		
End Time	2023-06-21 15:02:30	Run Time	0:15:30.5	Pause Time	0:00:00.0
Pre-Calibration	2023-06-21 14:02:42	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	51.2 dB		
LAE	80.9 dB	SEA	--- dB
EA	13.6 µPa²h		
LA_{peak}	86.0 dB	2023-06-21 14:48:48	
LAS_{max}	62.8 dB	2023-06-21 15:00:04	
LAS_{min}	35.6 dB	2023-06-21 14:50:54	
LA_{eq}	51.2 dB		
LC_{eq}	62.7 dB	LC_{eq} - LA_{eq}	11.5 dB
LAI_{eq}	53.0 dB	LAI_{eq} - LA_{eq}	1.8 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	0	0:00:00.0
LAS > 85.0 dB	0	0:00:00.0
LApeak > 100.0 dB	0	0:00:00.0
LApeak > 120.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
51.2 dB	51.2 dB	0.0 dB

LDEN	LDay	LEve	LNight
51.2 dB	51.2 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	51.2 dB		62.7 dB		76.9 dB	
$LS_{(max)}$	62.8 dB	2023-06-21 15:00:04	79.4 dB	2023-06-21 15:00:22	93.7 dB	2023-06-21 15:00:22
$LF_{(max)}$	64.6 dB	2023-06-21 15:00:04	84.3 dB	2023-06-21 15:00:22	98.0 dB	2023-06-21 15:00:22
$LI_{(max)}$	65.6 dB	2023-06-21 15:00:04	88.4 dB	2023-06-21 15:00:22	101.0 dB	2023-06-21 15:00:22
$LS_{(min)}$	35.6 dB	2023-06-21 14:50:54	45.5 dB	2023-06-21 14:50:53	52.3 dB	2023-06-21 14:55:28
$LF_{(min)}$	34.5 dB	2023-06-21 14:53:59	43.5 dB	2023-06-21 14:50:52	49.7 dB	2023-06-21 14:55:25
$LI_{(min)}$	35.2 dB	2023-06-21 14:50:47	45.9 dB	2023-06-21 14:51:03	53.7 dB	2023-06-21 14:55:28
$L_{Peak(max)}$	86.0 dB	2023-06-21 14:48:48	93.2 dB	2023-06-21 15:00:22	105.5 dB	2023-06-21 15:00:22

Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 2.0	59.5 dB
LAS 8.0	57.3 dB
LAS 25.0	51.3 dB
LAS 50.0	43.4 dB
LAS 90.0	37.4 dB
LAS 95.0	36.6 dB

LT-01-Ldn

Long-Term 24 Hour Continuous Noise Monitoring

Model Input Sheet

Project: 684736 - Carnegie SVRA GP EIR

Date: Existi **Wednesday, June 21, 2023** **Thursday, June 22, 2023**

Site: LT-01

Hour	Leq	Lmax	L50	L90
13:30	39.0	54.1	27.6	36.8
14:30	42.8	60.0	34.6	40.5
15:30	42.2	56.4	32.0	40.3
16:30	43.4	57.2	35.4	42.2
17:30	51.7	74.4	34.6	44.5
18:30	43.0	58.3	32.3	41.1
19:30	39.4	54.4	29.0	35.8
20:30	38.9	59.7	30.3	34.3
21:30	34.3	49.1	30.3	32.5
22:30	34.6	50.5	28.0	31.1
23:30	34.6	51.2	27.5	30.6
0:30	33.2	50.1	28.3	32.1
1:30	32.6	43.7	26.2	31.1
2:30	33.7	49.9	27.4	32.1
3:30	41.8	53.2	35.2	40.3
4:30	46.8	55.6	39.2	45.6
5:30	46.7	57.0	38.0	45.6
6:30	46.2	60.7	37.2	44.7
7:30	44.4	57.4	34.1	42.7
8:30	44.8	59.0	34.4	41.9
9:30	44.6	55.0	37.4	42.9
10:30	48.0	73.4	37.9	42.9
11:30	44.8	63.3	36.1	42.0
12:30	48.1	72.7	36.7	42.6

Averages

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	45.2	61.1	33.7	40.7
Nighttime (10 p.m. - 7 a.m.)	42.7	52.1	31.7	36.6

Uppermost-Level

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	51.7	74.4	37.9	44.5
Nighttime (10 p.m. - 7 a.m.)	46.8	60.7	39.2	45.6

Percentage of Energy

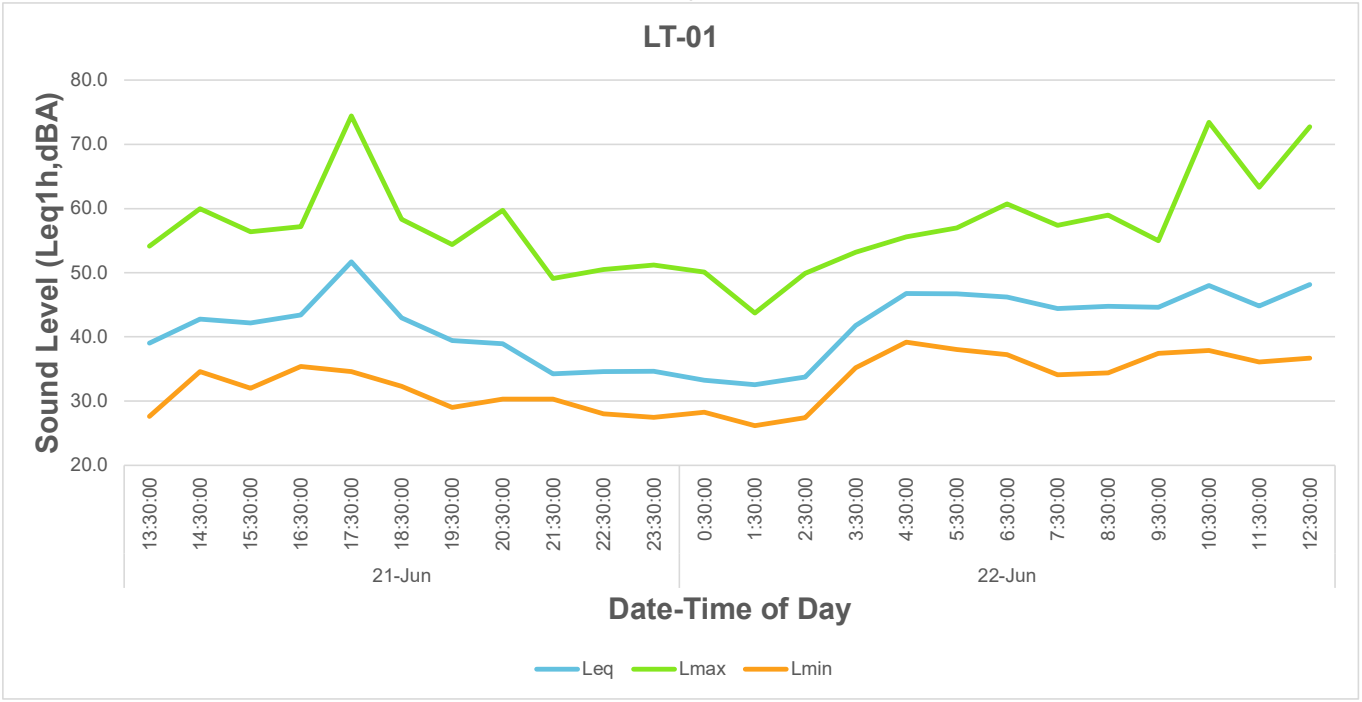
Daytime	75%
Nighttime	25%

Calculated L_{dn}, dBA

49.5

Date	Time	Leq	Lmax	Lmin
21-Jun	13:30:00	39.0	54.1	27.6
	14:30:00	42.8	60	34.6
	15:30:00	42.2	56.4	32
	16:30:00	43.4	57.2	35.4
	17:30:00	51.7	74.4	34.6
	18:30:00	43.0	58.3	32.3
	19:30:00	39.4	54.4	29
	20:30:00	38.9	59.7	30.3
	21:30:00	34.3	49.1	30.3
	22:30:00	34.6	50.5	28
	23:30:00	34.6	51.2	27.5
22-Jun	0:30:00	33.2	50.1	28.3
	1:30:00	32.6	43.7	26.2
	2:30:00	33.7	49.9	27.4
	3:30:00	41.8	53.2	35.2
	4:30:00	46.8	55.6	39.2
	5:30:00	46.7	57	38
	6:30:00	46.2	60.7	37.2
	7:30:00	44.4	57.4	34.1
	8:30:00	44.8	59	34.4
	9:30:00	44.6	55	37.4
	10:30:00	48.0	73.4	37.9
	11:30:00	44.8	63.3	36.1
	12:30:00	48.1	72.7	36.7

60684736 - Carnegie SVRA GP EIR



LT-02-Ldn

Long-Term 24 Hour Continuous Noise Monitoring

Model Input Sheet

Project: 684736 - Carnegie SVRA GP EIR

Date: Existi **Wednesday, June 21, 2023** **Thursday, June 22, 2023**

Site: LT-02

Hour	Leq	Lmax	L50	L90
14:00	54.5	74.9	38.2	46.4
15:00	56.4	70.2	36.4	47.8
16:00	58.7	76.4	39.3	53.1
17:00	61.2	82.0	42.4	59.1
18:00	59.5	70.3	41.4	55.2
19:00	56.8	71.3	40.5	46.4
20:00	51.4	69.9	32.6	38.8
21:00	43.2	65.3	32.0	36.5
22:00	41.1	65.1	31.0	33.5
23:00	35.9	60.3	30.1	32.2
0:00	35.3	46.1	31.6	34.1
1:00	36.6	63.2	31.2	34.0
2:00	40.1	67.5	31.3	34.2
3:00	45.6	68.2	35.3	39.0
4:00	58.0	75.0	41.0	47.9
5:00	61.1	74.4	43.8	53.5
6:00	61.4	74.8	44.0	54.4
7:00	59.3	78.7	43.1	51.0
8:00	59.2	76.4	44.2	56.3
9:00	52.8	69.0	40.6	47.4
10:00	53.4	77.0	40.9	46.9
11:00	52.6	73.5	41.1	47.8
12:00	54.0	74.8	40.4	49.6
13:00	57.2	69.6	43.3	54.9

Averages

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	56.9	73.3	39.8	49.1
Nighttime (10 p.m. - 7 a.m.)	55.7	66.1	35.5	40.3

Uppermost-Level

	Leq	Lmax	L50	L90
Daytime (7 a.m. - 10 p.m.)	61.2	82.0	44.2	59.1
Nighttime (10 p.m. - 7 a.m.)	61.4	75.0	44.0	54.4

Percentage of Energy

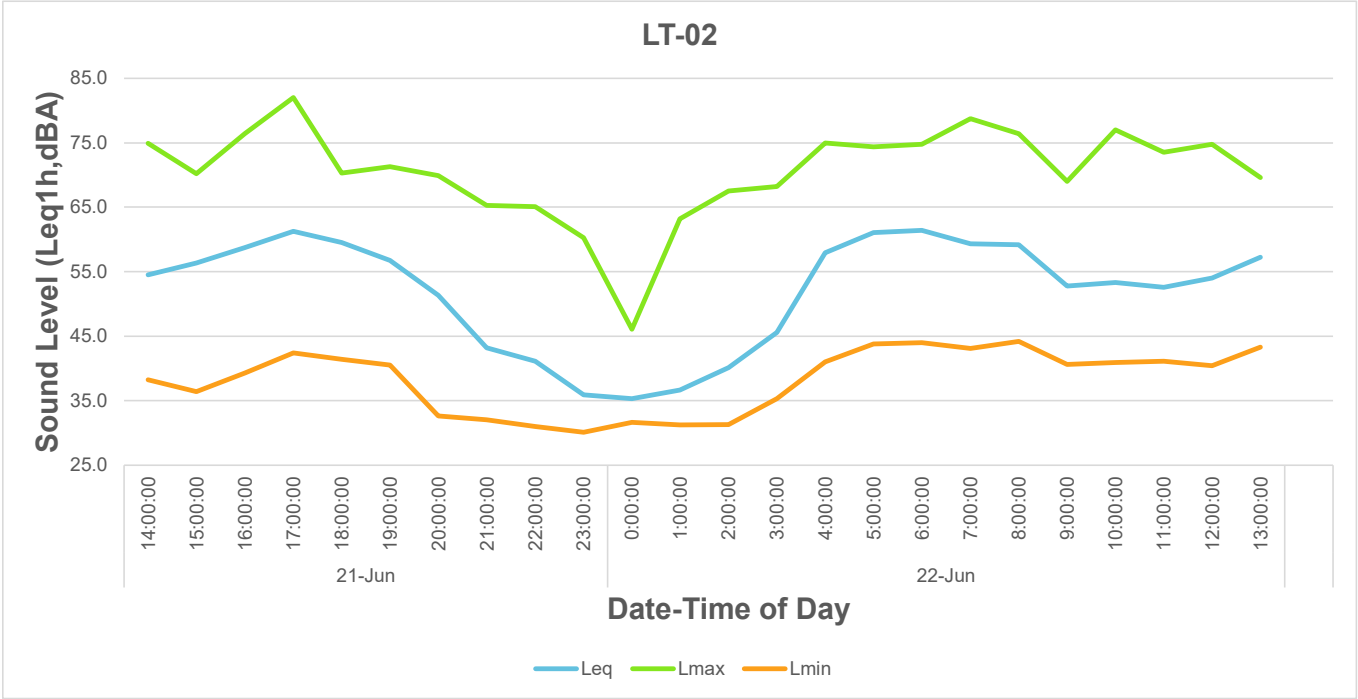
Daytime	69%
Nighttime	31%

Calculated L_{dn}, dBA

62.3

Date	Time	Leq	Lmax	Lmin
21-Jun	14:00:00	54.5	74.9	38.2
	15:00:00	56.4	70.2	36.4
	16:00:00	58.7	76.4	39.3
	17:00:00	61.2	82	42.4
	18:00:00	59.5	70.3	41.4
	19:00:00	56.8	71.3	40.5
	20:00:00	51.4	69.9	32.6
	21:00:00	43.2	65.3	32
	22:00:00	41.1	65.1	31
	23:00:00	35.9	60.3	30.1
22-Jun	0:00:00	35.3	46.1	31.6
	1:00:00	36.6	63.2	31.2
	2:00:00	40.1	67.5	31.3
	3:00:00	45.6	68.2	35.3
	4:00:00	58.0	75	41
	5:00:00	61.1	74.4	43.8
	6:00:00	61.4	74.8	44
	7:00:00	59.3	78.7	43.1
	8:00:00	59.2	76.4	44.2
	9:00:00	52.8	69	40.6
	10:00:00	53.4	77	40.9
	11:00:00	52.6	73.5	41.1
	12:00:00	54.0	74.8	40.4
	13:00:00	57.2	69.6	43.3

60684736 - Carnegie SVRA GP EIR



Project-Generated Construction Source Noise Prediction Model

60684736 - Carnegie SVRA GP EIR

Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)
Threshold*	636	60
	50	88
LT-01	3000	43

Assumptions:	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Backhoe	78	0.4
Concrete Mixer Truck	79	0.4
Concrete Pump Truck	81	0.2
Dozer	82	0.4
Dump Truck	76	0.4
Generator	81	0.5
Grader	85	0.4
Paver	77	0.5
Tractor	84	0.4
Excavator	81	0.4
Excavator	81	0.4

Ground Type	Soft
Ground Factor	0.50

Predicted Noise Level [2]	L_{eq} dBA at 50 feet[2]
Backhoe	74.0
Concrete Mixer Truck	75.0
Concrete Pump Truck	74.0
Dozer	78.0
Dump Truck	72.0
Generator	78.0
Grader	81.0
Paver	74.0
Tractor	80.0
Excavator	77.0
Excavator	77.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
87.6

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, Ja

[2] Based on the following from the Federal Transit Noise and Vibrati

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold