DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10TH Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759

CEQA Referral Initial Study And Notice of Intent to Adopt a Negative Declaration

Date: **August 14, 2024**

To: **Distribution List (See Attachment A)**

From: **Jeremy Ballard, Senior Planner, Planning and Community Development**

Subject: **USE PERMIT APPLICATION NO. PLN2023-0047 – BEST RV CENTER**

Comment Period: **August 14, 2024 – September 16, 2024**

Respond By: **September 16, 2024**

Public Hearing Date: Not yet scheduled. A separate notice will be sent to you when a hearing is scheduled.

You may have previously received an Early Consultation Notice regarding this project, and your comments, if provided, were incorporated into the Initial Study. Based on all comments received, Stanislaus County anticipates adopting a Negative Declaration for this project. This referral provides notice of a 30-day comment period during which Responsible and Trustee Agencies and other interested parties may provide comments to this Department regarding our proposal to adopt the Negative Declaration.

All applicable project documents are available for review at: Stanislaus County Department of Planning and Community Development, 1010 10th Street, Suite 3400, Modesto, CA 95354. Please provide any additional comments to the above address or call us at (209) 525-6330 if you have any questions. Thank you.

Applicant: **Naiel M. Ammari, Best RV Center**

Project Location: **5100 and 5300 Taylor Court, and 4318 W. Warner Road, between East Keyes Road and East Taylor Road, in the Keyes/ Turlock area.**

APN: **045-050-005, -009, and -013; 045-053-040, 041, -042, -043, and -044, 045-062-001.**

Williamson Act Contract: **N/A**

General Plan: **Planned Development**

Current Zoning: **Planned Development (P-D) (351) – APNs: 045-050-005, -009, and -013; 045-053-040, -042, -043, and -044 and 045-062-001**
P- D (253) – APN: 045-053-041

Project Description: **Request to amend the Development Plans of Planned Developments (P-D) (351) and (253), to allow for construction of a two story 129,608 square-foot recreational vehicle (RV) sales and service building, a detached 16,086 square foot canopy for RV sales staging, a 1,374 square-foot storage shed, and to allow for the sale of both motorized and non-motorized RVs.**

Full document with attachments available for viewing at:http://www.stancounty.com/planning/pl/act-projects.shtm

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10TH Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759

USE PERMIT APPLICATION NO. PLN2023-0047 – BEST RV CENTER

Attachment A

Distribution List

	CA DEPT OF CONSERVATION Land Resources		STAN CO ALUC
X	CA DEPT OF FISH & WILDLIFE		STAN CO ANIMAL SERVICES
	CA DEPT OF FORESTRY (CAL FIRE)	X	STAN CO BUILDING PERMITS DIVISION
X	CA DEPT OF TRANSPORTATION DIST 10	X	STAN CO CEO
X	CA OPR STATE CLEARINGHOUSE		STAN CO CSA
X	CA RWQCB CENTRAL VALLEY REGION	X	STAN CO DER
	CA STATE LANDS COMMISSION		STAN CO ERC
	CEMETERY DISTRICT	X	STAN CO FARM BUREAU
	CENTRAL VALLEY FLOOD PROTECTION	X	STAN CO HAZARDOUS MATERIALS
X	CITY: TURLOCK		STAN CO PARKS & RECREATION
X	COMMUNITY SERVICES DIST: KEYES	X	STAN CO PUBLIC WORKS
X	COOPERATIVE EXTENSION	X	STAN CO PUBLIC WORKS - SURVEY
	COUNTY OF:		STAN CO RISK MANAGEMENT
X	DER - GROUNDWATER RESOURCES DIVISION	X	STAN CO SHERIFF
X	FIRE PROTECTION DIST: KEYES	X	STAN CO SUPERVISOR DIST 2: CHIESA
	GSA:	X	STAN COUNTY COUNSEL
	HOSPITAL DIST:		StanCOG
X	IRRIGATION DIST: TID	X	STANISLAUS FIRE PREVENTION BUREAU
X	MOSQUITO DIST: TURLOCK	X	STANISLAUS LAFCO
X	STANISLAUS COUNTY EMERGENCY MEDICAL SERVICES		STATE OF CA SWRCB – DIV OF DRINKING WATER DIST. 10
X	MUNICIPAL ADVISORY COUNCIL: KEYES	X	SURROUNDING LAND OWNERS
X	PACIFIC GAS & ELECTRIC		INTERESTED PARTIES
X	POSTMASTER: KEYES	X	TELEPHONE COMPANY: AT&T
X	RAILROAD: UNION PACIFIC		TRIBAL CONTACTS (CA Government Code §65352.3)
	SAN JOAQUIN VALLEY APCD		US ARMY CORPS OF ENGINEERS
X	SCHOOL DIST 1: KEYES UNIFIED	X	US FISH & WILDLIFE
X	SCHOOL DIST 2: TURLOCK JOINT		US MILITARY (SB 1462)
	WORKFORCE DEVELOPMENT		USDA NRCS
	STAN CO AG COMMISSIONER		WATER DIST:

STANISLAUS COUNTY
CEQA REFERRAL RESPONSE FORM

TO: **Stanislaus County Planning & Community Development**
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

SUBJECT: **USE PERMIT APPLICATION NO. PLN2023-0047 – BEST RV CENTER**

Based on this agency's particular field(s) of expertise, it is our position the above described project:

_____ Will not have a significant effect on the environment.
_____ May have a significant effect on the environment.
_____ No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheet if necessary)

1.
2.
3.
4.

Listed below are possible mitigation measures for the above-listed impacts: *PLEASE BE SURE TO INCLUDE WHEN THE MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

1.
2.
3.
4.

In addition, our agency has the following comments (attach additional sheets if necessary).

_____

_____

Response prepared by:

_____

Name Title Date

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10TH Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209) 525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759

CEQA INITIAL STUDY

Adapted from CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, January 1, 2020

1.	**Project title:**	Use Permit Application No. PLN2023-0047 – Best RV Center
2.	**Lead agency name and address:**	Stanislaus County 1010 10th Street, Suite 3400 Modesto, CA 95354
3.	**Contact person and phone number:**	Jeremy Ballard, Senior Planner (209) 525-6330
4.	**Project location:**	5100 and 5300 Taylor Court, and 4318 W. Warner Road, between East Keyes and East Taylor Roads, in the Keyes/Turlock area. (APN's:) 045-050-005, -009, and -013; 045-053-040 through -044; and 045-062-001.
5.	**Project sponsor's name and address:**	Naiel M. Ammari, Best RV Center 5340 Taylor Court Turlock, CA 95382
6.	**General Plan designation:**	Planned Development (P-D)
7.	**Zoning:**	P-D (351) – APNs: 045-050-005, -009, and -013; 045-053-040, -042, -043, and -044 and 045-062-001; and P-D (253) – APN: 045-053-041

8. Description of project:

This project is a request to amend Planned Developments (P-D) (351) and (253), to allow for construction of a two story 129,608 square-foot recreational vehicle (RV) sales and service building, a detached 16,086 square-foot canopy for vehicle sales staging, a 1,374 square-foot storage shed, and to allow for the sale of both motorized and non-motorized RVs. The RV sales and service building will be a maximum of 37-feet in height, and will consist of: a 9,589 square-foot showroom, a 2,540 square-foot sales office, a 8,642 square-foot covered service drop off station, 40 service bays totaling 75,165 square feet, a 4,210 square-foot RV wash area, a 1,207 square-foot paint spray booth, a 6,522 square-foot service office with areas for retail sales of accessories and parts, and a second story 16,390 square-foot area for offices and parts storage. Service of RV's will consist of light repairs such as oil changes, brake pad changes, and other minor repairs. Engine and transmission repairs will not be conducted on-site. Maps identifying the boundaries of the existing zoning districts, phasing areas, and the Assessor's Parcel Numbers (APN's) making up the project site are provided as an attachment to the Initial Study referral packet and will be part of the project's Planning Commission staff report.

Originally approved in 2020, P-D (351), covering a total of 29.68± acres comprised of eight Assessor's Parcels, allowed for a two phased expansion and reorganization of an existing RV sales business. All improvements associated with Phase 1 have been completed. Phase 2, consisting of the reconfiguring of an existing service shop to allow for additional sales offices and paving of 7.76± acres for RV overstock storage, is still pending and will be superseded by this request. A subsequent use permit was granted in 2021 to reactivate P-D (351) due to the applicant not meeting the required timeline of the adopted development standards. P-D (253) was approved in 2001 allowing for the storage of RV's and boats on a 1.25± acre parcel. The applicant purchased the 1.25-acre parcel zoned P-D 253 in January of 2023 and is proposed to be incorporate into the proposed customer parking lot of the Best RV Center facility by demolishing an existing dwelling and accessory structures and to pave the entire parcel.

This project will include the paving and stripping of 110 RV customer parking spaces and 330 passenger vehicle spaces for employees and customers on a 15.3-acre portion of P-D 351 (APN's: 045-053-040, 045-062-001, and 045-053-041), which was originally proposed as Phase 2, for inventory parking. Development of the 15.3-acre portion of the site will also include perimeter landscaping, consistent with the development plan approved for P-D (351), additional landscaping within the interior of the site, along the drive aisle of customer and employee parking areas, the installation of 76 new light poles, each 30-feet in height, wrought iron fencing and electrical fencing around the perimeter, the installation of three wall signs and two directional monument signs along Taylor Court, eight-feet in height, and the installation of two 1,500-gallon above ground fuel tanks.

The project site will continue to be served by the Keyes Community Service District for domestic water service and on-site septic facilities. The development of the site will include incorporation of West Warner Road, which has been formally abandoned by the County. The former road travels east to west through APNs 045-053-040 and 045-062-001 and a portion of APN 045-053-041. P-D 351 had included incorporation of the abandoned road into the development plan of Phase 2. The portion of abandoned West Warner Road within APN 045-053-041 will be developed as part of a proposed driveway onto Taylor Court. Additionally, a portion of the proposed parking lot improvements will be located APN: 045-053-044, requiring a reciprocal access easement to be recorded on the property.

This use permit will apply the existing seven days a week, 9:00 a.m. to 6:00 p.m., hours of operation for the Best RV Center operation to the entire project site. Operations on the entire project site will be undertaken by up to 90 employees on a maximum shift as anticipated under the full buildout of P-D 351.

9.	**Surrounding land uses and setting:**	State Route 99, a dairy, row crops, the Union Pacific rail line, trucking repair, and manufacturing and assembly warehouse.
10.	**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**	California Department of Transportation (Caltrans) San Joaquin Valley Air Pollution Control District (SJVAPCD) Stanislaus County Department of Public Works Keyes Community Service District
11.	**Attachments:**	I. CalEEMod Air Quality and Greenhouse Gas Study performed by Yorke Engineering, LLC dated January 2, 2024. II. Adopted Traffic Impact Analysis performed by Pinnacle Traffic Engineering dated December 31, 2018. III. Supplemental to the Adopted Traffic Impact Analysis performed by Pinnacle Traffic Engineering dated May 9, 2023.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture & Forestry Resources**	☐ **Air Quality**
☐ **Biological Resources**	☐ **Cultural Resources**	☐ **Energy**
☐ **Geology / Soils**	☐ **Greenhouse Gas Emissions**	☐ **Hazards & Hazardous Materials**
☐ **Hydrology / Water Quality**	☐ **Land Use / Planning**	☐ **Mineral Resources**
☐ **Noise**	☐ **Population / Housing**	☐ **Public Services**
☐ **Recreation**	☐ **Transportation**	☐ **Tribal Cultural Resources**
☐ **Utilities / Service Systems**	☐ **Wildfire**	☐ **Mandatory Findings of Significance**

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☒ **I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.**

☐ **I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ **I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.**

☐ **I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.**

☐ **I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.**

Signature on File **August 8, 2024**
Prepared by Jeremy Ballard, Senior Planner Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

> **a) Earlier Analysis Used. Identify and state where they are available for review.**
>
> **b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.**
>
> **c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.**

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

> **a) the significant criteria or threshold, if any, used to evaluate each question; and**
>
> **b) the mitigation measure identified, if any, to reduce the impact to less than significant.**

ISSUES

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

Discussion: As described in the project description, this project will construct a total of 147,068 square feet of new building space, 15.3-acres of paved inventory parking, landscaping, signage, and lighting consistent with Best RV Centers existing development and other development along this corridor of State Route 99. The largest proposed structure will be 129,608 square feet in size. The area that will house RV sales and service operation will consist of a façade of glass and metal and the service areas will be comprised of a metal warehouse with 40 openings for each repair bay.

As required under the Development Standards for both P-D (351) and (253), landscaping is required to meet City of Turlock design standards, as the site is a gateway into the City of Turlock. The conceptual landscape plan has been designed with this requirement in mind, however, a condition of approval will be added to the project requiring the City review and approval of the final landscape plan prior to installation. A condition of approval will be added to ensure no adverse glare or light source is created as a result of the project. A condition of approval will also be added to require approval of a sign plan for the directional signage, prior to issuance of a permit.

The project is not located near any recognized scenic vista within the County. As the project site has already been developed for RV sales and service, as well as RV and Boat storage, no adverse impacts to the existing visual character of the site or its surroundings are anticipated as a result of the proposed project.

Mitigation: None.

References: Application information; Stanislaus County Zoning Ordinance; the Stanislaus County General Plan; and Support Documentation[1].

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

Discussion: All nine parcels are currently located within a Planned Development zoning district. No agricultural production has existed on-site for some time, nor are any of the parcels enrolled in a Williamson Act Contract. According to the California Department of Conservation Farmland Mapping and Monitoring Program the project site is comprised of Urban and Built-Up Land. The USDA Natural Resources Conservation Services' Eastern Stanislaus County Soil Survey indicates that the property is made up of Dinuba sandy loam (DrA) with a Storie Index Rating of 77 and grade 2, shallow (DsA) with a Storie Index Rating of 43 and grade 3, slightly saline alkali (DyA) with a Storie Index Rating of 33 and grade 4, and Tujunga loamy sand (TuA) with a Storie Index Rating of 76 and grade 3. Based on this information none of the parcels included in the project request would qualify as prime farmland.

The project site is bordered on the east by State Route (SR) 99 and on the west by the Union Pacific rail line and Taylor Court. The parcels west of SR 99 are zoned Planned Development and A-2-40 (General Agriculture) and include a mixture of vacant properties, ranchettes, and light industrial development. There are agricultural operations to the west of the project site, separated by Taylor Court and a Union Pacific rail line. It is not anticipated that the proposed project will result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.
A referral response was received from the Turlock Irrigation District regarding irrigation facilities currently within the project site. The District identified an irrigation pipeline and easement that lies within parts of the project site and has required that

the facilities be removed as they no longer serve any users west of the State Highway. A condition of approval will be added to address the District's requirements prior to the issuance of a building or grading permit.

In December of 2007, Stanislaus County adopted an updated Agricultural Element which incorporated guidelines for the implementation of agricultural buffers applicable to new and expanding non-agricultural uses within or adjacent to the A-2 Zoning District. The purpose of these guidelines is to protect the long-term health of agriculture by minimizing conflicts such as spray-drift and trespassing resulting from the interaction of agricultural and non-agricultural uses. Alternatives may be approved provided the Planning Commission finds that the alternative provides equal or greater protection than the existing buffer standards. Additionally, the agricultural buffer exempts areas utilized for parking of vehicles.

The entirety of the operation will consist of a maximum of 90 employees at full build-out including retail activities with customers on-site, which would be considered to be people intensive and require a 300-foot setback from the proposed use to adjacent agriculturally zoned property. The closest agriculturally zoned parcel is across Taylor Court and the Union Pacific rail line to the west of the site. P-D (351) was originally approved with, an alternative to the Agricultural Buffer Policy, allowing the existing building at 245-feet east of the agricultural parcel. P-D (259) was permitted prior to the adoption of the policy and was not subject at the time of its development. The proposed amendment to both P-D (351) and (259) will place the new proposed building over 300-feet away from the closest agriculturally zoned parcel. The remaining portion of the proposed project site, south of the building will be used for storage and parking of RV's and customer vehicles, which is exempt from the Agricultural buffer policy.

The project will not result in the loss of forest land or conversion of forest land and nor will it lead to changes in the existing environment resulting in farmland conversion. Thus, the project is anticipated to have a less than significant impact on agricultural resources.

Mitigation: None

References: Natural Resources Conservation Service Soil Survey; Application information; Stanislaus Soil Survey (1957); California State Department of Conservation Farmland Mapping and Monitoring Program - Stanislaus County Farmland 2018; Referral response from Turlock Irrigation District, dated July 17, 2023; Stanislaus County General Plan and Support Documentation[1].

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

Discussion: The proposed project is located within the San Joaquin Valley Air Basin (SJVAB) and, therefore, falls under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). In conjunction with the Stanislaus Council of Governments (StanCOG), the SJVAPCD is responsible for formulating and implementing air pollution control strategies. The SJVAPCD's most recent air quality plans are the 2007 PM10 (respirable particulate matter) Maintenance Plan, the 2008 PM2.5 (fine particulate matter) Plan, and the 2007 Ozone Plan. These plans establish a comprehensive air pollution control program leading to the attainment of state and federal air quality standards in the SJVAB, which has been classified

as “extreme non-attainment” for ozone, “attainment” for respirable particulate matter (PM-10), and “non-attainment” for PM 2.5, as defined by the Federal Clean Air Act.

The primary source of air pollutants generated by this project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming, and automobile exhausts. Mobile sources are generally regulated by the Air Resources Board of the California EPA which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the District has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the Basin. The project will increase traffic in the area and, thereby, impacting air quality.

Construction activities will be limited to the construction of the sales and service building, the detached canopy for vehicle sales staging, and storage shed. Additionally, the project will include paving of a 15.3-acre portion of project site, with the exception of the proposed landscaped storm drain basin and other landscaped areas. These activities would not require any substantial use of heavy-duty construction equipment and would require little or no demolition or grading as the site is presently unimproved and considered to be topographically flat.

The Air District provided a project referral response indicating that the proposed project may exceed the District’s thresholds of significance for construction or operational emissions. The District asked that a CalEEMod analysis be performed as well as a Health Risk Assessment to evaluate the risk of Toxic Air Contaminants (TACs) to sensitive receptors in the vicinity of the project site. The District stated that an Ambient Air Quality Analysis be completed, if project emissions are to exceed 100 pounds per-day of any pollutant. The SVJAPCD’s comment letter also stated that the project would be subject to other SJVAPCD rules and regulations such as Rule 2010 and 2201 – Air Quality Permitting for Stationary Sources, Rule 9510 – Indirect Source Review, and Regulation VIII – Fugitive PM 10 Prohibitions. The District also requested the applicant demonstrate compliance with these Rules and Regulations through SJVAPCD permitting such as an Authority to Construction (ATC) and an Air Impact Assessment (AIA) prior to issuance of any permit. These permit requirements will be added as conditions of approval for the project.

A CalEEMod Air Quality and Greenhouse Gas Study, SJVAPCD Rule 9510 Indirect Source Review and Risk Prioritization Scoring was completed by Yorke Engineering, LLC on January 2, 2024. The study found that the proposed project would not exceed District thresholds of significance for emissions of any criteria pollutants for either construction or operational activities. Additionally, the study found that the project through implementation of applicable and feasible Greenhouse Gas (GHG) reductions measures the project’s annual emissions would only represent 0.0006% of the statewide yearly GHG inventory. The study found that the project’s Health Risk Assessment score would be below all District significant impact threshold standards. Lastly, the study calculated a fee to be paid to the District for compliance in Rule 9510 evaluation of construction and operational emissions. The payment of the fee will be added as a condition of approval for the project. The District reviewed the study and concurred with its findings that the project would not exceed any District thresholds or have a significant impact on air quality for construction or operational activities.

Potential impacts on local and regional air quality are anticipated to be less than significant, falling below SJVAPCD thresholds, as a result of the nature of the proposed project and project’s operation after construction. Implementation of the proposed project would fall below the SJVAPCD significance thresholds for both short-term construction and long-term operational emissions, as discussed below. Because construction and operation of the project would not exceed the SJVAPCD significance thresholds, the proposed project would not increase the frequency or severity of existing air quality standards or the interim emission reductions specified in the air plans.

Mitigation: None

References: San Joaquin Valley Air Pollution Control District - Regulation VIII Fugitive Dust/PM-10 Synopsis; www.valleyair.org; and the Stanislaus County General Plan and Support Documentation; Referral response from San Joaquin Valley Air Pollution Control District dated, July 31, 2023; San Joaquin Valley Air Pollution Control District email correspondence, dated January 17, 2024; CalEEMod Air Quality and Greenhouse Gas Study, SJVAPCD Rule 9510 Indirect Source Review and Risk Prioritization Scoring, completed by Yorke Engineering, LLC on January 2, 2024.

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

Discussion: It does not appear this project will result in impacts to endangered species or habitats, locally designated species, or wildlife dispersal or migration corridors. There is no known sensitive or protected species or natural community located on the site. The project is located within the Ceres Quad of the California Natural Diversity Database. Some of the threatened species known to populate the Ceres Quad include: Swainson's hawk, the tricolored blackbird, Steelhead (Central Valley DPS), and the Valley Elderberry Longhorn Beetle. Large portions of the project site have been previously developed with commercial uses or disturbed agricultural practices prior to the current operation. Both P-D (351) and (259) are located just west of State Route 99. Because of this, the site would have a low probability of containing suitable habitat.

The project will not conflict with a Habitat Conservation Plan, a Natural Community Conservation Plan, or other locally approved conservation plans. Impacts to endangered species or habitats, locally designated species, or wildlife dispersal or migration corridors are considered to be less than significant.

An early consultation was referred to the California Department of Fish and Wildlife and no response was received.

Mitigation: None.

References: California Department of Fish and Wildlife's Natural Diversity Database Quad Species List; Stanislaus County General Plan and Support Documentation[1].

V. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion: The adoption of P-D 351 included a records search conducted by the Central California Information Center for the project site indicated that there are no historical, cultural, or archeological resources recorded on-site and that the site has a low sensitivity for the discovery of such resources. The proposed amended development plan for both P-D (351) and (259) do not appear they will result in significant impacts to any archaeological or cultural resources. Each P-D has already been developed to various degrees and the proposed construction is within areas of the project site, which have already been disturbed. However, standard conditions of approval regarding the discovery of cultural resources during the construction process will be added to the project.

Mitigation: None.

References: Application information; Stanislaus County General Plan and Support Documentation[1].

VI. ENERGY -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Discussion: The California Environmental Quality Act (CEQA) Guidelines Appendix F states that energy consuming equipment and processes, which will be used during construction or operation such as energy requirements of the project by fuel type and end use, energy conservation equipment and design features, energy supplies that would serve the project, total estimated daily vehicle trips to be generated by the project, and the additional energy consumed per-trip by mode, shall be taken into consideration when evaluating energy impacts. Additionally, the project's compliance with applicable state or local energy legislation, policies, and standards must be considered.

The site will be to be served by the Turlock Irrigation District (TID) for electrical services. A referral response was received from TID regarding electrical facilities as a result of the project's development but did not indicate limitations of service for the project. The District stated that the project frontage shall dedicate a 10-foot public utility easement across the property frontage, Additionally, they stated that any facility change or pole relocation necessary to serve the development will be performed at the applicant's expense. Conditions of approval will be added to address the District's requirements prior to the issuance of a building or grading permit.

Senate Bill 743 (SB743) requires that the transportation impacts under the California Environmental Quality Act (CEQA) evaluate impacts by using Vehicle Miles Traveled (VMT) as a metric. Stanislaus County has currently not adopted any significance thresholds for VMT, and projects are treated on a case-by-case basis for evaluation under CEQA. However, the State of California Office of Planning and Research (OPR) has issued guidelines regarding VMT significance under CEQA. One of the guidelines, presented in the December 2018 document Technical Advisory on Evaluating Transportation Impacts in CEQA, states that locally serving retail would generally redistribute trips from other local uses, rather than generate new trips.

At the time of adoption of P-D (351), a VMT analysis was not a mandatory field of the CEQA evaluation. However, one of the guidelines, presented in the December 2018 document Technical Advisory on Evaluating Transportation Impacts in CEQA, states that locally serving retail would generally redistribute trips from other local uses, rather than generate new trips. Continued sale and service of RV's through an amendment to the development plan of P-D (351) would be consistent with locally serving retail, therefore, it is anticipated the projects impact on VMT to be less than significant.

Construction of the sales and service buildings and development of the site would be subject to all applicable SJVAPCD permits and all SJVAPCD standards will be required to be met. Additionally, all construction must meet California Green Building Standards Code (CALGreen Code), which includes mandatory provisions applicable to all new residential, commercial, and school buildings. The intent of the CALGreen Code is to establish minimum statewide standards to significantly reduce the greenhouse gas emissions from new construction. The CALGreen Code includes provisions to reduce water use, wastewater generation, and solid waste generation, as well as requirements for bicycle parking and designated parking for fuel-efficient and carpool/vanpool vehicles in commercial development. It is the intent of the CALGreen Code that buildings constructed pursuant to the code achieve at least a 15 percent reduction in energy usage when compared to the state's mandatory energy efficiency standards contained in Title 24. The CALGreen Code also sets limits on VOCs (volatile organic compounds) and formaldehyde content of various building materials, architectural coatings, and adhesives. The project has proposed to develop dedicated bicycle parking as well as EV charging stalls for customers.

The project will be required to meet all applicable SJVAPCD and TID standards and to obtain all applicable SJVAPCD permits. The proposed project would be consistent with all applicable renewable energy or energy efficiency requirements. Impacts related to *Energy* are considered to be less than significant.

Mitigation: None

References: Application information; Referral response from Turlock Irrigation District, dated July 17, 2023; California Green Building Standards Code Title 24, Part 11(Cal Green); 2016 California Energy Code Title 24, Part 6; State of California Office of Planning and Research (OPR) guidelines regarding VMT significance under CEQA; Stanislaus County General Plan and Support Documentation[1].

VII. GEOLOGY AND SOILS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			**X**	
ii) Strong seismic ground shaking?			**X**	

iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Discussion: All nine parcels are currently located within a Planned Development zoning district. The USDA Natural Resources Conservation Services' Eastern Stanislaus County Soil Survey indicates that the property is made up of Dinuba sandy loam (DrA) with a Storie Index Rating of 77 and grade 2, shallow (DsA) with a Storie Index Rating of 43 and grade 3, slightly saline alkali (DyA) with a Storie Index Rating of 33 and grade 4, and Tujunga loamy sand (TuA) with a Storie Index Rating of 76 and grade 3.

As contained in Chapter 5 of the General Plan Support Documentation, the areas of the County subject to significant geologic hazard are located in the Diablo Range, west of Interstate 5; however, as per the California Building Code, all of Stanislaus County is located within a geologic hazard zone (Seismic Design Category D, E, or F) and a soils test may be required at building permit application. Results from the soils test will determine if unstable or expansive soils are present. If such soils are present, special engineering of the structure will be required to compensate for the soil deficiency. Any structures resulting from this project will be designed and built according to building standards appropriate to withstand shaking for the area in which they are constructed. Soils on site are not considered unstable or expansive and not anticipated to create significant impacts to life or property.

An early consultation referral response received from the Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project will be required, subject to Public Works review and Standards and Specifications. A referral response received from the Departmental of Environmental Resources (DER) stated any new on-site wastewater treatment systems cannot be covered by impermeable surfaces, meet Measure X guidelines for design, meet LAMP standards and setbacks, and include a design of a 100% expansion area. These same requirements were included in the development standards for P-D 351, however, a condition of approval will be added to ensure the proposed development plan meets these requirements prior to issuance of a building permit.

The project site is not located near an active fault or within a high earthquake zone. Landslides and soil erosion are not likely due to the flat terrain of the area. Impacts related to geology and soils are considered to be less than significant.

Mitigation: None.

References: Application information; Referral response from Department of Environmental Resources (DER), dated July 17, 2023; Referral response from Stanislaus County Department of Public Works August 7, 2023; Stanislaus County General Plan and Support Documentation[1].

VIII. GREENHOUSE GAS EMISSIONS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion: The principal Greenhouse Gasses (GHGs) are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H2O). CO2 is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as CO2 equivalents (CO2e). In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] No. 32), which requires the California Air Resources Board (ARB) design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020. Two additional bills, SB 350 and SB32, were passed in 2015 further amending the states Renewables Portfolio Standard (RPS) for electrical generation and amending the reduction targets to 40% of 1990 levels by 2030.

Construction activities will be limited to the construction of the sales and service building, the detached canopy for vehicle sales staging, and storage shed. Additionally, the project will include paving of a 15.3-acre portion of project site, with the exception of the proposed landscaped storm drain basin and other landscaped areas. These activities would not require any substantial use of heavy-duty construction equipment and would require little or no demolition or grading as the site is presently unimproved and considered to be topographically flat.

As discussed in Section III – *Air Quality*, a CalEEMod Air Quality and Greenhouse Gas Study, SJVAPCD Rule 9510 Indirect Source Review and Risk Prioritization Scoring was completed by Yorke Engineering, LLC on January 2, 2024. Specifically, the study found that the project through implementation of applicable and feasible Greenhouse Gas (GHG) reductions measures the project's annual emissions would consist of 1,419 MT CO_2e per year, which represents 0.0006% of the statewide yearly GHG inventory. The study stated without adopted GHG standards by Stanislaus County, a threshold baseline would not be able to be articulated on a project to project basis. Additionally, the study stated that with the project incorporating Best Performance Standards consistent with CARB guidelines such as bicycle parking and vehicle idling limits, GHG would be reduced. Ultimately the study found the project impacts on GHG to be less than significant.

Additionally, Section VI – Energy evaluated the projects impacts to Vehicle Miles Traveled (VMT). At the time of adoption of P-D (351), a VMT analysis was not a mandatory field of the CEQA evaluation. However, one of the guidelines, presented in the December 2018 State of California Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA, stated that locally serving retail would generally redistribute trips from other local uses, rather than generate new trips. Continued sale and service of RV's through an amendment to the development plan of P-D (351) would be consistent with locally serving retail, therefore, it is anticipated the proposed project's impact on VMT to be less than significant.

Mitigation: None.

References: Referral response from San Joaquin Valley Air Pollution Control District dated, July 31, 2023; San Joaquin Valley Air Pollution Control District email correspondence, dated January 17, 2024; CalEEMod Air Quality and Greenhouse Gas Study, California Green Building Standards Code Title 24, Part 11(Cal Green); 2016 California Energy Code Title 24, Part 6; State of California Office of Planning and Research (OPR) guidelines regarding VMT significance under CEQA; SJVAPCD Rule 9510 Indirect Source Review and Risk Prioritization Scoring, completed by Yorke Engineering, LLC on January 2, 2024; Stanislaus County General Plan and Support Documentation[1].

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

Discussion: The County Department of Environmental Resources is responsible for overseeing hazardous materials and has not indicated any particular concerns in this area. P-D (351) originally proposed to develop a drive-thru waste disposal and propane station, which was to be subject to permitting by the Hazardous Materials Division of DER (DER HAZMAT). The proposed amended development plan of P-D (351) will continue to include the waste disposal but also include the construction of a sales and service, a propane filling station, as well the inclusion of motorized RV sales for the entire operation. Service will consist of light repairs such as oil changes, brake pad changes, and other minor repairs. Engine and transmission repairs will not be conducted on-site. In both P-D (351) and the proposed amendment, the primary hazardous material that would likely be stored on site were gasoline and oil, which is regulated locally and at the state level. DER HAZMAT provided a referral response for the project stating that the project is not expected to generate any significant impacts, however, to ensure any existing underground storage tanks, buried chemicals or refuse, or contaminated soils are properly located and disposed of, a Phase I and Phase II study, if necessary, shall be completed prior to the issuance of a grading permit. Additionally, DER HAZMAT stated that the applicant would be responsible to receive all permits and license through the County and State for the storage of hazardous materials. Lastly, DER HAZMAT stated that the proposed storm drain runoff shall be kept separate from any hazardous materials including runoff generated from the truck washing station. Conditions of approval will be added to ensure this takes place.

Consequently, the proposed use is not recognized as a generator and/or consumer of hazardous materials itself, therefore no significant impacts associated with hazards or hazardous materials are anticipated to occur as a result of the proposed project.

The project site is not within the vicinity of any airstrip or wildlands.

Mitigation: None.

References: Application information; Referral response from Department of Environmental Resources – Hazardous Materials Division dated, July 12, 2023; Safety Element of the Stanislaus County General Plan and Support Documentation[1].

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

Discussion: As part of the first phase of development for P-D (351), an out of boundary service connection to the Keyes Community Service District facilities east of State Route 99 was approved by the Stanislaus County Local Agency Formation Commission (LAFCO). The site is currently served by the District for domestic water and will continue with the proposed sales and service building. Water consumption is expected to be minimal with uses ranging from bathroom and breakroom facilities and a RV wash that will be apart of the sales and service operation and not open to the public.

Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act (FEMA). Run-off is not considered an issue because of several factors which limit the potential impact. These factors include the relatively flat terrain of the subject site, and relatively low rainfall intensities in the Central Valley. Areas subject to flooding have been identified in accordance with the Federal Emergency Management Act. The project site itself is located in Zone X (outside the 0.2 percent floodplain) and, as such, exposure to people or structures to a significant risk of loss/injury/death involving flooding due to levee/dam failure and/or alteration of a watercourse, at this location is not an issue with respect to this project. Flood zone requirements are enforced through the building permit process. The Building Permits Division also

reviews building permits and determines if geotechnical reports are required with submission of building permits. A requirement to obtain all applicable building permits will be incorporated into the project's development standards.

P-D (351) included an on-site landscaped basin at the northeastern portion of the site, the development of the basin as part of this request will not be altered and is anticipated to be able to maintain all storm water on-site. A referral response received from the Stanislaus County Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project is required and will be subject to Public Works review and Standards and Specifications, as well as the submittal of a Storm Water Pollution Prevention Plan (SWPPP) prior to the approval of any grading plan. The submittal and approval of the grading, drainage, erosion/sediment control plan and SWPPP will be made part of the conditions of approval for this project prior to issuance of a building permit. Accordingly, runoff associated with the construction at the proposed project site will be reviewed as part of the grading review process and be required to be maintained on-site. Additionally, any construction will be reviewed under the Building Permit process and must be reviewed and approved by DER and adhere to current Local Agency Management Program (LAMP) standards. LAMP standards include minimum setback from wells to prevent negative impacts to groundwater quality.

The Sustainable Groundwater Management Act (SGMA) was passed in 2014 with the goal of ensuring the long-term sustainable management of California's groundwater resources. SGMA requires agencies throughout California to meet certain requirements including forming Groundwater Sustainability Agencies (GSA), developing Groundwater Sustainability Plans (GSP), and achieving balanced groundwater levels within 20 years. As the site is served by the Keyes Community Service District, participation in the sub-basins GSA and enforcement of their GSP would fall to the District. Therefore, continued service to the project site would be considered less than significant to groundwater resources.

Mitigation:

References: Application information and Planned Development 351; Referral response from Department of Environmental Resources (DER), dated July 17, 2023; Referral response from Stanislaus County Department of Public Works August 7, 2023; Stanislaus County General Plan and Support Documentation[1].

XI. LAND USE AND PLANNING -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?			**X**	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			**X**	

Discussion: This is a request to amend the Development Plans of Planned Developments (P-D) (351) and (253), to allow for construction of an RV sales and service building, a detached canopy for vehicle sales staging, a storage shed, and to allow for the sale of motorized RVs on both P-Ds. Service of RV's will consist of light repairs such as oil changes, brake pad changes, and other minor repairs. Engine and transmission repairs will not be conducted on-site. A full description of the project including building square footages, site development, project history, employee information, and hours of operation can be found in the *Project Description* section of this document.

As discussed in Section II – *Agricultural Resources* the proposed amendment to both P-D (351) and (259) sites, the new proposed building over 300 feet away from the closest agriculturally zoned parcel. The remaining portion of the proposed project site, south of the building will be used for storage and parking of RV's and customer vehicles, which is exempt from the Agricultural buffer policy.

In accordance with Section 21.040.080(B) of the County Code, an amendment to the development plans of both P-D (351) and (253) can be permitted provided a use permit is obtained. Findings related to approval of a use permit include the Planning Commission finds that the establishment, maintenance and operation of the proposed use or building applied for

is consistent with the general plan and will not, under the circumstances of the particular case, be detrimental to the health, safety and general welfare of persons residing or working in the neighborhood of the use and that it will not be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.

As the project will amend the existing development plans of two P-D's, it is not anticipated that the project will not divide an established community or conflict with any existing land use plan adopted to avoid or mitigate environmental impacts.

Mitigation: None.

References: Application information and Planned Development 351; Stanislaus County General Plan and Support Documentation[1].

XII. MINERAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

Discussion: The location of all commercially viable mineral resources in Stanislaus County has been mapped by the State Division of Mines and Geology in Special Report 173. There are no known significant resources on the site, nor is the project site located in a geological area known to produce resources.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

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

Discussion: The Stanislaus County General Plan identifies noise levels up to 70 dB Ldn (or CNEL) as the normally acceptable level of noise for commercial uses. On-site grading and construction resulting from this project may result in a temporary increase in the area's ambient noise levels; however, noise impacts associated with on-site activities and traffic are not anticipated to exceed the normally acceptable level of noise. The site itself is impacted by the noise generated from California Highway 99. The proposed project will not alter the ambient levels of noise during construction nor operation. The area's ambient noise level will temporarily increase during grading/construction. As such, the project will be conditioned to comply with County regulations related to hours and days of construction.

The site is not located within an airport land use plan.

Mitigation: None.

References: Application information; Stanislaus County General Plan Noise Element and Support Documentation[1].

XIV. POPULATION AND HOUSING -- Would the project:	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

Discussion: The site is not included in the vacant sites inventory for the 2016 Stanislaus County Housing Element, which covers the 5th cycle Regional Housing Needs Allocation (RHNA) for the County and will therefore not impact the County's ability to meet their RHNA. No population growth will be induced, nor will any existing housing be displaced as a result of this project.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

XV. PUBLIC SERVICES --	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Would the project result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:			**X**	
Fire protection?			**X**	
Police protection?			**X**	

Schools?			**X**	
Parks?			**X**	
Other public facilities?			**X**	

Discussion: The County has adopted Public Facilities Fees, as well as Fire Facility Fees on behalf of the appropriate fire district, to address impacts to public services. Construction of the new buildings will include payment of applicable school district fees as well. The proposed sales and service building, new vehicle staging structure, and storage structure will be subject to both fees at the time of building permit issuance. The proposed project will not have any impacts to schools or parks.

This project was circulated to all applicable school, fire, police, irrigation, and public works departments and districts during the early consultation referral period. As stated in the project description, the project, including the new sales and service building, will continue to utilize the Keyes Community Service District (CSD) for public water services.

As with P-D (351), a referral response was received from the Turlock Irrigation District regarding irrigation facilities currently within the project site. The District identified an irrigation pipeline and easement that lies within parts of the project site and has required that the facilities be removed as they no longer serve any users west of the State Highway. A condition of approval will be added to address the District's requirements prior to the issuance of a building or grading permit.

This project was circulated to all applicable public service providers including: school, fire, police, irrigation district, and public works department during the early consultation referral period. The project is not anticipated to have any significant adverse impact on public services.

Mitigation: None.

References: Application information and Planned Development 351; Referral response from Turlock Irrigation District Referral Response, dated July 17, 2023; Stanislaus County General Plan and Support Documentation[1].

XVI. RECREATION --	**Potentially Significant Impact**	**Less Than Significant With Mitigation Included**	**Less Than Significant Impact**	**No Impact**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Discussion: This project will not increase demands for recreational facilities, as such impacts typically are associated with residential development.

Mitigation: None.

References: Stanislaus County General Plan and Support Documentation[1].

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

Discussion: As approved with P-D (351) and (259), the development of the site for RV sales, storage, and service will utilize County-maintained Taylor Court as well as a reciprocal access easement for customers and employees to access the site. The applicant proposes to stripe a total of 110 RV customer parking and inventory spaces and 330 customer passenger vehicle spaces. The development of the site will include incorporation of West Warner Road, which has been formally abandoned by the County.

There are no proposed changes in the hours of operation of seven days a week, 9:00 a.m. to 6:00 p.m. Additionally, the applicant does not expect an increase in the previously approved P-D (351)'s 90 employees on a maximum shift at full buildout of Phase 2. However, as there is an increase in proposed total building space to be developed, a supplemental to the previously adopted Traffic Impact Analysis has been prepared and included in the application submittal.

As part of the adoption of P-D (351), a Traffic Impact Analysis (TIA) for the proposed project was prepared by Pinnacle Traffic Engineering, which included input from the County and City of Turlock for its scoping parameters. The analysis evaluated the potential project impacts on weekday operations at adjacent intersections along Taylor Road, Taylor Court, on-ramps for SR 99, and North Golden State Boulevard. The analysis concluded that the proposed project was anticipated to generate 710 trips per-day at full build-out. The analysis also found that existing service levels along Taylor Road and SR 99 southbound intersection already exceeds the threshold for adequate levels of service, warranting signalization and the development of the project would further contribute to that impact. To mitigate the projects impact, the analysis recommends the applicant pay County Public Facilities fee and a fair-share contribution towards the future improvements at the SR 99 and Taylor Road interchange. In review of the TIA, Caltrans recommends that the County collect a proportional share from the applicant, to hold for contribution for future improvements to SR 99 facilities. As part of the Phase 1 development of P-D (351), a payment of $143,878.83 was made to the City of Turlock for the projects 1.3% proportional share of future improvements need to the Taylor Road interchange. County Public Facilities fees were also paid for construction of a storage building.

With the proposed amendment to Phase 2 of P-D (351), a Supplement Traffic Impact Analysis by Pinnacle Traffic Engineering on May 9, 2023 and was completed prior to application submittal. As the adopted Phase 2 of P-D (351), proposed to use an existing service building and outdoor storage of RV inventory, the supplemental analysis compared potential vehicle trips based on actual employee trips, trips based on employee amounts, and building square footage from the Institute of Traffic Engineering Trip General Manual (11th edition). The supplement found that the proposed amendment to Phase 2 would represent up to a total of 34 new daily trips, which would not alter the findings of the original TIA or the mitigation imposed on the development. The supplemental stated the amended development plan would not alter the proportional fair share payment made by the applicant for improvements to the Taylor Road and SR 99 interchange. The proposed structures in the amended development plan will be required to pay all County Public Facilities Fees, which would be a substantial increase to the amount likely to be paid for all of P-D (351). Therefore, no additional mitigation is required for the proposed amendment to Phase 2.

Additionally, Section VI – Energy evaluated the projects impacts to Vehicle Miles Traveled (VMT). At the time of adoption of P-D (351), a VMT analysis was not a mandatory field of the CEQA evaluation. However, one of the guidelines, presented in the December 2018 State of California Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA, stated that locally serving retail would generally redistribute trips from other local uses, rather than generate new trips. Continued sale and service of RV's through an amendment to the development plan of P-D (351) would be consistent with locally serving retail, therefore, it is anticipated the projects impact on VMT to be less than significant.

The project, including the supplemental analysis, was referred to the County's Public Works Department, the California Department of Transportation, and the City of Turlock. A referral response received from the Public Works Department, did not indicate any issues related to traffic impacts or site development. The department provided standard conditions of approval for use of loading and unloading of County Right-of-way, encroachment permitting, and a grading permit. Each will be applied to the project, prior to issuance of any permit. No responses to the Supplement Traffic Impact Analysis have been received from Caltrans or the City to date.

The project is not anticipated to conflict with a transportation program, result in increased hazards, or inadequate emergency access.

Mitigation: None.

References: Application information and Planned Development 351; Referral response from Stanislaus County Department of Public Works August 7, 2023; Adopted Traffic Impact Analysis performed by Pinnacle Traffic Engineering dated December 31, 2018; Supplemental to the Adopted Traffic Impact Analysis performed by Pinnacle Traffic Engineering dated May 9, 2023; Part 6; State of California Office of Planning and Research (OPR) guidelines regarding VMT significance under CEQA Stanislaus County General Plan and Support Documentation[1].

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

Discussion: The adoption of P-D (351) included a records search conducted by the Central California Information Center for the project site indicated that there are no historical, cultural, or archeological resources recorded on-site and that the site has a low sensitivity for the discovery of such resources. The proposed amended development plan for both P-D (351) and (259) do not appear they will result in significant impacts to any archaeological or cultural resources. Each P-D have already been developed to various degrees and the proposed construction is within areas of the project site, which has already been disturbed. However, standard conditions of approval regarding the discovery of cultural resources during the construction process will be added to the project.

Mitigation: None.

References: Application information and Planned Development 351; Stanislaus County General Plan and Support Documentation[1].

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

Discussion: Limitations on providing services have not been identified. The project proposes to continue to utilize the Keyes Community Service District for public water services and develop private septic facilities for the proposed sales and service building. Storm water capture will continue as originally adopted by P-D (351) with development of a landscaped basin at the northeast portion of the project site.

An early consultation referral response received from the Department of Public Works indicated that a grading, drainage, and erosion/sediment control plan for the project will be required, subject to Public Works review and Standards and Specifications. A referral response received from the Departmental of Environmental Resources (DER) stated any new on-site wastewater treatment systems cannot be covered by impermeable surfaces, meet Measure X guidelines for design, meet LAMP standards and setbacks, and include a design of a 100% expansion area. These same requirements were included in the development standards for P-D (351); in addition, a condition of approval will be added to ensure the proposed development plan meets these requirements prior to issuance of a building permit.

As with P-D (351), a referral response was received from the Turlock Irrigation District regarding irrigation facilities currently within the project site. The District identified an irrigation pipeline and easement that lies within parts of the project site and has required that the facilities be removed as they no longer serve any users west of the State Highway. A condition of approval will be added to address the District's requirements prior to the issuance of a building or grading permit.

The project is not anticipated to have a significant impact to utilities and service systems.

Mitigation: None.

References: Application information and Planned Development 351; Referral response from Turlock Irrigation District, dated July 17, 2023; Referral response from Department of Environmental Resources (DER), dated July 17, 2023; Referral response from Stanislaus County Department of Public Works August 7, 2023; Stanislaus County General Plan and Support Documentation[1].

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

Discussion: The Stanislaus County Local Hazard Mitigation Plan identifies risks posed by disasters and identifies ways to minimize damage from those disasters. With the Wildfire Hazard Mitigation Activities of this plan in place, impacts to an adopted emergency response plan or emergency evacuation plan are anticipated to be less-than significant. The terrain of the site is relatively flat, and the site has access to a County-maintained road. The site is located in a Local Responsibility Area (LRA) for fire protection and is served by Keyes Fire Protection District. The project was referred to the District, but no response was received. California Building Code establishes minimum standards for the protection of life and property by increasing the ability of a building to resist intrusion of flame and embers. All construction is required to meet fire code, which will be verified through the building permit review process. A grading and drainage plan will be required and all fire protection, and emergency vehicle access standards met. These requirements will be applied as development standards for the project.

Wildfire risk and risks associated with postfire land changes are considered to be less-than significant.

Mitigation: None.

References: Application information; California Building Code Title 24, Part 2, Chapter 7; Stanislaus County Local Hazard Mitigation Plan; Stanislaus County General Plan; and Support Documentation[1].

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

Discussion: The proposed project site has already been approved for RV sales, service, and storage. The immediate vicinity of the project has also been developed for light industrial uses such as truck repair and manufacturing. SR 99 and the Union Pacific rail line limit an additional growth of this pocket of light industrial and limited retail development. The proposed sales and service building as well as the remaining site of development of P-D (351) and (259) would not contribute to cumulative impacts to agricultural or hydrological resources.

As discussed in Section XVII – *Transportation*, the originally adopted P-D (351) required mitigation of potential traffic impacts to the Taylor Road and SR 99 interchange by payment of all applicable County Public Facility Fee and a fair share payment of the projects proportional use of the intersection. A supplemental Traffic Impact Analysis prepared for this project found that the total daily vehicle trips associated with amended Phase 2 of P-D (351) would be minimal and would not alter the assumptions or proportional fair share fees of the original analysis prepared for adoption of P-D (351). However, the project would still be subject to the County's Public Facility Fees for all new buildings, which would be utilized for any roadway improvements in the vicinity.

An analysis of potential projects in the vicinity of the project site that could contribute to cumulative traffic impacts found two projects, Use Permit App No. PLN2023-0026 – Singh Trucking and General Plan Amendment and Rezone Application No. PLN2021-0052 – Pattar Trucking. Both projects are requesting truck parking of varying intensity, Singh Trucking requesting parking of up to 12 tractor-trailers, as permitted by use permit in the General Agricultural (A-2) zoning district and Pattar Trucking requesting to amend the current General Plan and Zoning designation of a parcel from Agriculture to Planned Development to allow for the parking of up to 80 tractor-trailers. Both Singh and Pattar Trucking are located just west of the project site across the Union Pacific rail line. As found in the original Traffic Impact Analysis for the adoption of P-D (351), the intersection of Taylor Road and SR 99 was already considered to exceed the threshold for adequate levels of service, warranting signalization. Pattar Trucking because of their size was also required to complete a traffic impact analysis, which the current draft contains a similar conclusion, that mitigation of the impacts to the intersection should come in the form of payment of the County Public Facilities fee and a fair-share contribution towards the future improvements at the SR 99 and Taylor Road interchange, if approved. Singh Trucking, while not subject to the same mitigation because of their lesser size, would be subject County Public Facility Fees, that would include funding for roadway projects, if approved. Ultimately, all three projects, through payment of fair share fees and County Public Facility Fees would contribute to

improvement to an already impacted intersection, therefore, it is not expected that the project would not lead to significant impacts to transportation resources.

Review of this project has not indicated any features which might significantly impact the environmental quality of the site and/or the surrounding area.

Mitigation: None.

References: Application information; Planned Development 351; Initial Study; Stanislaus County General Plan and Support Documentation[1].

---

[1]Stanislaus County General Plan and Support Documentation adopted in August 23, 2016, as amended. ***Housing Element*** adopted on April 5, 2016.

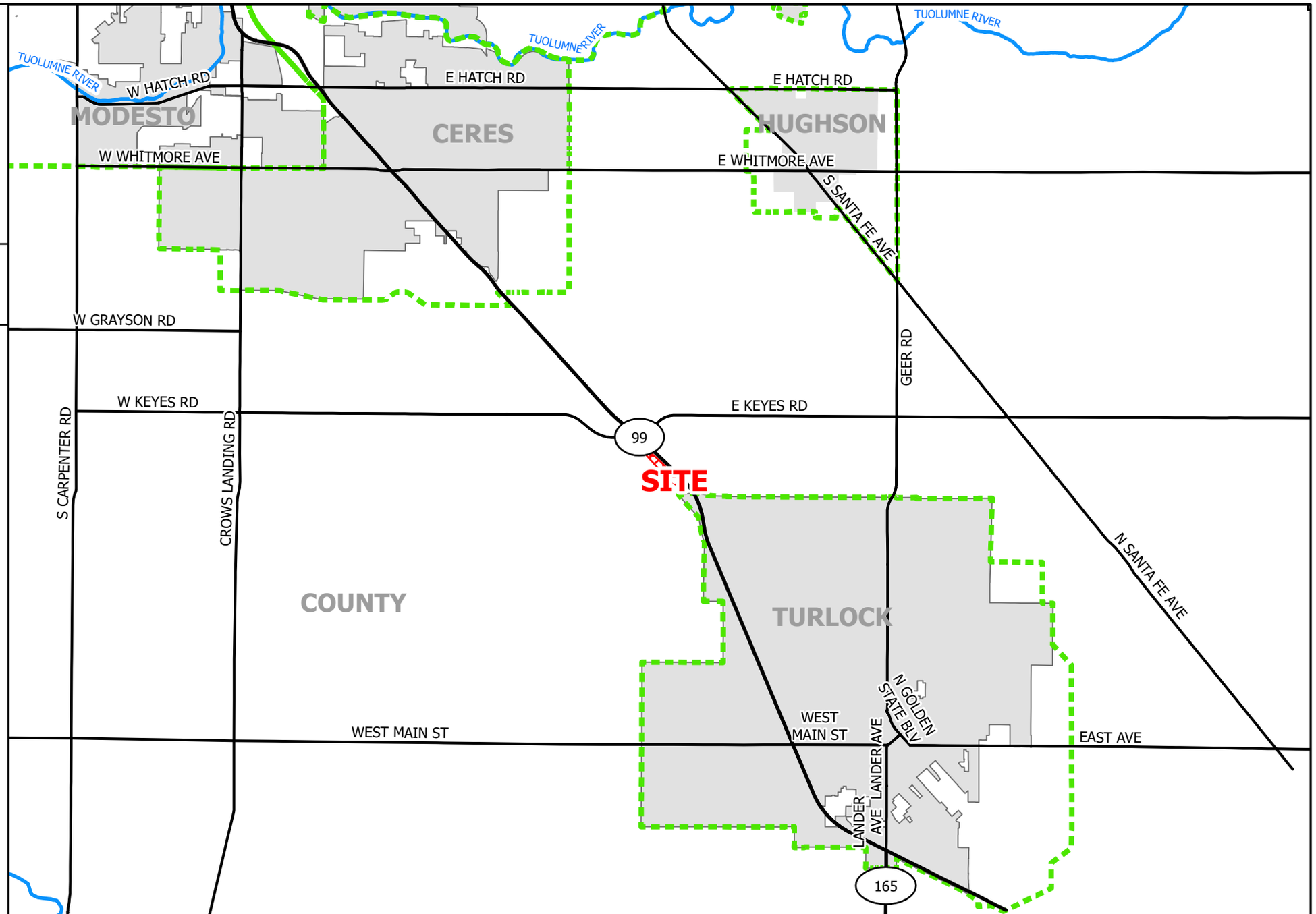
BEST RV CENTER

UP PLN2023-0047

AREA MAP

LEGEND

- Project Site
- Highway
- Major Road
- River
- Sphere of Influence



N

0 1.5 3 Miles

0 1.8 3.5 Kilometers

Source: Planning Department GIS

Date Exported: 5/13/2024

BEST RV CENTER

UP PLN2023-0047

GENERAL PLAN MAP

LEGEND

- Project Site
- Parcel
- Highway
- Major Road
- Canal
- Agriculture
- City
- Commercial
- Industrial
- Planned Development
- Residential - Low Density
- Residential - Medium Density
- Residential - Medium/High Density
- Street

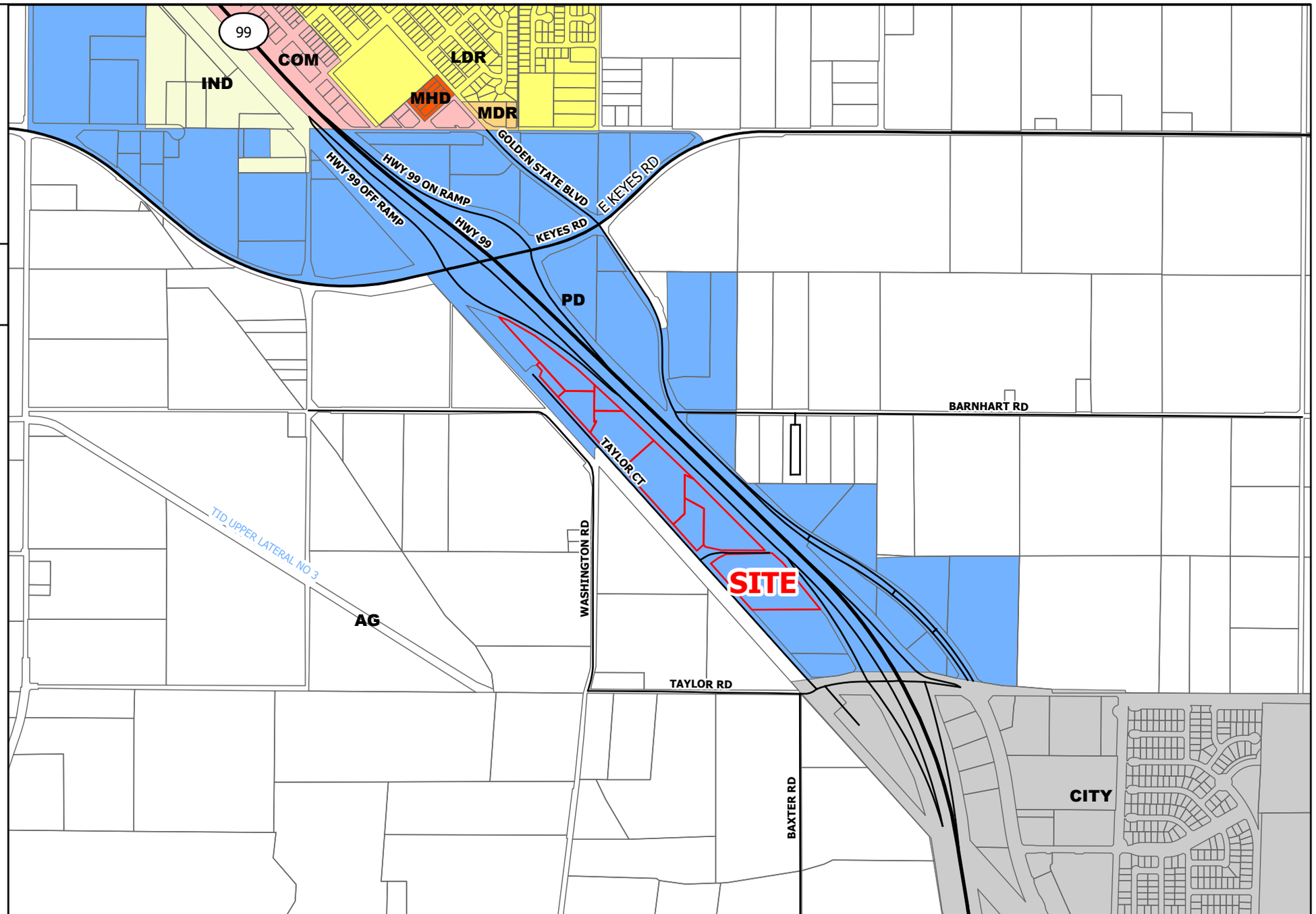
N

0 1,000 2,000 US Feet

0 313 625 Meters

Source: Planning Department GIS

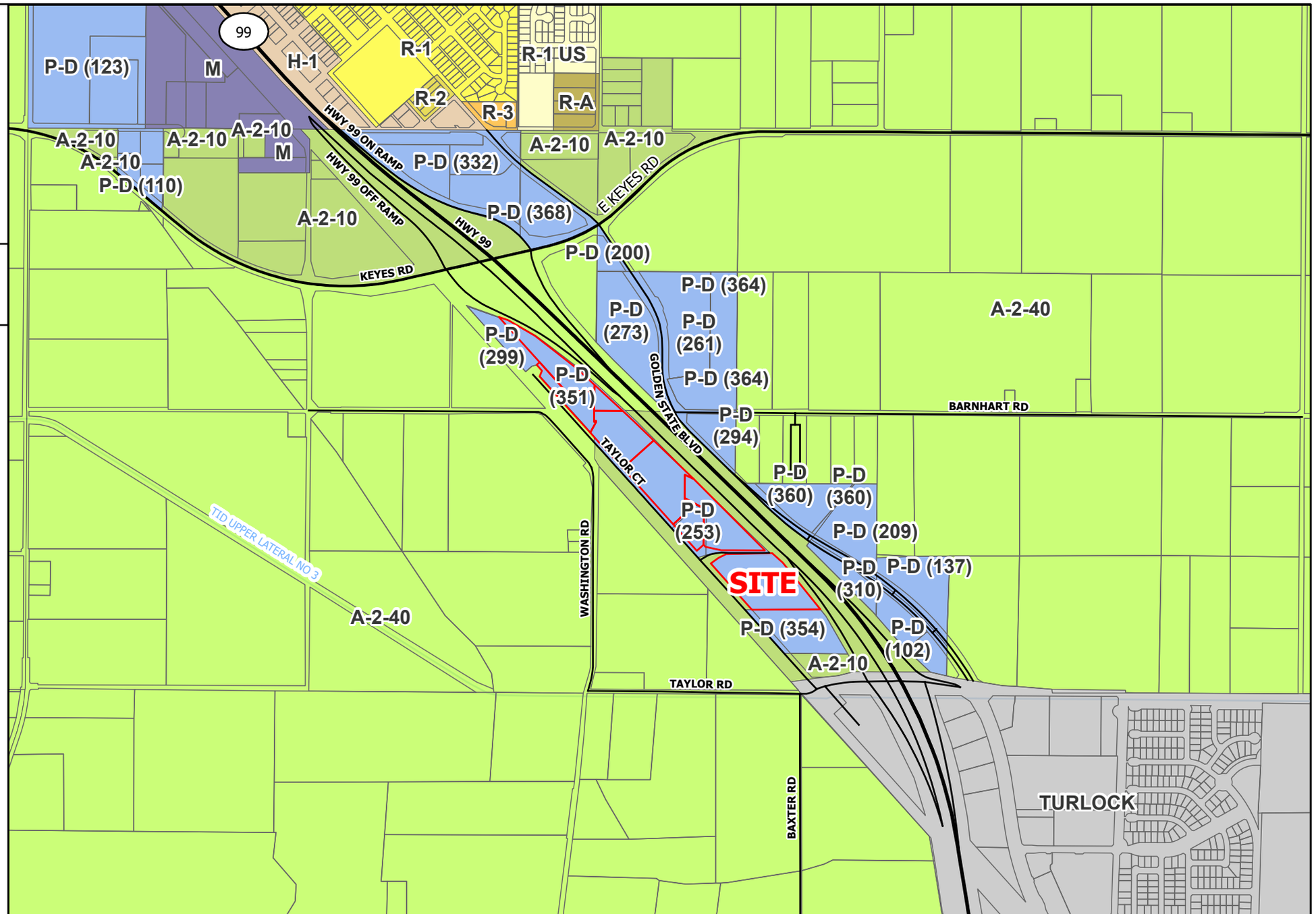
Date Exported: 5/13/2024



BEST RV CENTER

UP PLN2023-0047

ZONING MAP



LEGEND

- Project Site
- Parcel
- Highway
- Major Road
- Canal

Zoning Designation

- General Agriculture 10 Acre
- General Agriculture 40 Acre
- City
- Highway Frontage
- Industrial
- Planned Development; P-D (333); P-D (344); P-D (345); P-D
- Planned Development; P-D (333); P-D (344); P-D (345); P-D
- Planned Development; P-D (333); P-D (344); P-D (345); P-D
- Planned Development; P-D (333); P-D (344); P-D (345); P-D
- Planned Development; P-D (333); P-D (344); P-D (345); P-D
- Planned Development; P-D (333); P-D (344); P-D (345); P-D
- Planned Development; P-D (333); P-D (344); P-D (345); P-D
- Planned Development; P-D (333); P-D (344); P-D (345); P-D
- Planned Development; P-D (333); P-D (344); P-D (345); P-D

N

0 1,000 2,000 US Feet

0 313 625 Meters

Source: Planning Department GIS

Date Exported: 5/13/2024

BEST RV CENTER

UP PLN2023-0047

2023 AERIAL AREA MAP

LEGEND

- Project Site
- Parcel
- Highway
- Major Road
- Canal
- Street

N

0 1,000 2,000 US Feet

0 313 625 Meters

Source: Planning Department GIS

Date Exported: 5/13/2024

BEST RV CENTER

UP PLN2023-0047

2023 AERIAL SITE MAP

LEGEND

- Project Site
- Parcel
- Highway
- Street

N

0 350 700 US Feet

0 100 200 Meters

Source: Planning Department GIS

Date Exported: 5/13/2024

BEST RV TURLOCK

5100-5300 TAYLOR CT. TURLOCK, CA 95382

VICINITY MAP

BEST RV BUILDING BREAKDOWN (FOR REFERENCE ONLY)

B OCCUPANCY	SHOWROOM	9,589 S.F.
B OCCUPANCY	SALES OFFICE	2,540 S.F.
S1 OCCUPANCY	SERVICE DRIVE	8,642 S.F.
B OCCUPANCY	SERVICE RECEPTION/OFFICE	6,522 S.F.
S1 OCCUPANCY	SERVICE BAYS	75,165 S.F.
S1 OCCUPANCY	TECH AMENITIES	1,339 S.F.
S1 OCCUPANCY	RV WASH AREA	4,210 S.F.
F1 OCCUPANCY	PAINT BOOTH AREA	1,207 S.F.
TOTAL 1ST FLOOR		109,545 S.F.
B OCCUPANCY	SALES & ADMIN. OFFICES	16,390 S.F.
S1 OCCUPANCY	PARTS & MEZZANINE	3,673 S.F.
TOTAL 2ND FLOOR		20,063 S.F.
B OCCUPANCY	NEW VEHICLE DELIVERY	16,086 S.F.
S1 OCCUPANCY	STORAGE	1,378 S.F.
TOTAL BUILDING		129,608 S.F.
TOTAL FACILITY		147,068 S.F.

DEFERRED SUBMITTAL

DEFERRED SUBMISSION LIST	
DEFERRED ITEM TYPE	DEFERRED ITEM
1. FACTORY BRANDED FEATURES	PAINT BOOTH

THESE DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE PROJECT ARCHITECT AND/OR ENGINEER FOR REVIEW AND COORDINATION. FOLLOWING THE COMPLETION OF THE PROJECT ARCHITECT/ENGINEER REVIEW AND COORDINATION, A SUBMITTAL TO THE CITY SHALL BE MADE (FOR CITY REVIEW AND APPROVAL), WHICH SHALL INCLUDE A LETTER STATING THIS REVIEW AND COORDINATION HAS BEEN PERFORMED AND COMPLETED AND THAT THE PLANS AND CALCULATIONS FOR THE DEFERRED ITEMS ARE FOUND TO BE ACCEPTABLE (E.G., WITH REGARD TO GEOMETRY, LOAD CONDITONS, ETC.) WITH NO EXCEPTIONS.

THE FINAL SET OF PLANS MUST BE SIGNED BY AN ENGINEER OR ARCHITECT LICENSED BY THE STATE OF CALIFORNIA. PLANS FOR ELEMENTS OF THE STRUCTURE DESIGNED BY THE OTHERS MUST BE REVIEWED AND APPROVED BY ENGINEER OR ARCHITECT OF RECORD FOR GENERAL CONFORMANCE TO THE STRUCTURAL DESIGN.

*SUBMITTAL - ALL DEFERRED PLANS SHALL BE SUBMITTED NO LATER THAN 45 DAYS FROM AWARD OF CONTRACT.

PROJECT INFORMATION

BUILDING ADDRESS:
5100-5300 TAYLOR CT., TURLOCK, CA 95382

APN:
PHASE II, 045-053-040, 045-053-041 & 045-062-001

ZONING DESIGNANTION:
P-D (194) & A-2-10

EXISTING LAND USE:
RV DEALERSHIP

SCOPE OF WORK:
THE PROJECT IS A REQUEST TO AMEND PREVIOUS APPROVED PHASE 2, PLANNED DEVELOPMENT 351 (PD 351), TO ALLOW FOR DEVELOPMENT OF A NEW RV DEALERSHIP WITH TOTAL BUILDING AREA OF 129,608 S.F. THE PROJECT WILL INCLUDE THE NEW CONSTRUCTION OF A 37-FOOT-TALL, TWO-STORY RV DEALERSHIP WITH 28,519 S.F. FOR SHOWROOM/OFFICE AREA, 6,522 SERVICE RECEPTION, 2,640 S.F. OF PARTS SALES, 3,673 S.F FOR PARTS STORAGE MEZZANINE, 75,165 S.F. FOR (40) SERVICE BAYS AND 4,210 S.F. FOR AUTOMATIC RV WASH TUNNEL. THE PROJECT WILL ALSO CONSIST OF CONSTRUCTION OF A NEW METAL FRAME CANOPY FOR 16,086 S.F. RV WALK-THRU/ DELIVERY AREA, AND RELOCATION OF AN EXISTING 1,374 S.F. METAL STORAGE SHED FROM PHASE 1 TO SOUTHEAST CORNER OF PHASE 2 PROJECT SITE. SEE ARCHITECTURAL SITE PLAN. WE ALSO PROPOSED TO INSTALL (2) NEW ABOVE-GROUND FUEL STORAGE TANKS, ONE 1,500-GALLON DIESEL TANK AND ONE 1,500-GALLON GAS TANK.

AS PART OF PHASE 2, THE PROJECT SITE WILL BE DEVELOPED WITH A FULLY PAVED PARKING LOT PROVIDING 326 STANDARD PARKING STALLS (9' X 18') FOR EMPLOYEE AND CUSTOMER PARKING THAT WILL COVER THE NUMBER OF EMPLOYEES RANGING BETWEEN 65 TO 90 AND 40 CUSTOMER PARKING STALLS BASED ON THE PROJECTED 800 UNITS OF RV DISPLAY. WE ALSO PROPOSED 119 RV PARKING STALLS (20' X 45') FOR RV CUSTOMER, RV IN-SERVICE AND NEW RV DELIVERY PARKING, AND LANDSCAPING THAT WILL INCLUDE SHADE TREES AND GROUNDCOVER, AND (76) OF 30-FOOT-TALL LIGHT POLES.

TOTAL BUILDING AREA:

MAIN BUILDING A	134,846 S.F.
WALK-THROUGH CANOPY	16,086 S.F.
STORAGE SHED	1,374 S.F.
TOTAL	152,306 S.F.

LOT SIZE:
4.7 + 7.8 + 2.8 = 15.3 ACRE

LOT COVERAGE:

	SQUARE FEET	PERCENTAGE
BUILDING AREA:	152,306 SF	22%

OCCUPANCY:
B, S-1, & F-1

TYPE OF CONSTRUCTION:
II-B

SPRINKLERED/FIRE ALARM:
YES

NUMBER OF STORIES:
TWO

HEIGHT OF BUILDING:
37'-0"

Goree Whitfield
24691 Del Prado Ave
Dana Point, CA 92629
949 -234 -1950
www.goreewhitfield.com

CONSULTANTS

STRUCTURAL ENGINEER
GRIMM & CHEN
17500 REDHILL AVE., STE. 240, IRVINE, CA 92614
P: (949) 250.3150 X 1001
E: JEFFG@GC-SE.COM

ELECTRICAL ENGINEER
DMI ENGINEERS
8140 WEIRICK RD, CORONA, CA 92883
P: (951) 277-9109
E: FIYENGAR@DMIENGINEERS.COM

CIVIL ENGINEER
ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4
MODESTO, CA 95356
P: (209) 614-6021
E: RYAN@ASSOCENG.COM

INTERIOR DESIGN
ABEL DESIGN GROUP
1700 BROADWAY, SUIT 830, DENVER, CO 80290
P: (303) 532-8899
E: JHOSKIN@ABELDESIGNGROUP.COM

MECHANICAL ENGINEERS
RPM ENGINEERS, INC
102 DISCOVERY, IRVINE, CA 92618
P: (949) 880-2506
E: ETHANS@RPMPE.COM

CONSULTANT #5 - DISCIPLINE
CONSULTANT #6 - NAME
ADDRESS
PHONE NUMBER
WEBSITE

PROJECT NAME
BEST RV TURLOCK

PROJECT DESCRIPTION
RV SALES FACILITY
EXPANSION

PROJECT ADDRESS
5100-5300 TAYLOR CT.
TURLOCK, CA 95382

OWNER INFORMATION
NADER AMMARI

GOREE PROJECT NUMBER
GW2227

STAMP / SIGNATURE

ISSUE DATE

ISSUE HISTORY

DATE:	MARK:	DESCRIPTION:

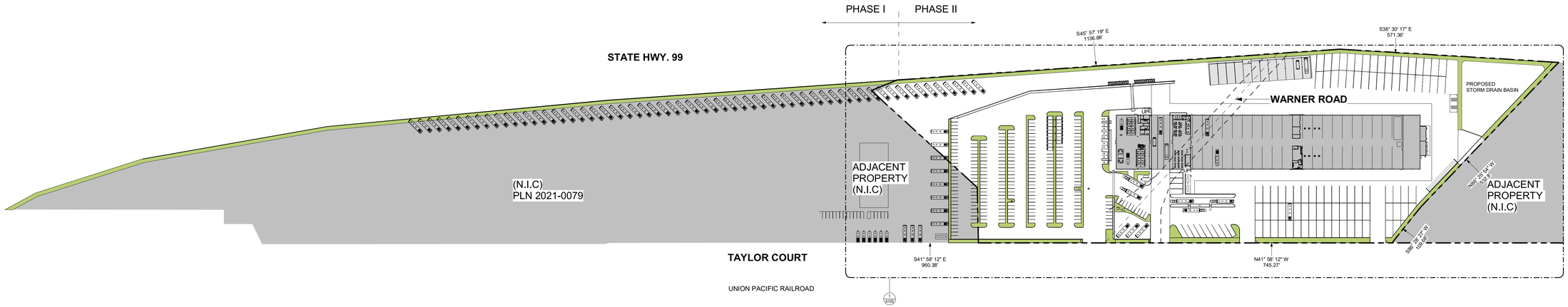
KEY PLAN

SHEET NAME
COVER SHEET

SHEET NUMBER
A000

COPYRIGHTED DOCUMENT - THE DRAWING AND THE BIMCAD FILE FROM WHICH IT HAS BEEN GENERATED AND PROVIDED AS AN INSTRUMENT OF SERVICE FOR THE PROJECT THESE DOCUMENTS ARE THE SOLE PROPERTY OF GOREE ARCHITECTS, INC. ANY USE OF THESE DOCUMENTS, DATA AND DESIGNS FOR PURPOSES OTHER THAN THOSE ASSOCIATED WITH THIS PROJECT WITHOUT THE EXPRESSED, WRITTEN PERMISSION OF GOREE WHITFIELD, INC. IS PROHIBITED.

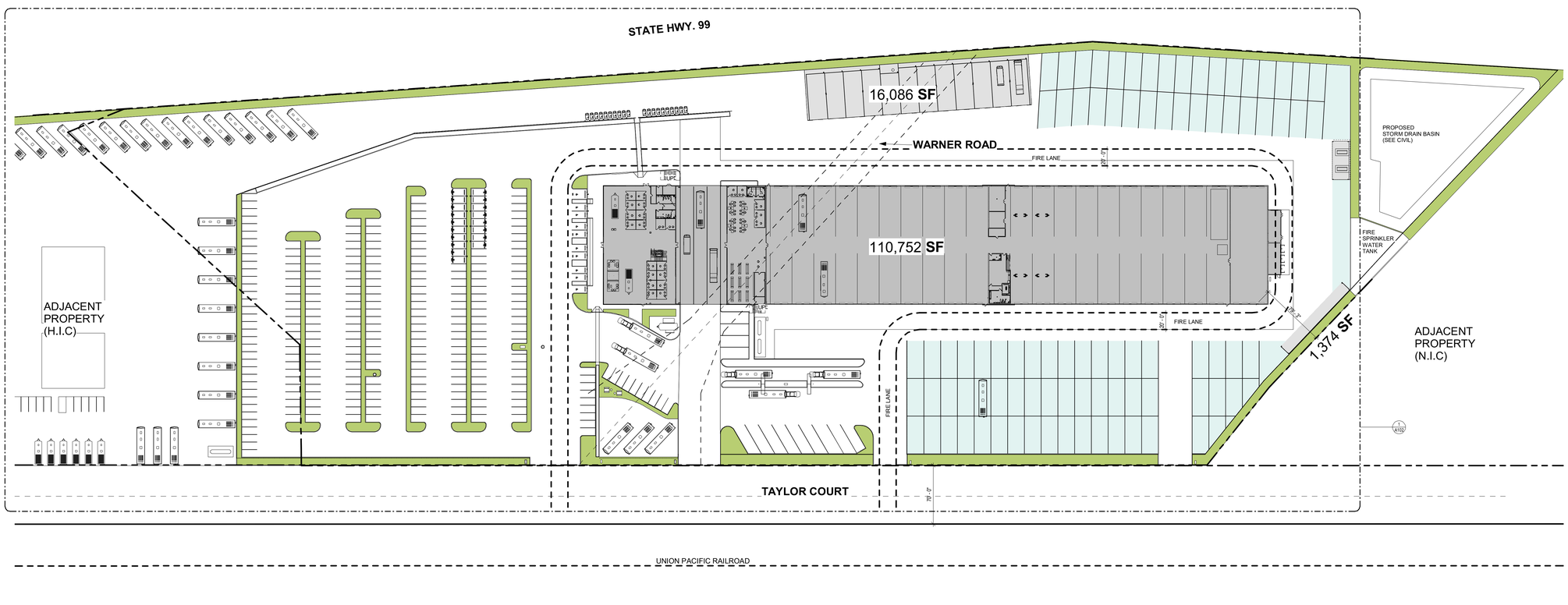
© GOREE WHITFIELD 2021



2 COMPOSITE PROPERTY SITE PLAN
1" = 100'-0"

SCALE: 1" = 100'

0 25 50 100 200



1 COMPOSITE SITE PLAN
1" = 50'-0"

SCALE: 1" = 50'

0 12.525 50 100

Goree Whitfield

24691 Del Prado Ave
Dana Point, CA 92629
949 -234 -1950
www.goreewhitfield.com

CONSULTANTS

STRUCTURAL ENGINEER
GRIMM & CHEN
17500 REDHILL AVE., STE. 240, IRVINE, CA 92614
P: (949) 250.3150 X 1001
E: JEFFG@GC-SE.COM

ELECTRICAL ENGINEER
DMI ENGINEERS
8140 WEIRICK RD, CORONA, CA 92883
P: (951) 277-9109
E: FIYENGAR@DMIENGINEERS.COM

CIVIL ENGINEER
ASSOCIATED ENGINEERING GROUP
4200 TECHNOLOGY DRIVE, SUITE 4
MODESTO, CA 95356
P: (209) 614-6021
E: RYAN@ASSOCENG.COM

INTERIOR DESIGN
ABEL DESIGN GROUP
1700 BROADWAY, SUIT 630, DENVER, CO 80290
P: (303) 532-8899
E: JHOSKIN@ABELDESIGNGROUP.COM

MECHANICAL ENGINEERS
RPM ENGINEERS, INC
102 DISCOVERY, IRVINE, CA 92618
P: (949) 880-2506
E: ETHANS@RPMPE.COM

CONSULTANT #5 - DISCIPLINE
CONSULTANT #6 - NAME
ADDRESS
PHONE NUMBER
WEBSITE

PROJECT NAME

BEST RV TURLOCK

PROJECT DESCRIPTION

RV SALES FACILITY
EXPANSION

PROJECT ADDRESS

5100-5300 TAYLOR CT.
TURLOCK, CA 95382

OWNER INFORMATION

NADER AMMARI

GOREE PROJECT NUMBER

GW2227

STAMP / SIGNATURE

ISSUE DATE

ISSUE HISTORY

DATE:	MARK:	DESCRIPTION:

KEY PLAN

SHEET NAME

COMPOSITE SITE PLAN

SHEET NUMBER

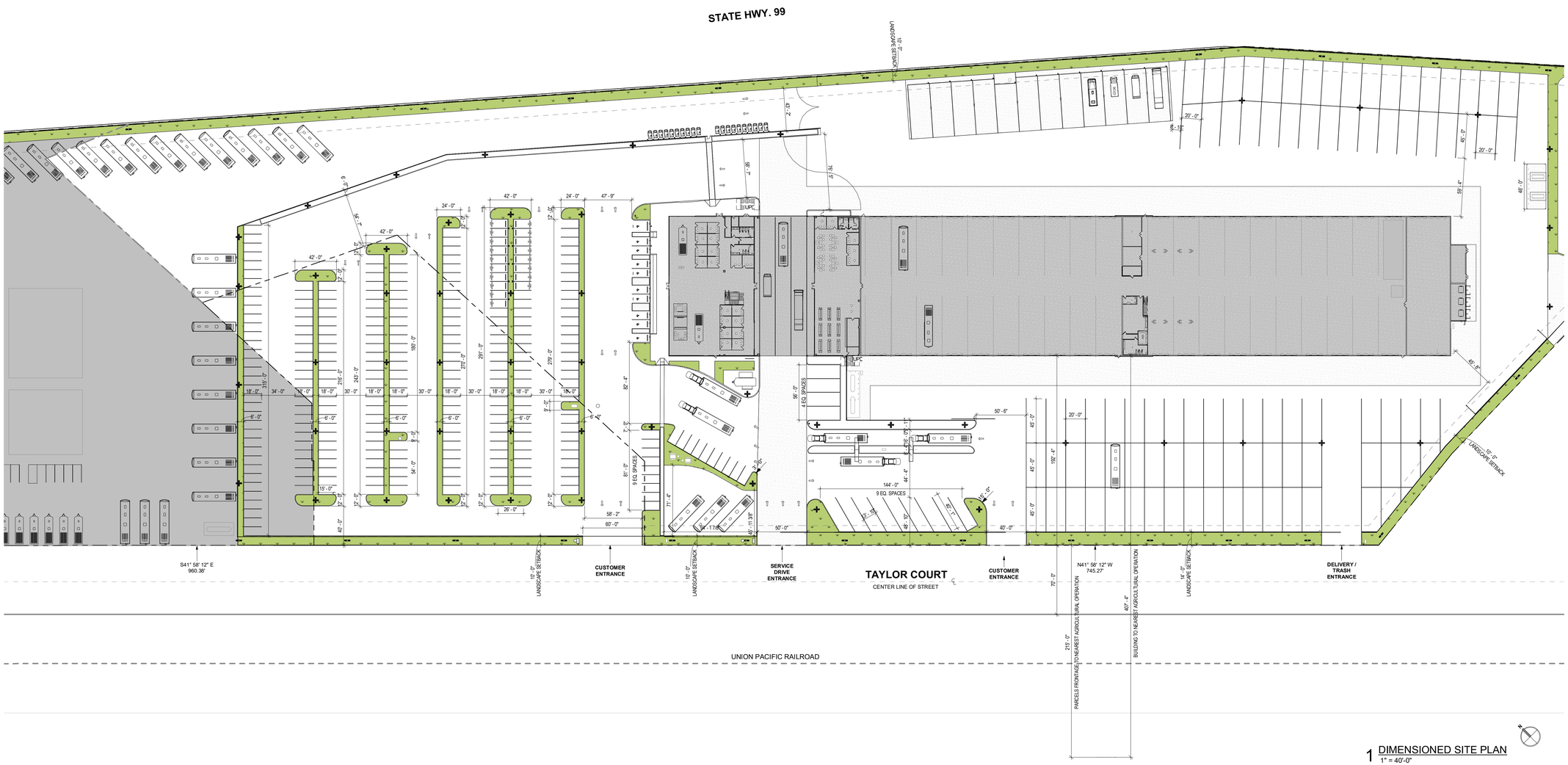
A100

COPYRIGHTED DOCUMENT: THE DRAWING AND THE BIM/CAD FILE FROM WHICH IT HAS BEEN GENERATED ARE PROVIDED AS AN INSTRUMENT OF SERVICE FOR THIS PROJECT. THESE DOCUMENTS ARE THE SOLE PROPERTY OF GOREE ARCHITECTS, INC. ANY USE OF THESE DOCUMENTS, DATA AND DESIGNS FOR PURPOSES OTHER THAN THOSE ASSOCIATED WITH THIS PROJECT WITHOUT THE EXPRESSED, WRITTEN PERMISSION OF GOREE WHITFIELD, INC. IS PROHIBITED.

© GOREE WHITFIELD 2021

SITE WORK GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND SCOPE OF WORK REQUIREMENTS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF CURBS, PAVING AND PLANTERS ADJACENT TO BUILDINGS.
3. CONTRACTOR SHALL EXECUTE THE WORK IN STRICT ACCORDANCE WITH THESE DRAWINGS, LOCAL GOVERNING BUILDING, FIRE, MECHANICAL AND PLUMBING CODES, THE CURRENT ACCESSIBILITY STANDARDS AND ALL OTHER AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT. THE CONTRACTOR SHALL REPORT CONFLICTING REQUIREMENTS TO THE ARCHITECT FOR INTERPRETATION.
4. DEALER SITE SIGNS AND THEIR REQUIRED FOUNDATIONS ARE NOT IN CONTRACT UNLESS NOTED OTHERWISE. GENERAL CONTRACTOR SHALL PROVIDE / COORDINATE POWER REQUIREMENTS CONDUITS, AND PROVIDE HOOK-UPS FOR POWER.
5. PARKING AND CURB DIMENSIONS ARE TAKEN FROM FACE OF CURB UNLESS NOTED OTHERWISE.
6. ACCESSIBLE PARKING SPACES SHALL COMPLY WITH APPLICABLE ACCESSIBILITY CODES. PROVIDE SIGNS SHOWING SYMBOL OF ACCESSIBILITY AT EACH SPACE. PROVIDE "VAN ACCESSIBLE" SIGN AT VAN SPACE. REFERENCE ACCESSIBILITY SHEETS FOR MOUNTING DETAILS.
7. POST SITE ADDRESS DURING CONSTRUCTION AND AFTER THE BUILDING IS OCCUPIED IN ACCORDANCE WITH FIRE MARSHALL REQUIREMENTS.
8. REFER TO CIVIL FOR FIRE AND SITE YARD HYDRANTS INFORMATION.
9. REFER TO LANDSCAPE & IRRIGATION PLANS FOR APPROXIMATE LOCATIONS AND QUANTITIES.
10. REFER TO ELECTRICAL PLANS FOR POWER



1 DIMENSIONED SITE PLAN
1" = 40'-0"

SCALE: 1" = 40'
0 10 20 40 80

Goree Whitfield
24691 Del Prado Ave
Dana Point, CA 92629
949 -234 -1950
www.goreewhitfield.com

CONSULTANTS

STRUCTURAL ENGINEER
GRIMM & CHEN
17500 REDHILL AVE., STE. 240, IRVINE, CA 92614
P: (949) 250.3150 X 1001
E: JEFFG@GC-SE.COM

ELECTRICAL ENGINEER
DMI ENGINEERS
8140 WEIRICK RD, CORONA, CA 92883
P: (951) 277-9109
E: FIYENGAR@DMIENGINEERS.COM

CIVIL ENGINEER
ASSOCIATED ENGINEERING GROUP
4200 TECHNOLOGY DRIVE, SUITE 4
MODESTO, CA 95356
P: (209) 614-6021
E: RYAN@ASSOCENG.COM

INTERIOR DESIGN
ABEL DESIGN GROUP
1700 BROADWAY, SUIT 630, DENVER, CO 80290
P: (303) 532-8899
E: JHOSKIN@ABELDESIGNGROUP.COM

MECHANICAL ENGINEERS
RPM ENGINEERS, INC
102 DISCOVERY, IRVINE, CA 92618
P: (949) 880-2506
E: ETHANS@RPMPE.COM

CONSULTANT #5 - DISCIPLINE
CONSULTANT #6 - NAME
ADDRESS
PHONE NUMBER
WEBSITE

PROJECT NAME
BEST RV TURLOCK

PROJECT DESCRIPTION
RV SALES FACILITY
EXPANSION

PROJECT ADDRESS
5100-5300 TAYLOR CT.
TURLOCK, CA 95382

OWNER INFORMATION
NADER AMMARI

GOREE PROJECT NUMBER
GW2227

STAMP / SIGNATURE

ISSUE DATE

ISSUE HISTORY

DATE	MARK	DESCRIPTION

KEY PLAN

SHEET NAME
DIMENSIONED SITE PLAN

SHEET NUMBER
A101

COPYRIGHTED DOCUMENT: THIS DRAWING AND THE BIM/CAD FILE FROM WHICH IT HAS BEEN GENERATED ARE PROVIDED AS AN INSTRUMENT OF SERVICE FOR THIS PROJECT. THESE DOCUMENTS ARE THE SOLE PROPERTY OF GOREE ARCHITECTS, INC. ANY USE OF THESE DOCUMENTS, DATA AND DESIGNS FOR PURPOSES OTHER THAN THOSE ASSOCIATED WITH THIS PROJECT WITHOUT THE EXPRESSED WRITTEN PERMISSION OF GOREE WHITFIELD, INC. IS PROHIBITED.
© GOREE WHITFIELD 2021

EXTERIOR EV CHARGER SCHEDULE

MARK	MANUFACTURER	MODEL	COMMENTS
EV-1	TBD	TBD	
EV-2	TBD	19.2kW AC	
EV-3	TBD	50kW DCFC	

CGBC TABLE A5.106.5.3.2 - TIER 2 REQUIRED EV SPACES
*PER SMC SECTION 13.12.040.(C)
90 REQUIRED SPACES
76 TO 100 = 13 EVCS & 40 EV CAPABLE SPACES REQUIRED
13 EVCS PROVIDED, INCLUDING 1 VAN ACCESSIBLE & 1 STANDARD ACCESSIBLE. THE 13 EVCS ARE SERVICED BY 7 EVSE
- 1 DCFC (THIS REDUCES THE EV CAPABLE COUNT BY 5 PER 5.106.5.3.2)
- 5 AC (THESE EACH REDUCE THE COUNT BY 2 SINCE THEY EACH SERVICE 2 SPACES, THIS INCLUDES THE STANDARD ACCESSIBLE EV)
- 1 AC (THE VAN ACCESSIBLE SPACE REDUCES THE COUNT BY 1 SINCE IT SERVICE A SINGLE SPACE)
TOTAL REDUCTION ABOVE IS 16 SPACES. THE REMAINING 24 EV CAPABLE SPACES ARE COVERED BY KEYNOTE 30. THESE FUTURE EVSE WOULD SERVICE TWO SPACES EACH. SO YOU'LL SEE 12 LOCATIONS FOR KEYNOTE 30.

PER SMC, MINIMUM LEVEL 2 ELECTRIC VEHICLE CHARGERS MUST BE PROVIDED FOR 5% OF REQUIRED PARKING = 5 SPACES (WE ARE CURRENTLY PROVIDING FOR 13 SPACES)

OFF-STREET PARKING TABULATION
PER § 21.76 OF STANISLAUS COUNTY ORDINANCES

USE	RATIO			SPACES
VEHICLE SALES	1 SPACE FOR EA.	EMPLOYEE	90 EMPLOYEES = 90 SPACES	**130 SPACES** (CUSTOMER, EMPLOYEE)
	1 SPACE FOR EA.	20 VEHICLES FOR SALE	400 VEHICLES FOR SALE = 40 SPACES	
GARAGES AND REPAIR SHOPS	1 SPACE FOR EA.	300 S.F.	77,633 S.F. / 300 = 256 256 - 40 SPACES PROVIDED IN SHOP	**219 SPACES** (SERVICE)
USES NOT SPECIFIED	ALL OTHER USES NOT SET FORTH IN THIS CHAPTER SHALL BE DETERMINED BY THE PLANNING COMMISSION BASED ON THE INTENSITY OF USE BY MOTOR VEHICLES. (PRIOR CODE SEC. 9-123(T)).			-
TOTAL REQUIRED PARKING SPACES *(CUSTOMER & EMPLOYEE)*				**349 SPACES**
TOTAL PROVIDED PARKING SPACES *(CUSTOMER & EMPLOYEE)*			330 CAR PARKING SPACES 40 RV PARKING SPACES	**370 SPACES**
TOTAL INVENTORY PARKING SPACES *(CUSTOMER & EMPLOYEE)*			70 RV PARKING SPACES	**440 SPACES**

ACCESSIBLE PARKING TABULATION
PER § 11B0208 AND TABLE 11B-208.2 OF THE 2022 CALIFORNIA BUILDING CODE
BASED ON CUSTOMER/EMPLOYEE PARKING (350 SPACES)

TYPE	RATIO	REQUIRED	PROVIDED
STANDARD	8 SPACES FOR 301 to 400 TOTAL PARKING SPACES	6 SPACES	6 SPACES
VAN	1 SPACE FOR EVERY 6 (OR FRACTION OF 6) ADA SPACES	2 SPACES	2 SPACES
TOTAL		8 SPACES	8 SPACES

DESIGNATED EV PARKING TABULATION
PER § 5.106.5.3 AND TABLE 5.106.5.3.1 OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
BASED ON CUSTOMER/EMPLOYEE PARKING (349 SPACES)

TYPE	RATIO	REQUIRED	PROVIDED
EV CAPABLE SPACES	20% OF TOTAL FOR 201 AND OVER PARKING SPACES	70 SPACES	34 SPACES
EV CHARGING STATIONS (EVCS)	25% PERCENT OF EV CAPABLE SPACES	18 SPACES	18 SPACES
TOTAL		REF. CGBC TABLE A5.106.5.3.2	52 SPACES

ELECTRIC VEHICLE CHARGING STATIONS FOR PUBLIC USE AND COMMON USE
PER § 11B-228 AND TABLE 11B-228.3.2.1 OF THE 2022 CALIFORNIA BUILDING CODE
BASED ON REQUIRED EVCS (18 SPACES)

TYPE	RATIO	REQUIRED	PROVIDED
STANDARD ACCESSIBLE	1 SPACE FOR 5 TO 25 OF TOTAL EVCS PROVIDED	1 SPACE	1 SPACE
VAN ACCESSIBLE	1 SPACE FOR 5 TO 25 OF TOTAL EVCS PROVIDED	1 SPACE	1 SPACE

BICYCLE PARKING TABULATION
PER § 5.106.4.1.1 AND 5.106.4.1.2 OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

TYPE	RATIO	REQUIRED	PROVIDED
BICYCLE PARKING (SHORT-TERM)	5% OF CUSTOMER PARKING (40 SPACES)	2 BIKES	XX BIKES
BICYCLE PARKING (LONG-TERM)	5% EMPLOYEE PARKING (90 SPACES)	5 BIKES	XX BIKES

SITE PLAN KEYNOTES

001	NEW CAMPGROUND DISPLAY
002	NEW PROPANE TANK, PROVIDED AND INSTALLED BY OWNERS CERTIFIED VENDOR
003	WASTE WATER, REF: CIVIL.
004	NEW BRAND MONUMENT, REF: APPROVED SIGNAGE PLANS
005	PROPOSED SHORT TERM BIKE STORAGE.
006	2" CONDUIT FOR FUTURE EV CHARGING STATION
007	NEW AUTOMATIC SWING GATE. REF: ELECTRICAL.
008	NEW AUTOMATIC SLIDING GATE. REF: ELECTRICAL.
009	PROPOSE 6' HIGH INDUSTRIAL METAL SECURITY CURVED PICKET FENCE WITH SPEAR HEAD, COLOR: BLACK TO MATCH EXITING FENCE ON PHASE 1.
010	EXISTING UTILITY POLE TO REMAIN.
011	EXISTING SITE LIGHTING TO REMAIN.
012	EXISTING STORM DRAIN TO REMAIN.
013	NEW 1000 GALLON DIESEL TANK. PROVIDED AND INSTALLED BY OWNERS CERTIFIED VENDOR.
014	NEW 1000 GALLON GAS TANK. PROVIDED AND INSTALLED BY OWNERS CERTIFIED VENDOR.
015	6" BOLLARD, 4' TALL AT 5'-0" O.C.
016	PROPOSED SITE ENTRANCE SIGN.
017	PROPOSED SITE ACCESSIBLE ENTRANCE SIGN
018	PATH OF TRAVEL FROM PUBLIC RIGHT OF WAY
019	STORAGE STEEL SHED MOEVED HERE FROM PREVIOUS LOCATION
020	EXISTING CAL TRAN FENCE TO REMAIN.
021	EXISTING BRAND SIGN TO BE REMOVED
022	EXISTING WATER WELL TO REMAIN

SITE PLAN KEYNOTES

023	PROPOSED MAN DOOR WITH NUMBER KEY PAD AND TELECOM CONNECTION.
025	PROPOSED 6' HIGH METAL SECURITY PICKET FENCE TO MATCH EXISTING FENCE ON PHASE 1, COLOR: BLACK
026	EXISTING SIGN POLE TO REMAIN, PROTECT IN PLACE FOR A NEW SIGN. REF APPROVED SIGNAGE PLANS.
027	NEW CONCRETE PAVEMENT, REF: CIVIL
028	EXISTING STORM DRAINAGE EASEMENT BY TURLOCK IRRIGATION DISTRICT
029	CATCH BASIN FOR EXCESS TREATED CAR WASH WATER. CONNECT TO STORM WATER BASIN. REF: CAR WASH EQUIPMENT AND CIVIL PLANS
030	GOLF CART CHARGING STATIONS. REF: ELECTRICAL
031	RV ELECTRICAL POWER PEDESTAL WITH WATER HOOK-UP, REF: ELECTRICAL AND PLUMBING PLANS
032	VEHICLE ENTRANCE STORM BASIN. REF: CIVIL
033	PROPOSED FIRE RISER
034	PROPOSED FIRE HYDRANT
035	APPRAISAL AREA
036	DUMP/SEWAGE CONNECTION TO BE RECESSED, REF: CIVIL.
037	PROPANE TANK EMERGENCY SHUT OFF SWITCH
038	PROPANE TANK CUSTOMER FILLING STATION, INTERCOM TO BE PROVIDED FOR SERVICE RECEPTIONIST
039	WATER HOSE BIB, REF: CIVIL
040	WARNER ROAD TO BE ABANDONED
041	BUILDING SETBACK
042	UNDERGROUND WATER WELL WITH MANHOLE COVER
043	UNDERGROUND WATER WELL TANK AND ELECTRICAL CONTROLS
044	NEW SEPTIC SYSTEM DESIGN, SEEPAGE PIT. REF: CIVIL.

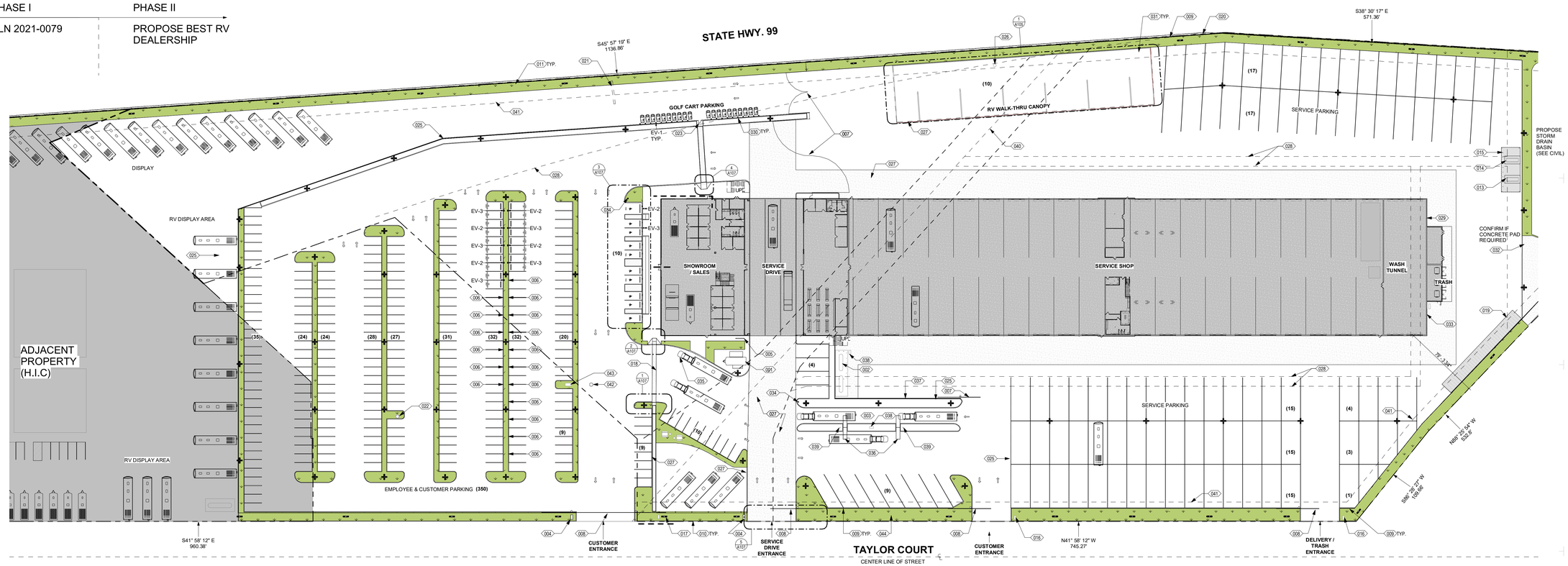
SITE WORK GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND SCOPE OF WORK REQUIREMENTS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF CURBS, PAVING AND PLANTERS ADJACENT TO BUILDINGS.
3. CONTRACTOR SHALL EXECUTE THE WORK IN STRICT ACCORDANCE WITH THESE DRAWINGS, LOCAL GOVERNING BUILDING, FIRE, MECHANICAL AND PLUMBING CODES. THE CURRENT ACCESSIBILITY STANDARDS AND ALL OTHER AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT. THE CONTRACTOR SHALL REPORT CONFLICTING REQUIREMENTS TO THE ARCHITECT FOR INTERPRETATION.
4. DEALER SITE SIGNS AND THEIR REQUIRED FOUNDATIONS ARE NOT IN CONTRACT UNLESS NOTED OTHERWISE. GENERAL CONTRACTOR SHALL PROVIDE / COORDINATE POWER REQUIREMENTS CONDUITS, AND PROVIDE HOOK-UPS FOR POWER.
5. PARKING AND CURB DIMENSIONS ARE TAKEN FROM FACE OF CURB UNLESS NOTED OTHERWISE.
6. ACCESSIBLE PARKING SPACES SHALL COMPLY WITH APPLICABLE ACCESSIBILITY CODES. PROVIDE SIGNS SHOWING SYMBOL OF ACCESSIBILITY AT EACH SPACE. PROVIDE "VAN ACCESSIBLE" SIGN AT VAN SPACE. REFERENCE ACCESSIBILITY SHEETS FOR MOUNTING DETAILS.
7. POST SITE ADDRESS DURING CONSTRUCTION AND AFTER THE BUILDING IS OCCUPIED IN ACCORDANCE WITH FIRE MARSHALL REQUIREMENTS.
8. REFER TO CIVIL FOR FIRE AND SITE YARD HYDRANTS INFORMATION.
9. REFER TO LANDSCAPE & IRRIGATION PLANS FOR APPROXIMATE LOCATIONS AND QUANTITIES.
10. REFER TO ELECTRICAL PLANS FOR POWER

SITE PLAN LEGEND
- PROPERTY LINE
- BUILDING SETBACK
- LANDSCAPE

PHASE I
PLN 2021-0079

PHASE II
PROPOSE BEST RV DEALERSHIP



SCALE: 1" = 40'
0 10 20 40 80

1 NOTED ENLARGED SITE PLAN
1" = 40'-0"

Goree Whitfield
24691 Del Prado Ave
Dana Point, CA 92629
949 -234 -1950
www.goreewhitfield.com

CONSULTANTS

STRUCTURAL ENGINEER
GRIMM & CHEN
17500 REDHILL AVE., STE. 240, IRVINE, CA 92614
P: (949) 250.3150 X 1001
E: JEFFC@GC-SE.COM

ELECTRICAL ENGINEER
DMI ENGINEERS
8140 WEIRICK RD, CORONA, CA 92883
P: (951) 277-9109
E: FIYENGAR@DMIENGINEERS.COM

CIVIL ENGINEER
ASSOCIATED ENGINEERING GROUP
4200 TECHNOLOGY DRIVE, SUITE 4
MODESTO, CA 95355
P: (209) 614-6021
E: RYAN@ASSOCENG.COM

INTERIOR DESIGN
ABEL DESIGN GROUP
1700 BROADWAY, SUIT 030, DENVER, CO 80290
P: (303) 532-8899
E: JHOSKIN@ABELDESIGNGROUP.COM

MECHANICAL ENGINEERS
RPM ENGINEERS, INC
102 DISCOVERY, IRVINE, CA 92618
P: (949) 880-2506
E: ETHANS@RPMPE.COM

CONSULTANT #5 - DISCIPLINE
CONSULTANT #6 - NAME
ADDRESS
PHONE NUMBER
WEBSITE

PROJECT NAME
BEST RV TURLOCK

PROJECT DESCRIPTION
RV SALES FACILITY EXPANSION

PROJECT ADDRESS
5100-5300 TAYLOR CT.
TURLOCK, CA 95382

OWNER INFORMATION
NADER AMMARI

GOREE PROJECT NUMBER
GW2227

STAMP / SIGNATURE

ISSUE DATE

ISSUE HISTORY

DATE:	MARK:	DESCRIPTION:

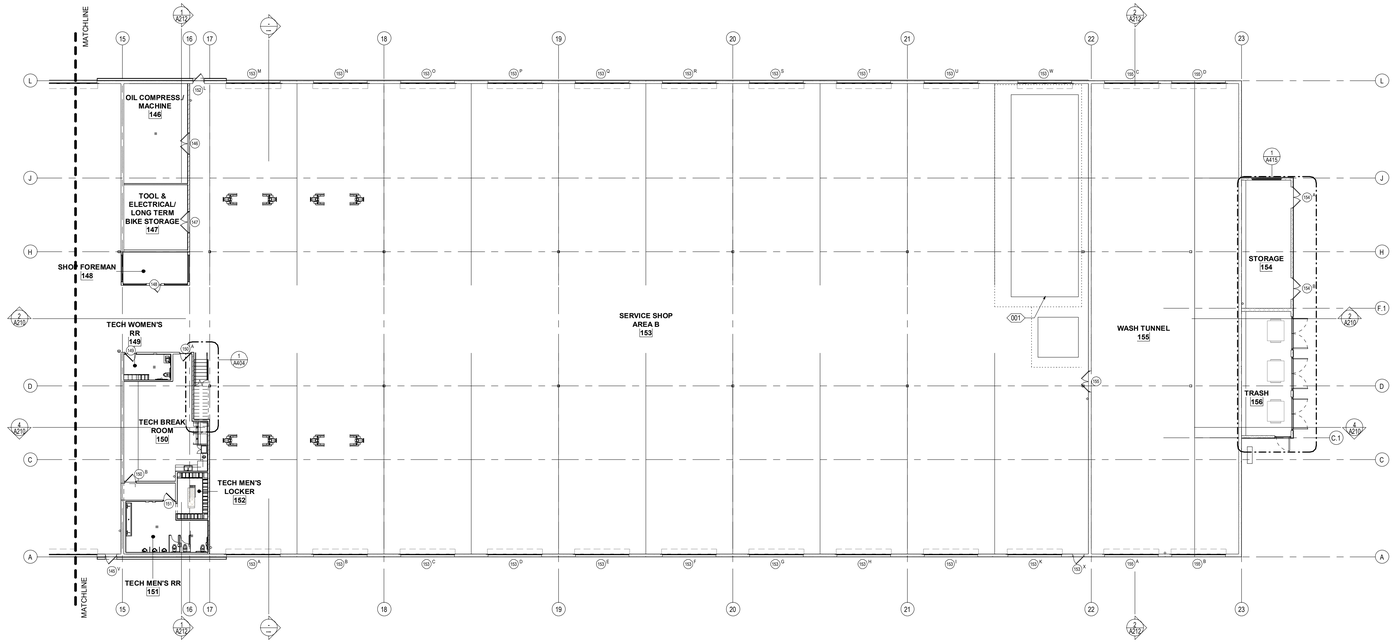
KEY PLAN

SHEET NAME
NOTED SITE PLAN

SHEET NUMBER
A102

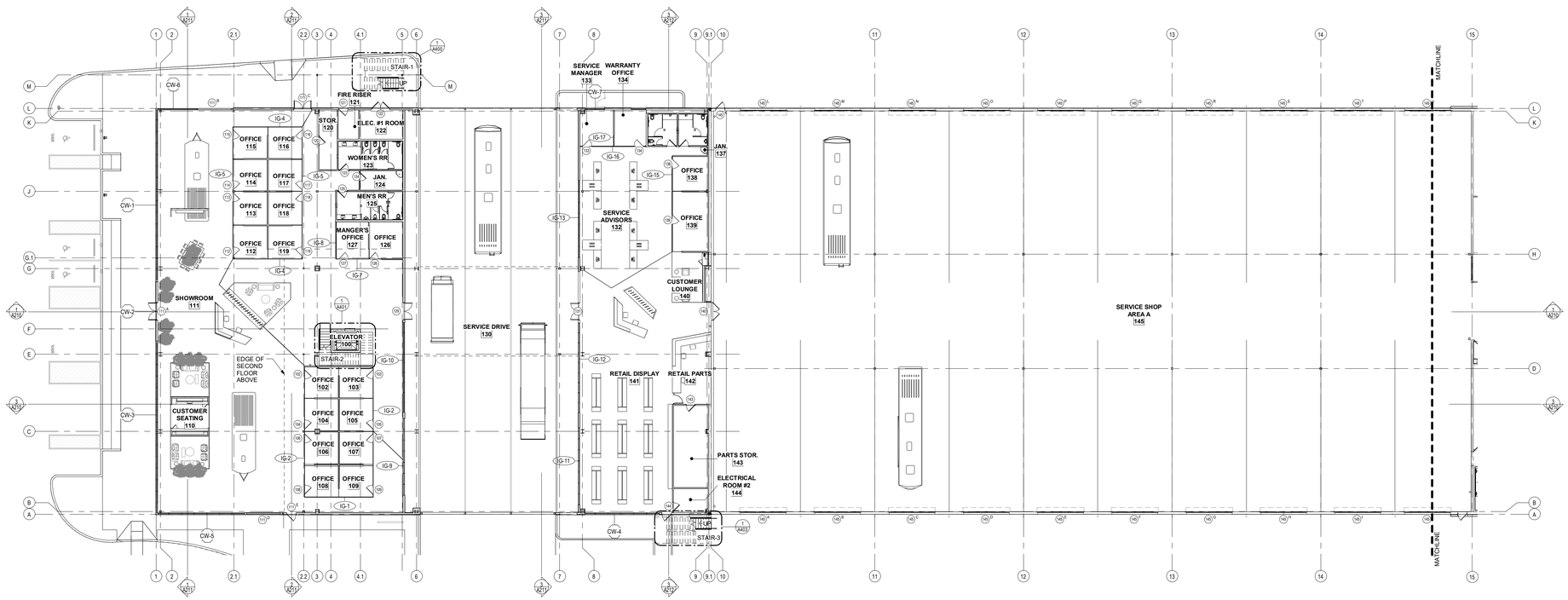
COPYRIGHTED DOCUMENT: THIS DRAWING AND THE BIM CAD FILE FROM WHICH IT HAS BEEN CREATED ARE PROVIDED AS AN INSTRUMENT OF SERVICE FOR THIS PROJECT. THESE DOCUMENTS ARE THE SOLE PROPERTY OF GOREE ARCHITECTS, INC. ANY USE OF THESE DOCUMENTS, DATA AND DESIGNS FOR PURPOSES OTHER THAN THOSE ASSOCIATED WITH THIS PROJECT WITHOUT THE EXPRESSED, WRITTEN PERMISSION OF GOREE WHITFIELD, INC. IS PROHIBITED.

© GOREE WHITFIELD 2021



2 NOTED PLAN - FIRST FLOOR AREA B
1/16" = 1'-0"

N
PROJECT NORTH



1 NOTED PLAN - FIRST FLOOR AREA A
1/16" = 1'-0"

N
PROJECT NORTH

GENERAL PLAN NOTES:

1. INTERIOR PARTITIONS TO BE TYPE 'A1'. UNLESS NOTED OTHERWISE.
2. THE WORK SHALL CONFORM TO REQUIREMENTS OF APPLICABLE LOCAL, STATE, AND FEDERAL BUILDING CODES AND AGENCIES HAVING JURISDICTION OVER THE VARIOUS PHASES OF THE WORK.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO STARTING WORK AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES.
4. PROVIDE FULL HEIGHT 5/8" CEMENT BACKER BOARD AT TOILET AND JANITOR ROOMS, AND AT WALLS TO RECEIVE TILE.
5. PROVIDE AND INSTALL SOUND DAMPENING INSULATION AT ALL PERIMETER METAL STUD WALLS OF RESTROOMS AND MECHANICAL ROOMS. EXTEND PARTITION WALLS TO UNDERSIDE OF DECK.
6. REFER TO NOTED FLOOR PLANS AND CODE ANALYSIS FOR FIRE-RATED WALLS. PROVIDE SOLID BACKING FOR ALL FIRE-RATED SHUTTERS IN WALL CAVITIES.
7. PROVIDE AND INSTALL THERMAL BATT INSULATION AT INTERIOR METAL STUD PARTITION WALLS ADJOINING AIR CONDITIONED AREAS WITH NON-AIR CONDITIONED AREAS.
8. REFER TO **ACCESSIBILITY STANDARDS** SHEETS FOR ACCESSIBILITY REQUIREMENTS. THE WORK SHALL CONFORM TO LOCAL, STATE, AND FEDERAL ACCESSIBILITY REQUIREMENTS.
9. ACCESSIBLE RESTROOMS SHALL CONFORM TO LOCAL, STATE AND FEDERAL ACCESSIBILITY REQUIREMENTS.
10. CONTRACTOR SHALL PROVIDE BLOCKING WHERE REQUIRED FOR TOILET ACCESSORIES.
11. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CONNECTIONS OF THE EQUIPMENT. THE CONTRACTOR SHALL COORDINATE W/ OWNER'S VENDORS FOR ITEMS REQUIRING HOOK-UPS.
12. CONTRACTOR SHALL PROVIDE (3) 4'-0" x 8'-0" x 3/4" THICK A-C GRADE PAINTED PLYWOOD PANEL BOARDS FOR COMMUNICATION AND DATA EQUIPMENT. LOCATION TO BE DETERMINED BY ARCHITECT.
13. GENERAL CONTRACTOR SHALL SECURE AND PAY FOR BUILDING PERMITS, APPLICATIONS FEES, SERVICE FEES, GOVERNMENTAL FEES, LICENSES AND INSPECTIONS NECESSARY FOR THE EXECUTION AND COMPLETION OF THE WORK.
14. PAINT EXPOSED CONDUIT, PIPING, METAL BUILDING COMPONENTS, ACCESSORIES, DUCTWORK AND PIPING RACEWAY ACCESSORIES AT ROOMS NOTED AS "PAINT EXPOSED STRUCTURE."
15. PAINT VISIBLE CONDUIT, PIPING, BUILDING COMPONENTS, ACCESSORIES, DUCTWORK AND PIPING RACEWAY ACCESSORIES ABOVE RETURN AIR GRILLS WHEN RETURN AIR PLENUM IS DESIGNED
16. HOLLOW METAL DOORS AND FRAMES SHALL BE PAINTED TO MATCH ADJACENT WALL, BOTH SIDES, UNLESS NOTED OTHERWISE .TYP.
17. PROVIDE CORNER GUARDS AT WALLS INDICATED AND SPECIFIED.

FLOOR PLAN KEYNOTES

001 PAINTBOOTH PROVIDED BY OWNER
002 SHAFT REF MECH

Goree Whitfield
24691 Del Prado Ave
Dana Point, CA 92629
949 -234 -1950
www.goreewhitfield.com

CONSULTANTS

STRUCTURAL ENGINEER
GRIMM & CHEN
17500 REDHILL AVE., STE. 240, IRVINE, CA 92614
P: (949) 250.3150 X 1001
E: JEFFG@GC-SE.COM

ELECTRICAL ENGINEER
DMI ENGINEERS
8140 WEIRICK RD, CORONA, CA 92883
P: (951) 277-9109
E: FIYENGAR@DMIENGINEERS.COM

CIVIL ENGINEER
ASSOCIATED ENGINEERING GROUP
4200 TECHNOLOGY DRIVE, SUITE 4
MODESTO, CA 95356
P: (209) 614-6021
E: RYAN@ASSOCENG.COM

INTERIOR DESIGN
ABEL DESIGN GROUP
1700 BROADWAY, SUIT 630, DENVER, CO 80290
P: (303) 532-8899
E: JHOSKIN@ABELDESIGNGROUP.COM

MECHANICAL ENGINEERS
RPM ENGINEERS, INC
102 DISCOVERY, IRVINE, CA 92618
P: (949) 880-2506
E: ETHANS@RPMPE.COM

CONSULTANT #6 - DISCIPLINE
CONSULTANT #6 - NAME
ADDRESS
PHONE NUMBER
WEBSITE

PROJECT NAME
BEST RV TURLOCK

PROJECT DESCRIPTION
RV SALES FACILITY EXPANSION

PROJECT ADDRESS
5100-5300 TAYLOR CT.
TURLOCK, CA 95382

OWNER INFORMATION
NADER AMMARI

GOREE PROJECT NUMBER
GW2227

STAMP / SIGNATURE

ISSUE DATE

ISSUE HISTORY

DATE:	MARK:	DESCRIPTION:

KEY PLAN

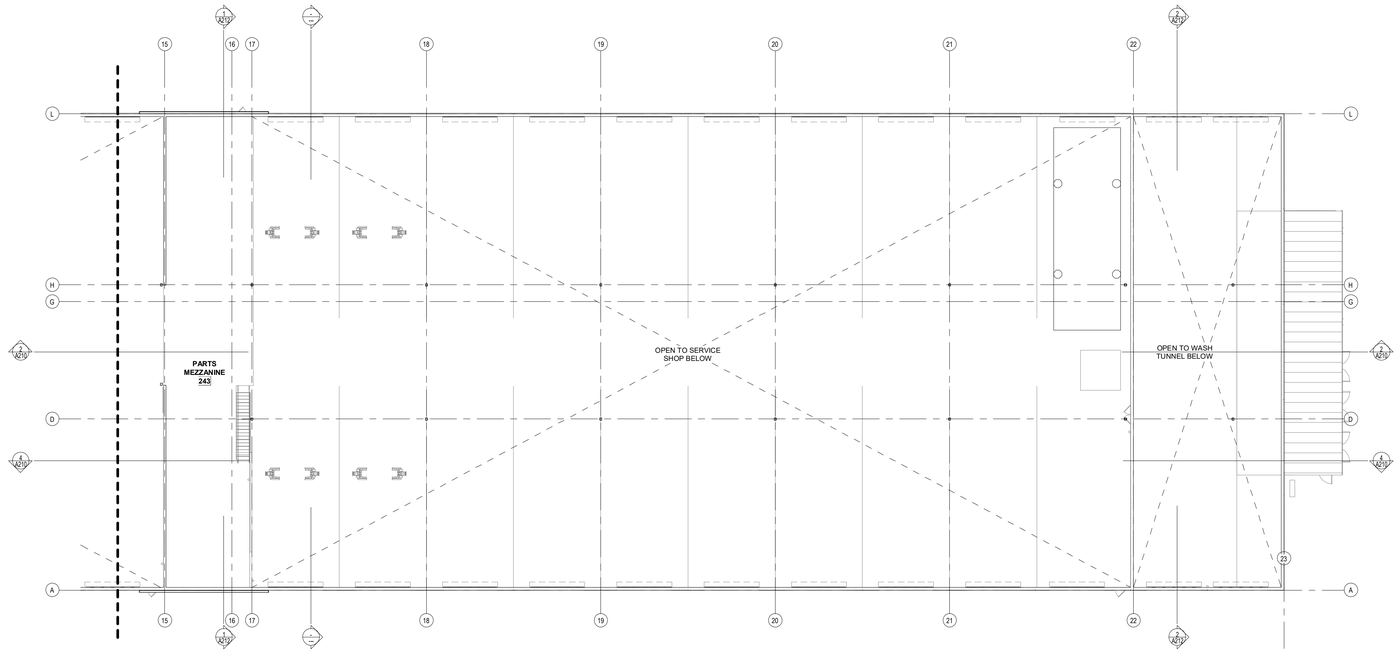
A	B

SHEET NAME
NOTED PLAN - FIRST FLOOR

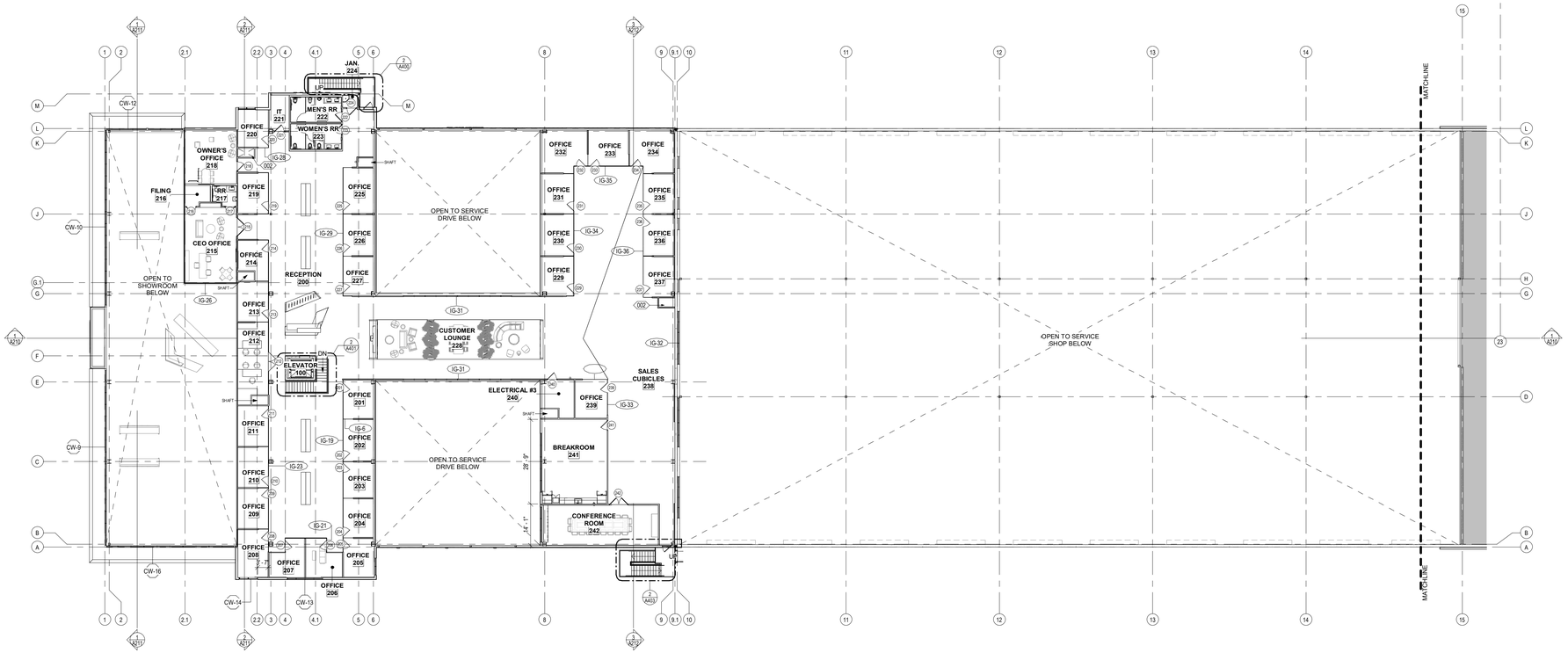
SHEET NUMBER
A130

COPYRIGHTED DOCUMENT: THIS DRAWING AND THE IMMCAD FILE FROM WHICH IT HAS BEEN GENERATED ARE PROVIDED AS AN INSTRUMENT OF SERVICE FOR THIS PROJECT. THESE DOCUMENTS ARE THE SOLE PROPERTY OF GOREE ARCHITECTS, INC. ANY USE OF THESE DOCUMENTS, DATA AND DESIGNS FOR PURPOSES OTHER THAN THOSE ASSOCIATED WITH THIS PROJECT WITHOUT THE EXPRESSED, WRITTEN PERMISSION OF GOREE WHITFIELD, INC. IS PROHIBITED.

© GOREE WHITFIELD 2021



2 LEVEL 2 - NOTED Area B
1/16" = 1'-0"



1 LEVEL 2 - NOTED Area A
1/16" = 1'-0"

GENERAL PLAN NOTES:

1. INTERIOR PARTITIONS TO BE TYPE 'A1'. UNLESS NOTED OTHERWISE.
2. THE WORK SHALL CONFORM TO REQUIREMENTS OF APPLICABLE LOCAL, STATE, AND FEDERAL BUILDING CODES AND AGENCIES HAVING JURISDICTION OVER THE VARIOUS PHASES OF THE WORK.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO STARTING WORK AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES.
4. PROVIDE FULL HEIGHT 5/8" CEMENT BACKER BOARD AT TOILET AND JANITOR ROOMS, AND AT WALLS TO RECEIVE TILE.
5. PROVIDE AND INSTALL SOUND DAMPENING INSULATION AT ALL PERIMETER METAL STUD WALLS OF RESTROOMS AND MECHANICAL ROOMS. EXTEND PARTITION WALLS TO UNDERSIDE OF DECK.
6. REFER TO NOTED FLOOR PLANS AND CODE ANALYSIS FOR FIRE-RATED WALLS. PROVIDE SOLID BACKING FOR ALL FIRE-RATED SHUTTERS IN WALL CAVITIES.
7. PROVIDE AND INSTALL THERMAL BATT INSULATION AT INTERIOR METAL STUD PARTITION WALLS ADJOINING AIR CONDITIONED AREAS WITH NON-AIR CONDITIONED AREAS.
8. REFER TO **ACCESSIBILITY STANDARDS** SHEETS FOR ACCESSIBILITY REQUIREMENTS. THE WORK SHALL CONFORM TO LOCAL, STATE, AND FEDERAL ACCESSIBILITY REQUIREMENTS.
9. ACCESSIBLE RESTROOMS SHALL CONFORM TO LOCAL, STATE AND FEDERAL ACCESSIBILITY REQUIREMENTS.
10. CONTRACTOR SHALL PROVIDE BLOCKING WHERE REQUIRED FOR TOILET ACCESSORIES.
11. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CONNECTIONS OF THE EQUIPMENT. THE CONTRACTOR SHALL COORDINATE W/ OWNER'S VENDORS FOR ITEMS REQUIRING HOOK-UPS.
12. CONTRACTOR SHALL PROVIDE (3) 4'-0" x 8'-0" x 3/4" THICK A-C GRADE PAINTED PLYWOOD PANEL BOARDS FOR COMMUNICATION AND DATA EQUIPMENT. LOCATION TO BE DETERMINED BY ARCHITECT.
13. GENERAL CONTRACTOR SHALL SECURE AND PAY FOR BUILDING PERMITS, APPLICATIONS FEES, SERVICE FEES, GOVERNMENTAL FEES, LICENSES AND INSPECTIONS NECESSARY FOR THE EXECUTION AND COMPLETION OF THE WORK.
14. PAINT EXPOSED CONDUIT, PIPING, METAL BUILDING COMPONENTS, ACCESSORIES, DUCTWORK AND PIPING RACEWAY ACCESSORIES AT ROOMS NOTED AS "PAINT EXPOSED STRUCTURE."
15. PAINT VISIBLE CONDUIT, PIPING, BUILDING COMPONENTS, ACCESSORIES, DUCTWORK AND PIPING RACEWAY ACCESSORIES ABOVE RETURN AIR GRILLS WHEN RETURN AIR PLENUM IS DESIGNED
16. HOLLOW METAL DOORS AND FRAMES SHALL BE PAINTED TO MATCH ADJACENT WALL, BOTH SIDES, UNLESS NOTED OTHERWISE .TYP.
17. PROVIDE CORNER GUARDS AT WALLS INDICATED AND SPECIFIED.

FLOOR PLAN KEYNOTES

001 PAINTBOOTH PROVIDED BY OWNER
002 SHAFT REF MECH.

Goree Whitfield
24691 Del Prado Ave
Dana Point, CA 92629
949 -234 -1950
www.goreewhitfield.com

CONSULTANTS

STRUCTURAL ENGINEER
GRIMM & CHEN
17500 REDHILL AVE., STE. 240, IRVINE, CA 92614
P: (949) 250.3150 X 1001
E: JEFFG@GC-SE.COM

ELECTRICAL ENGINEER
DMI ENGINEERS
8140 WEIRICK RD, CORONA, CA 92883
P: (951) 277-9109
E: FIYENGAR@DMIENGINEERS.COM

CIVIL ENGINEER
ASSOCIATED ENGINEERING GROUP
4200 TECHNOLOGY DRIVE, SUITE 4
MODESTO, CA 95356
P: (209) 614-6021
E: RYAN@ASSOCENG.COM

INTERIOR DESIGN
ABEL DESIGN GROUP
1700 BROADWAY, SUIT 630, DENVER, CO 80290
P: (303) 532-8899
E: JHOSKIN@ABELDESIGNGROUP.COM

MECHANICAL ENGINEERS
RPM ENGINEERS, INC
102 DISCOVERY, IRVINE, CA 92618
P: (949) 880-2506
E: ETHANS@RPMIPE.COM

CONSULTANT #5 - DISCIPLINE
CONSULTANT #6 - NAME
ADDRESS
PHONE NUMBER
WEBSITE

PROJECT NAME

BEST RV TURLOCK

PROJECT DESCRIPTION

RV SALES FACILITY EXPANSION

PROJECT ADDRESS

5100-5300 TAYLOR CT.
TURLOCK, CA 95382

OWNER INFORMATION

NADER AMMARI

GOREE PROJECT NUMBER

GW2227

STAMP / SIGNATURE

ISSUE DATE

ISSUE HISTORY

DATE:	MARK:	DESCRIPTION:

KEY PLAN

A	B

SHEET NAME

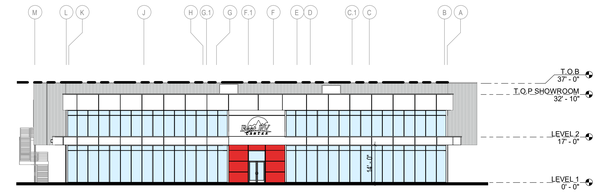
NOTED PLAN - SECOND FLOOR

SHEET NUMBER

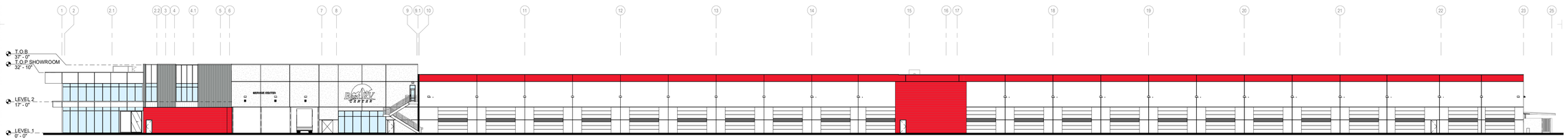
A131

COPYRIGHTED DOCUMENT: THIS DRAWING AND THE DWG/CAD FILE FROM WHICH IT HAS BEEN GENERATED) ARE PROVIDED AS AN INSTRUMENT OF SERVICE FOR THIS PROJECT. THESE DOCUMENTS ARE THE SOLE PROPERTY OF GOREE ARCHITECTS, INC. ANY USE OF THESE DOCUMENTS, DATA AND DESIGNS FOR PURPOSES OTHER THAN THOSE ASSOCIATED WITH THIS PROJECT WITHOUT THE EXPRESSED, WRITTEN PERMISSION OF GOREE WHITFIELD, INC. IS PROHIBITED.

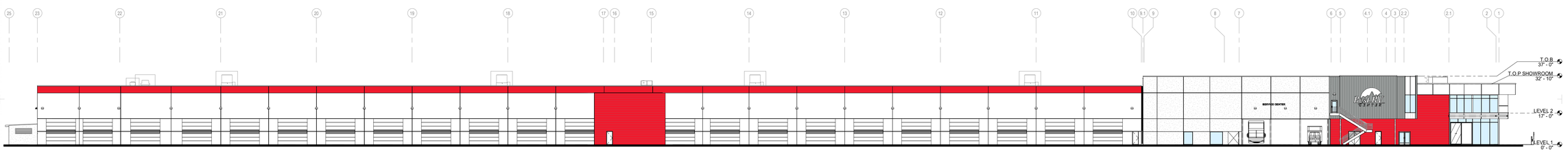
© GOREE WHITFIELD 2021



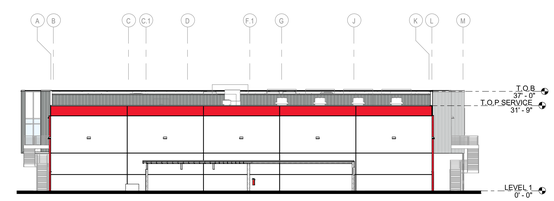
4 WEST ELEVATION
1" = 20'-0"



3 SOUTH ELEVATION
1" = 20'-0"



2 NORTH ELEVATION
1" = 20'-0"



1 EAST ELEVATION
1" = 20'-0"

Goree Whitfield

24691 Del Prado Ave
Dana Point, CA 92629
949 -234 -1950
www.goreewhitfield.com

CONSULTANTS

STRUCTURAL ENGINEER
GRIMM & CHEN
17500 REDHILL AVE., STE. 240, IRVINE, CA 92614
P: (949) 250.3150 X 1001
E: JEFFC@GC-SE.COM

ELECTRICAL ENGINEER
DMI ENGINEERS
8140 WEIRICK RD, CORONA, CA 92883
P: (951) 277-9109
E: FIYENGAR@DMIENGINEERS.COM

CIVIL ENGINEER
ASSOCIATED ENGINEERING GROUP
4200 TECHNOLOGY DRIVE, SUITE 4
MODESTO, CA 95356
P: (209) 614-6021
E: RYAN@ASSOCENG.COM

INTERIOR DESIGN
ABEL DESIGN GROUP
1700 BROADWAY, SUIT 630, DENVER, CO 80290
P: (303) 532-8899
E: JHOSKIN@ABELDESIGNGROUP.COM

MECHANICAL ENGINEERS
RPM ENGINEERS, INC
102 DISCOVERY, IRVINE, CA 92618
P: (949) 880-2506
E: ETHANS@RPMPE.COM

CONSULTANT #5 - DISCIPLINE
CONSULTANT #6 - NAME
ADDRESS
PHONE NUMBER
WEBSITE

PROJECT NAME
BEST RV TURLOCK

PROJECT DESCRIPTION
RV SALES FACILITY
EXPANSION

PROJECT ADDRESS
5100-5300 TAYLOR CT.
TURLOCK, CA 95382

OWNER INFORMATION
NADER AMMARI

GOREE PROJECT NUMBER
GW2227

STAMP / SIGNATURE

ISSUE DATE

ISSUE HISTORY

DATE:	MARK:	DESCRIPTION:

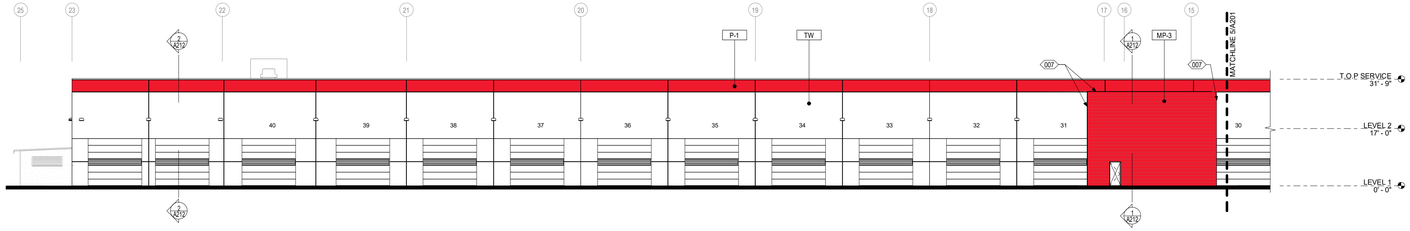
KEY PLAN

SHEET NAME
COMPOSITE BUILDING ELEVATIONS

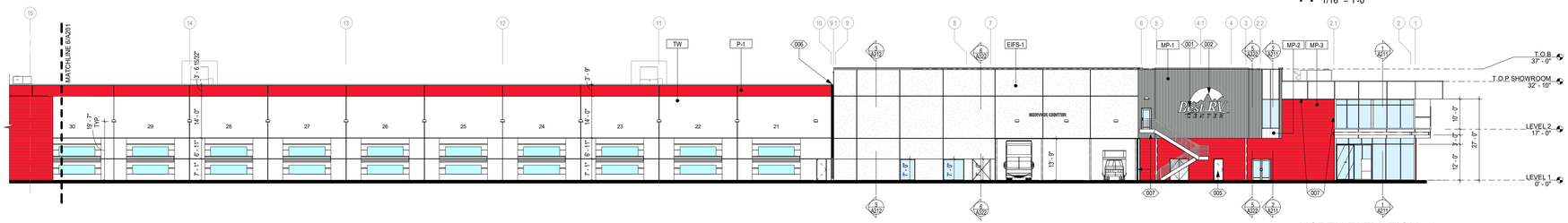
SHEET NUMBER
A200

COPYRIGHTED DOCUMENT: THIS DRAWING AND THE IMMCAD FILE FROM WHICH IT HAS BEEN GENERATED ARE PROVIDED AS AN INSTRUMENT OF SERVICE FOR THIS PROJECT. THESE DOCUMENTS ARE THE SOLE PROPERTY OF GOREE ARCHITECTS, INC. ANY USE OF THESE DOCUMENTS, DATA AND DESIGNS FOR PURPOSES OTHER THAN THOSE ASSOCIATED WITH THIS PROJECT WITHOUT THE EXPRESSED, WRITTEN PERMISSION OF GOREE WHITFIELD, INC. IS PROHIBITED.

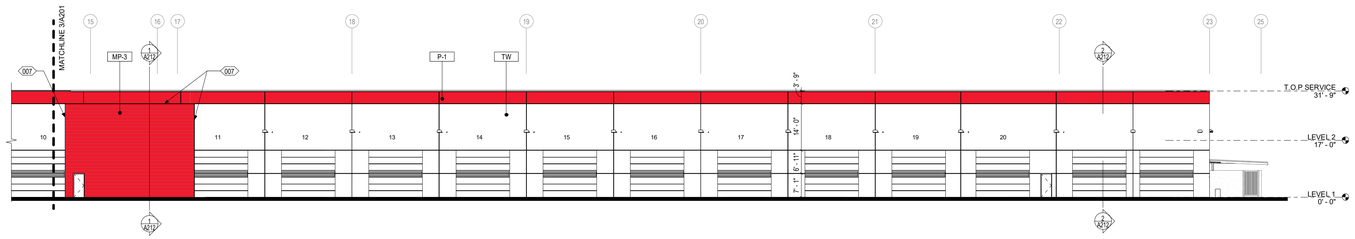
© GOREE WHITFIELD 2021



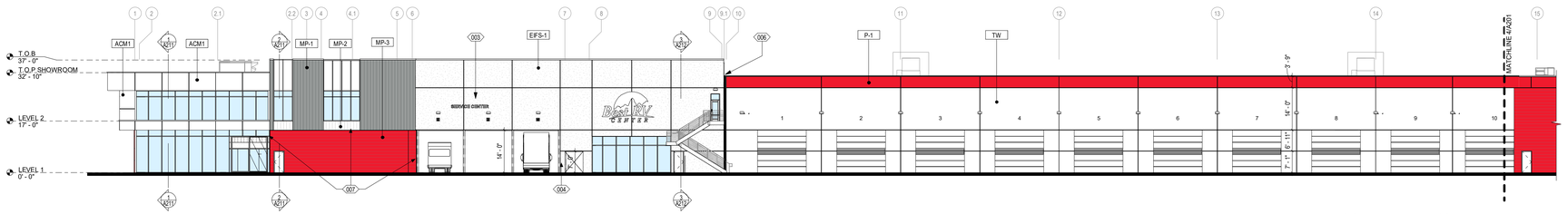
7. NORTH ELEVATION - B
1/16" = 1'-0"



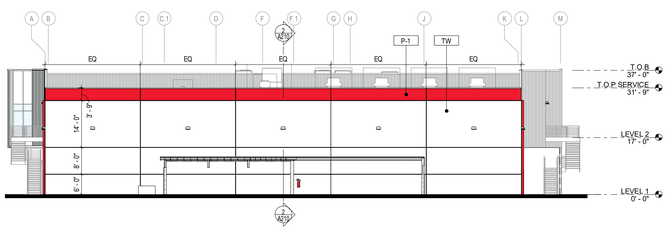
6 NORTH ELEVATION - A
1/16" = 1'-0"



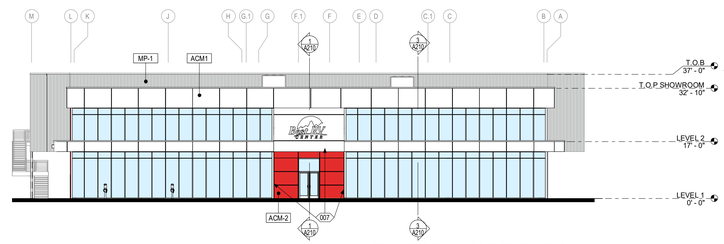
5 SOUTH ELEVATION - B
1/16" = 1'-0"



4 SOUTH ELEVATION - A
1/16" = 1'-0"



2 ENLARGED EAST ELEVATION
1/16" = 1'-0"



1 ENLARGED WEST ELEVATION
1/16" = 1'-0"

EXTERIOR ELEVATION KEYNOTES

001	ILLUMINATED RV LOGO SIGN MODULE MOUNTED TO BUILDING FACADE
002	DEALER NAME SIGN MODULE MOUNTED TO BUILDING
003	DEALER SERVICE SIGN MODULE MOUNTED TO BUILDING
004	KEY DROP BOX PAINTED TO MATCH ADJACENT WALL COLOR. G.C. TO COORDINATE LOCATION WITH OWNER BEFORE INSTALLATION
005	DOOR TO BE PAINTED AS SCHEDULED. REF: A600
006	EXPAND-FLASH EXPANSION JOINT, INSTALL PER MANUFACTURER RECOMMENDATION REF. SPECIFICATION
007	RECESSED LINEAR INTEGRATED LED MODULE. MOUNTED IN FACADE AROUND ACM PANEL. FIXTURE EE. REF: A602

EXTERIOR FINISH LEGEND

EIFS - 1
COLOR: TBD

ACM - 1
COLOR: BNT BONE WHITE

ACM - 2
COLOR: RAL 3024

MP - 1
COLOR: DOVE GREY

MP - 2
COLOR: BONE WHITE

MP - 3
PAINTED TO MATCH FERRARI RED
RAL 3024

TW - CONCRETE TILT-UP PANELS
PAINTED TO MATCH BONE WHITE

GL
OLDCASTLE RELIANCE CASSETE
FRAMING: CLEAR ANODIZED ALUMINUM
GLASS: SOLARBAN 70XL LOW E, 1/4" PPG

P - 1
PAINTED TO MATCH FERRARI RED
RAL 3024

Goree Whitfield
24691 Del Prado Ave
Dana Point, CA 92629
949 -234 -1950
www.goreewhitfield.com

CONSULTANTS

STRUCTURAL ENGINEER
GRIMM & CHEN
17500 REDHILL AVE., STE. 240, IRVINE, CA 92614
P: (949) 250.3150 X 1001
E: JEFFG@GC-SE.COM

ELECTRICAL ENGINEER
DMI ENGINEERS
8140 WEIRICK RD, CORONA, CA 92883
P: (951) 277-9109
E: FIYENGAR@DMIENGINEERS.COM

CIVIL ENGINEER
ASSOCIATED ENGINEERING GROUP
4200 TECHNOLOGY DRIVE, SUITE 4
MODESTO, CA 95356
P: (209) 614-6021
E: RYAN@ASSOCENG.COM

INTERIOR DESIGN
ABEL DESIGN GROUP
1700 BROADWAY, SUIT 630, DENVER, CO 80290
P: (303) 532-8899
E: JHOSKIN@ABELDESIGNGROUP.COM

MECHANICAL ENGINEERS
RPM ENGINEERS, INC
102 DISCOVERY, IRVINE, CA 92618
P: (949) 880-2506
E: ETHANS@RPMIPE.COM

CONSULTANT #6 - DISCIPLINE
CONSULTANT #6 - NAME
ADDRESS
PHONE NUMBER
WEBSITE

PROJECT NAME
BEST RV TURLOCK

PROJECT DESCRIPTION
RV SALES FACILITY
EXPANSION

PROJECT ADDRESS
5100-5300 TAYLOR CT.
TURLOCK, CA 95382

OWNER INFORMATION
NADER AMMARI

GOREE PROJECT NUMBER
GW2227

STAMP / SIGNATURE

ISSUE DATE

ISSUE HISTORY

DATE:	MARK:	DESCRIPTION:

KEY PLAN

SHEET NAME
BUILDING ELEVATIONS

SHEET NUMBER
A201

COPYRIGHTED DOCUMENT: THIS DRAWING AND THE DWG/CAD FILE FROM WHICH IT HAS BEEN GENERATED ARE PROVIDED AS AN INSTRUMENT OF SERVICE FOR THIS PROJECT. THESE DOCUMENTS ARE THE SOLE PROPERTY OF GOREE ARCHITECTS, INC. ANY USE OF THESE DOCUMENTS, DATA AND DESIGNS FOR PURPOSES OTHER THAN THOSE ASSOCIATED WITH THIS PROJECT WITHOUT THE EXPRESSED, WRITTEN PERMISSION OF GOREE WHITFIELD, INC. IS PROHIBITED.
© GOREE WHITFIELD 2021

SIGN-A: LED ILLUMINATED PAN CHANNEL SIGN
Scale: 3/8" = 1'-0"

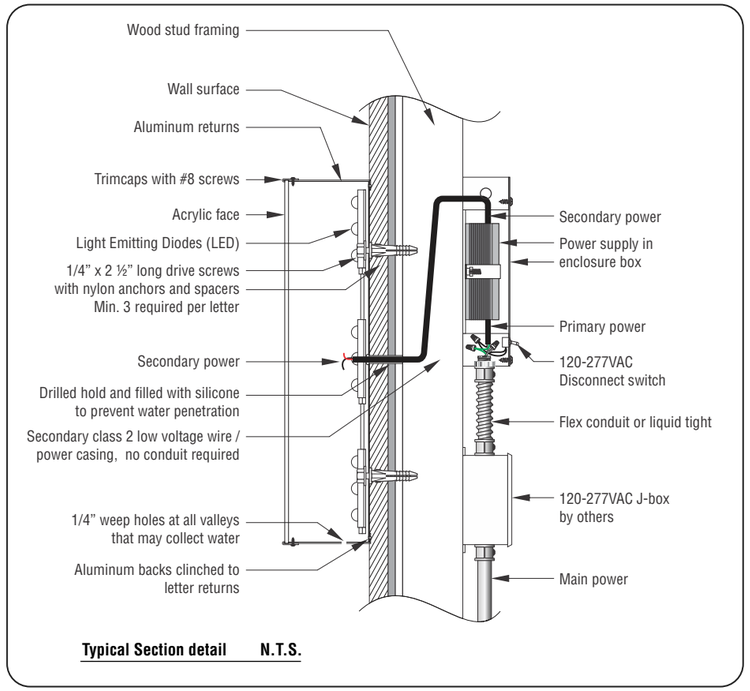
Best RV Letters:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white acrylic w/ #53 red vinyl overlay.

Swoosh:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white Lexan w/ #53 red vinyl overlay.

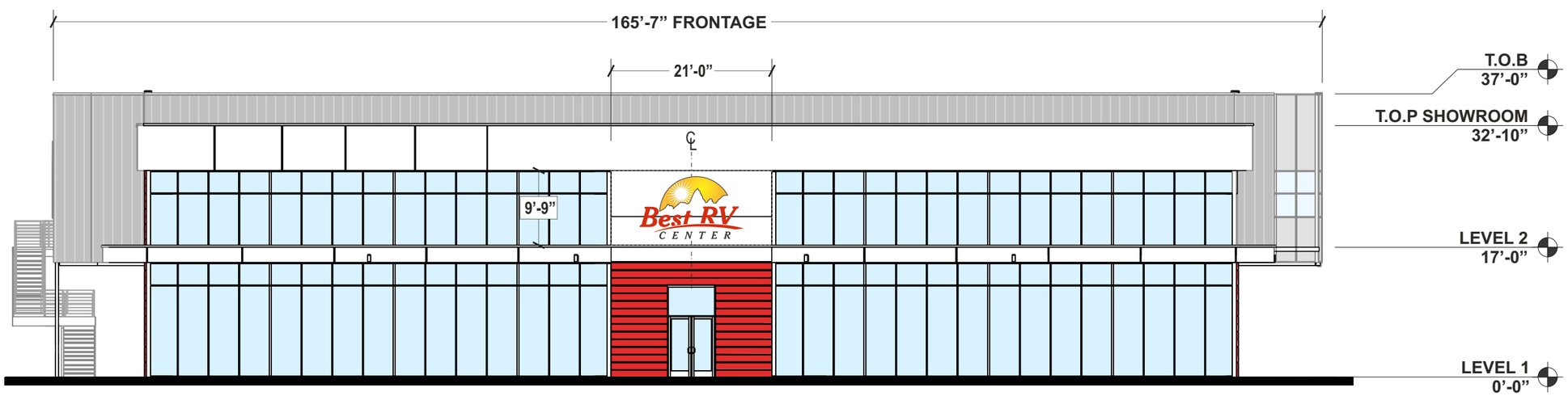
Logo:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white Lexan w/ digital print overlay.

CENTER Letters:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white acrylic w/ black perforated day/night overlay.

White LED illumination.



Typical Section detail N.T.S.



WEST ELEVATION - FRONT **Scale: 1/16" = 1'-0"**

1) This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

2) The location of the disconnect switch after installation shall comply with the Artical 600.6 (A)(1) of the National Electrical Code.

3) ALL WORK TO BE DONE IAW 2022 CBC, CEC, CFC COMPLIANT

FILE: best rv center - turlock

Client Review Status

Revision

Date

Project Information Date: 02-29-24 Job #00000 Page: 1

This is an original drawing created by United Sign Systems. It is loaned as part of an advertising or identification program being planned for you by United SignSystems. It is requested this material is not to be shown to anyone outside your organization, nor used, reproduced, copied or exhibited in any fashion whatsoever. All or part of this design (except for registered trademarks) remain the property of United Sign Systems until transferred actual sale.

COPYRIGHT 2018 United Sign Systems. This artwork is the exclusive property of United Sign Systems and cannot be reproduced without written permission of United Sign Systems

United Sign Systems requires that an "Approved" drawing be obtained from the client prior to any production release or production release revision

CLIENT APPROVAL DATE

LANDLORD APPROVAL DATE

Revision	Date
1 -	00-00-00
2 -	00-00-00

Client: Best RV Center
Location: -
Address: 5340 Taylor CT.
City/ST/Zip: Turlock, CA
Phone:
Fax:
Sales: Sean Campbell Designer: IL **Release By:** 00-00-00

UNITED SIGN SYSTEMS
C.S.C.L. #718965
5201 Pentecost Drive Modesto, Calif. 95356
1-800-481-SIGN
Phone: 209-543-1320 Fax:209-543-1326

SIGN-B: LED ILLUMINATED PAN CHANNEL SIGN
Scale: 3/16" = 1'-0"

Best RV Letters:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white acrylic w/ #53 red vinyl overlay.

Swoosh:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white Lexan w/ #53 red vinyl overlay.

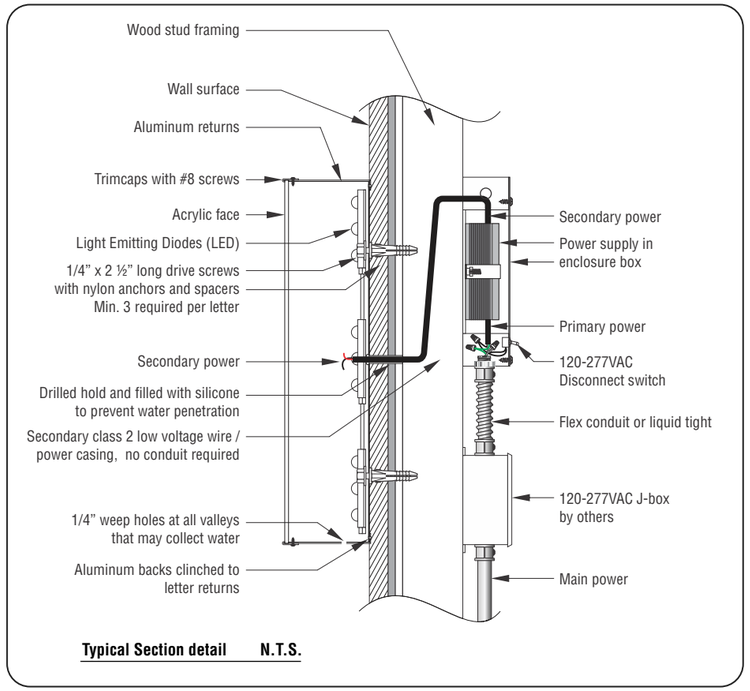
Logo:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white Lexan w/ digital print overlay.

CENTER Letters:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white acrylic w/ black perforated day/night overlay.

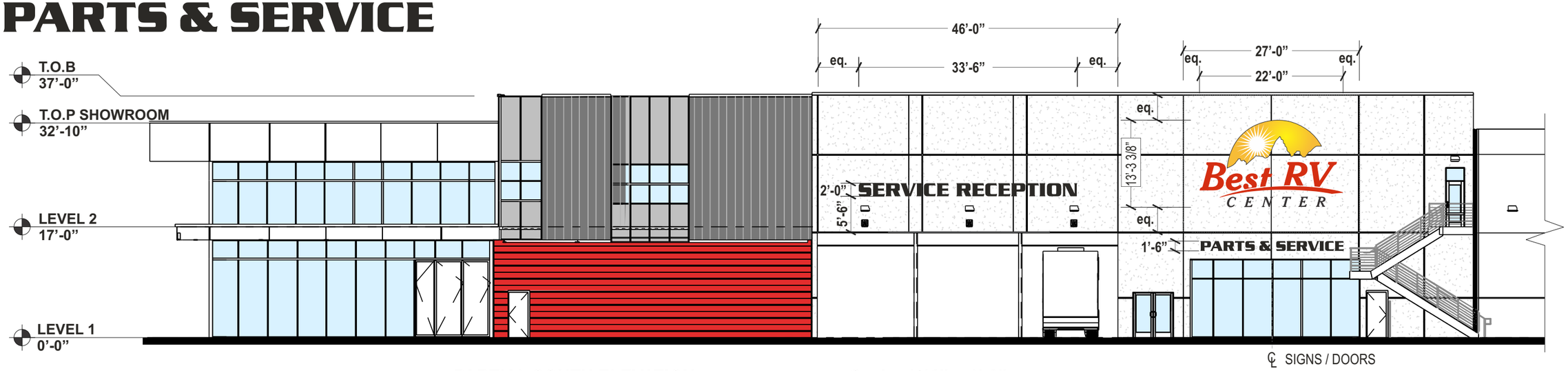
White LED illumination.

SIGN-C & C1: LED ILLUMINATED PAN CHANNEL SIGN
Scale: 3/16" = 1'-0"

5" deep white alum. returns w/ 3/4" white trim cap.
faces to be white acrylic w/ black perforated day/night vinyl overlay.
White LED's illumination.



Typical Section detail N.T.S.



PARTIAL SOUTH ELEVATION **Scale: 1/16" = 1'-0"**

1) This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

2) The location of the disconnect switch after installation shall comply with the Artical 600.6 (A)(1) of the National Electrical Code.

3) ALL WORK TO BE DONE IAW 2022 CBC, CEC, CFC COMPLIANT

FILE: best rv center - turlock

Client Review Status

Revision | Date
- 00-00-00
- 00-00-00

Project Information | Date: 02-29-24 | Job #00000 | Page: 2

Client: Best RV Center
Location: -
Address: 5340 Taylor CT.
City/ST/Zip: Turlock, CA
Phone:
Fax:
Sales: Sean Campbell Designer: IL **Release By:** 00-00-00

This is an original drawing created by United Sign Systems. It is loaned as part of an advertising or identification program being planned for you by United SignSystems. It is requested this material is not to be shown to anyone outside your organization, nor used, reproduced, copied or exhibited in any fashion whatsoever. All or part of this design (except for registered trademarks) remain the property of United Sign Systems until transferred actual sale.

COPYRIGHT 2018 United Sign Systems. This artwork is the exclusive property of United Sign Systems and cannot be reproduced without written permission of United Sign Systems

United Sign Systems requires that an "Approved" drawing be obtained from the client prior to any production release or production release revision

CLIENT APPROVAL DATE

LANDLORD APPROVAL DATE

UNITED SIGN SYSTEMS
C.S.C.L. #718965
5201 Pentecost Drive Modesto, Calif. 95356
1-800-481-SIGN
Phone: 209-543-1320 Fax:209-543-1326

SIGN-D: LED ILLUMINATED PAN CHANNEL SIGN
Scale: 3/8" = 1'-0"

Best RV Letters:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white acrylic w/ #53 red vinyl overlay.

Swoosh:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white Lexan w/ #53 red vinyl overlay.

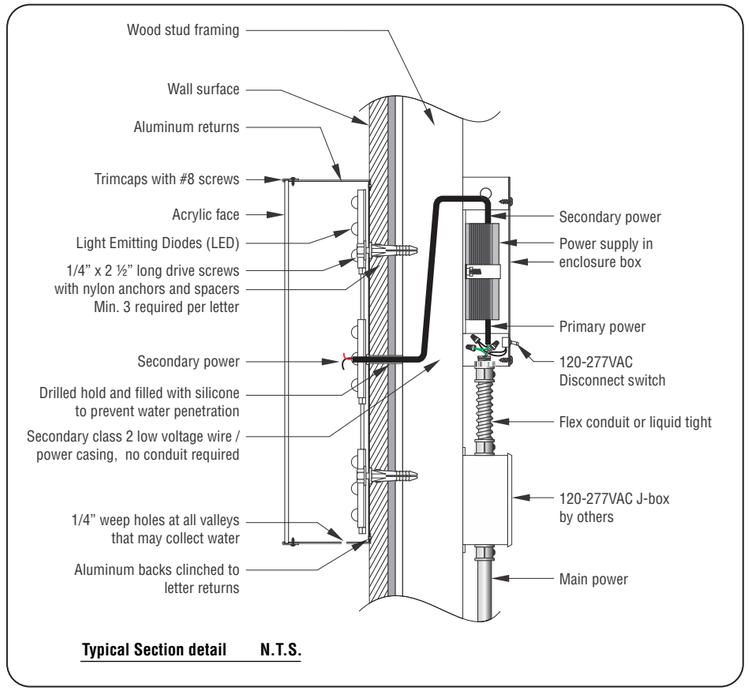
Logo:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white Lexan w/ digital print overlay.

CENTER Letters:
5" deep white alum. returns w/ 1" white trim cap.
faces to be white acrylic w/ black perforated day/night overlay.

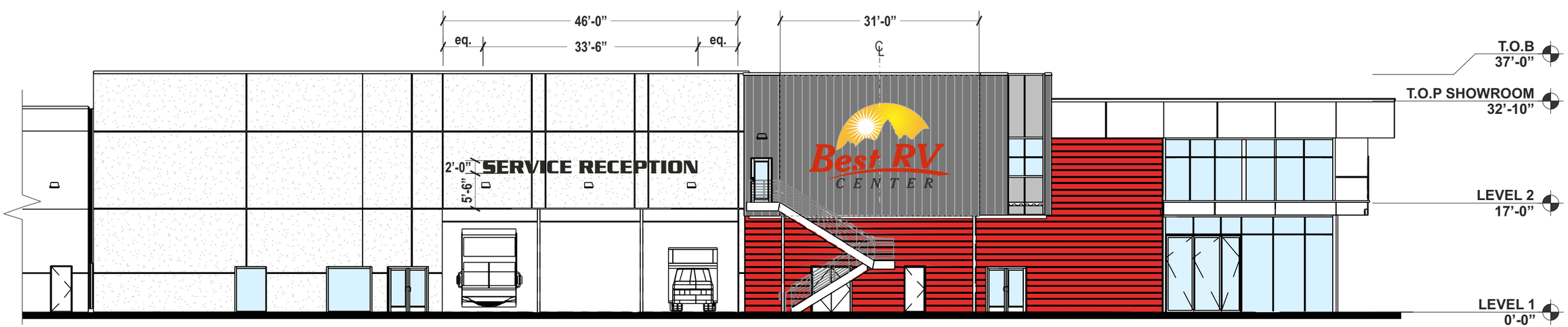
White LED illumination.

SIGN-E: LED ILLUMINATED PAN CHANNEL SIGN
Scale: 3/16" = 1'-0"

5" deep white alum. returns w/ 3/4" white trim cap.
faces to be white acrylic w/ black perforated day/night vinyl overlay.
White LED's illumination.



Typical Section detail N.T.S.



PARTIAL NORTH ELEVATION **Scale: 1/16" = 1'-0"**

1) This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

2) The location of the disconnect switch after installation shall comply with the Artical 600.6 (A)(1) of the National Electrical Code.

3) ALL WORK TO BE DONE IAW 2022 CBC, CEC, CFC COMPLIANT

FILE: best rv center - turlock	Client Review Status	Revision	Date	Project Information	Date: 02-29-24	Job #00000	Page: 3

This is an original drawing created by United Sign Systems. It is loaned as part of an advertising or identification program being planned for you by United SignSystems. It is requested this material is not to be shown to anyone outside your organization, nor used, reproduced, copied or exhibited in any fashion whatsoever. All or part of this design (except for registered trademarks) remain the property of United Sign Systems until transferred actual sale.

COPYRIGHT 2018 United Sign Systems. This artwork is the exclusive property of United Sign Systems and cannot be reproduced without written permission of United Sign Systems

United Sign Systems requires that an "Approved" drawing be obtained from the client prior to any production release or production release revision

CLIENT APPROVAL DATE

LANDLORD APPROVAL DATE

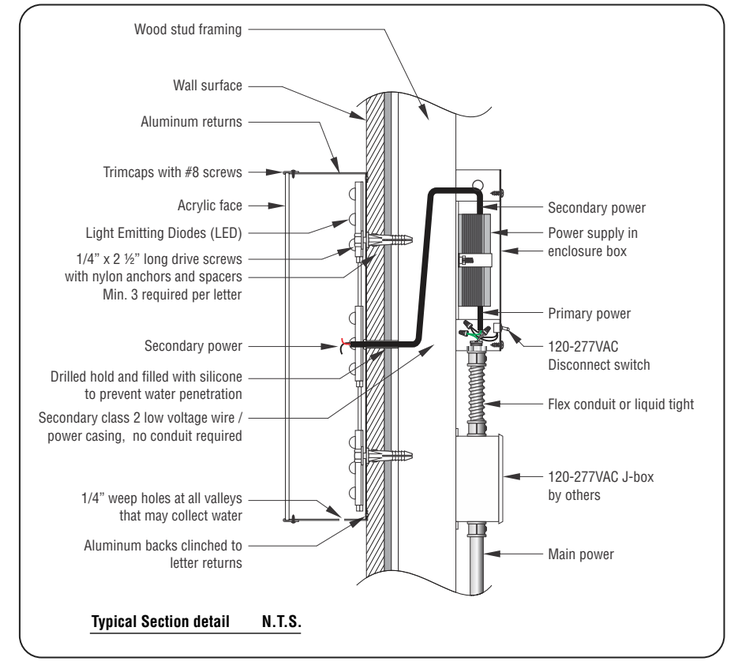
1 per request	03-04-24 IL
2 -	00-00-00

Client: Best RV Center
Location: -
Address: 5340 Taylor CT.
City/ST/Zip: Turlock, CA
Phone:
Fax:
Sales: Sean Campbell Designer: IL **Release By:** 00-00-00

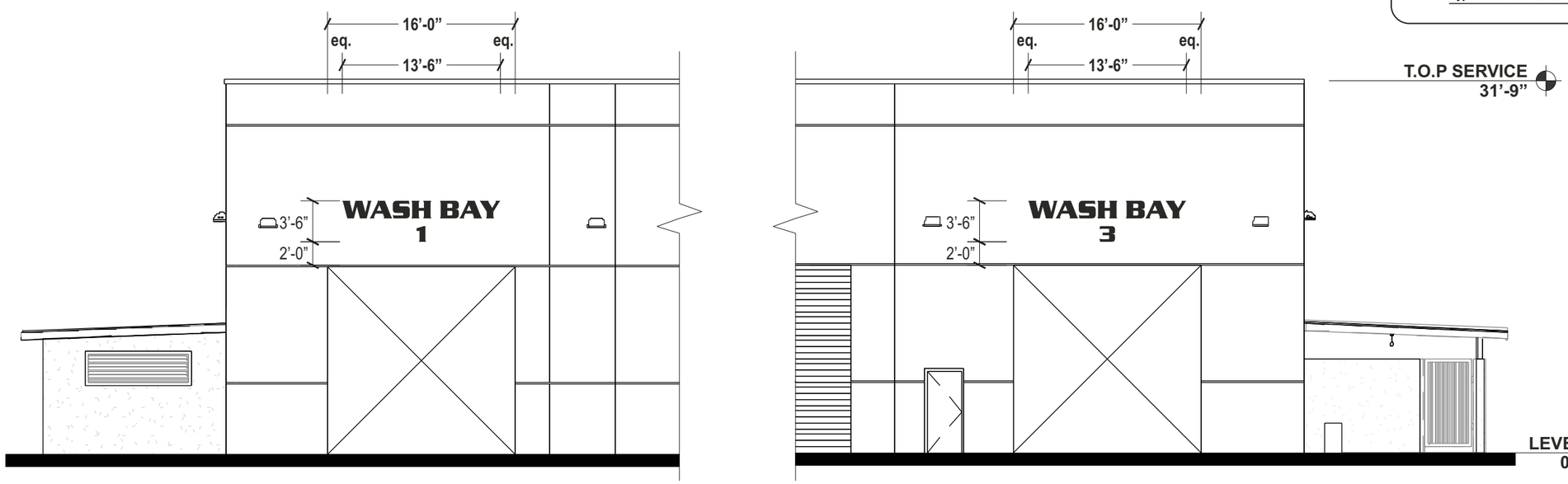
UNITED SIGN SYSTEMS
C.S.C.L. #718965
5201 Pentecost Drive Modesto, Calif. 95356
1-800-481-SIGN
Phone: 209-543-1320 Fax:209-543-1326

SIGN-F1 to F4: **LED ILLUMINATED PAN CHANNEL SIGNS**
Scale: 1/2" = 1'-0"

3" deep white alum. returns w/ 3/4" white trim cap.
faces to be white acrylic w/ black perforated day/night vinyl overlay.
White LED's illumination.



Typical Section detail N.T.S.



PARTIAL NORTH ELEVATION @ WASH BAY **Scale: 3/32" = 1'-0"**

PARTIAL SOUTH ELEVATION @ WASH BAY **Scale: 3/32" = 1'-0"**

1) **This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.**

2) **The location of the disconnect switch after installation shall comply with the Artical 600.6 (A)(1) of the National Electrical Code.**

3) **ALL WORK TO BE DONE IAW 2022 CBC, CEC, CFC COMPLIANT**

FILE: best rv center - turlock | Client Review Status | Revision | Date | Project Information | Date: 02-29-24 | Job #00000 | Page: 4

This is an original drawing created by United Sign Systems. It is loaned as part of an advertising or identification program being planned for you by United SignSystems. It is requested this material is not to be shown to anyone outside your organization, nor used, reproduced, copied or exhibited in any fashion whatsoever. All or part of this design (except for registered trademarks) remain the property of United Sign Systems until transferred actual sale.

COPYRIGHT 2018 United Sign Systems. This artwork is the exclusive property of United Sign Systems and cannot be reproduced without written permission of United Sign Systems

United Sign Systems requires that an "Approved" drawing be obtained from the client prior to any production release or production release revision

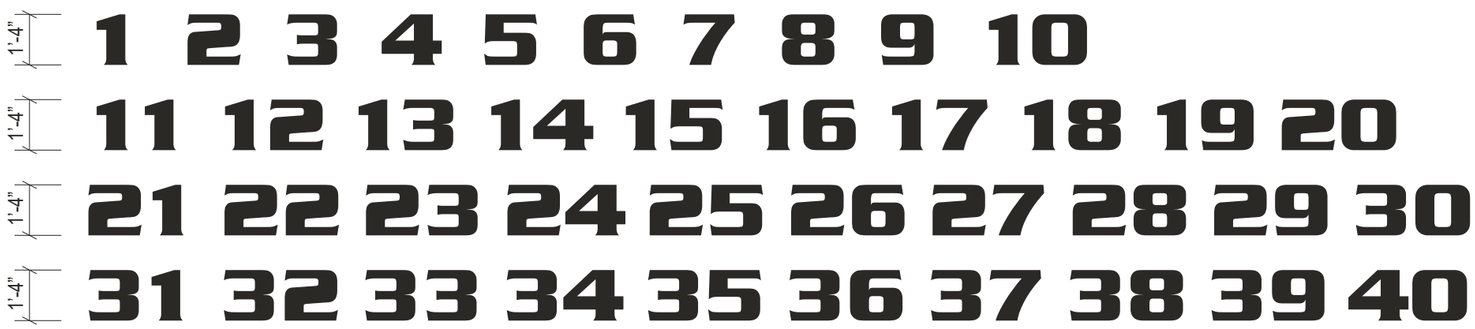
CLIENT APPROVAL DATE

LANDLORD APPROVAL DATE

Revision	Date
1 per request	03-04-24 IL
2 -	00-00-00

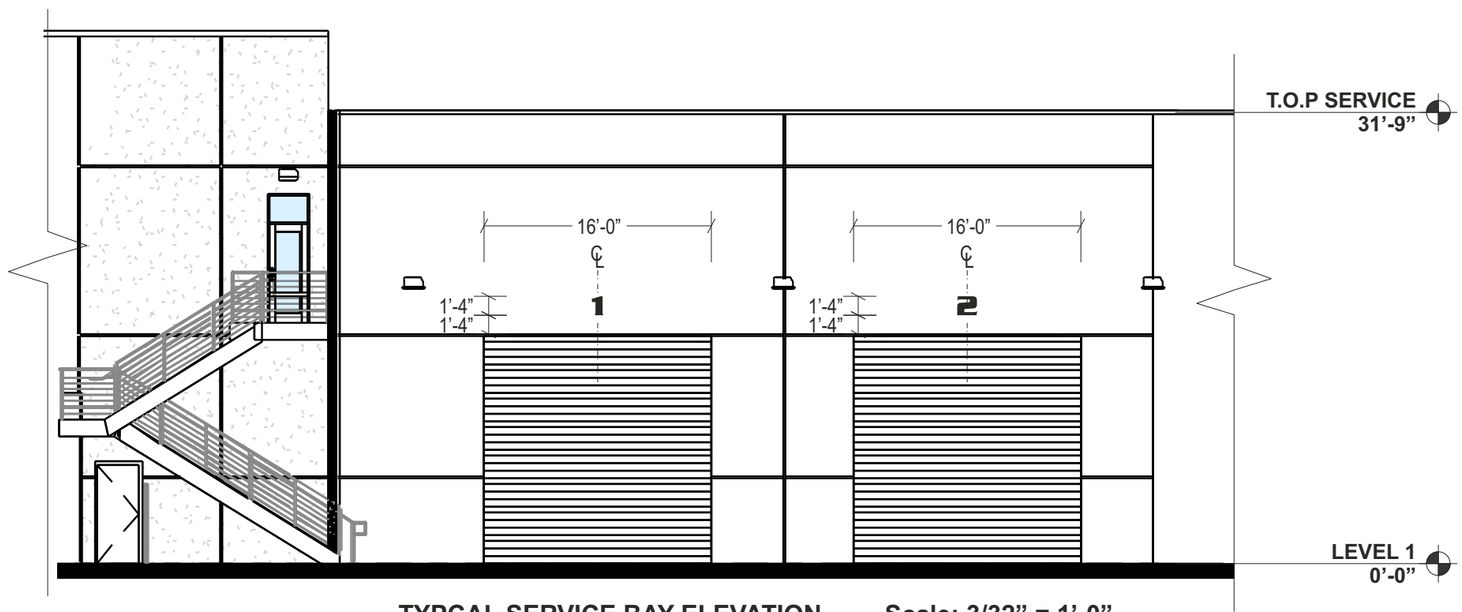
Client: Best RV Center
Location: -
Address: 5340 Taylor CT.
City/ST/Zip: Turlock, CA
Phone:
Fax:
Sales: Sean Campbell Designer: IL **Release By:** 00-00-00

UNITED SIGN SYSTEMS
C.S.C.L. #718965
5201 Pentecost Drive Modesto, Calif. 95356
1-800-481-SIGN
Phone: 209-543-1320 Fax:209-543-1326

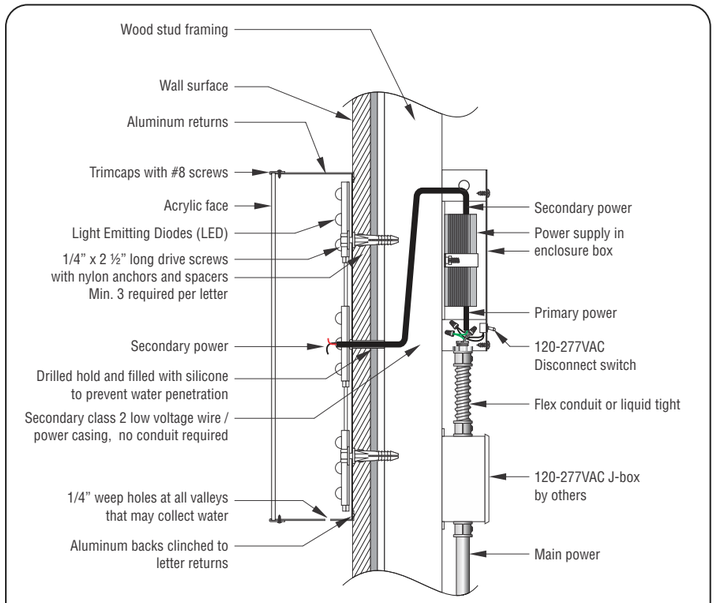


SIGN-H1 TO H40: LED ILLUMINATED PAN CHANNEL SIGN
Scale: 1/4" = 1'-0"

3" deep white alum. returns w/ 3/4" white trim cap.
faces to be white acrylic w/ black perforated day/night vinyl overlay.
White LED's illumination.



TYPCAL SERVICE BAY ELEVATION Scale: 3/32" = 1'-0"



Typical Section detail N.T.S.

1) This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

2) The location of the disconnect switch after installation shall comply with the Artical 600.6 (A)(1) of the National Electrical Code.

3) ALL WORK TO BE DONE IAW 2022 CBC, CEC, CFC COMPLIANT

FILE: best rv center - turlock | Client Review Status | Revision | Date | Project Information | Date: 02-29-24 | Job #00000 | Page: 5

This is an original drawing created by United Sign Systems. It is loaned as part of an advertising or identification program being planned for you by United SignSystems. It is requested this material is not to be shown to anyone outside your organization, nor used, reproduced, copied or exhibited in any fashion whatsoever. All or part of this design (except for registered trademarks) remain the property of United Sign Systems until transferred actual sale.

COPYRIGHT 2018 United Sign Systems. This artwork is the exclusive property of United Sign Systems and cannot be reproduced without written permission of United Sign Systems

United Sign Systems requires that an "Approved" drawing be obtained from the client prior to any production release or production release revision

CLIENT APPROVAL DATE

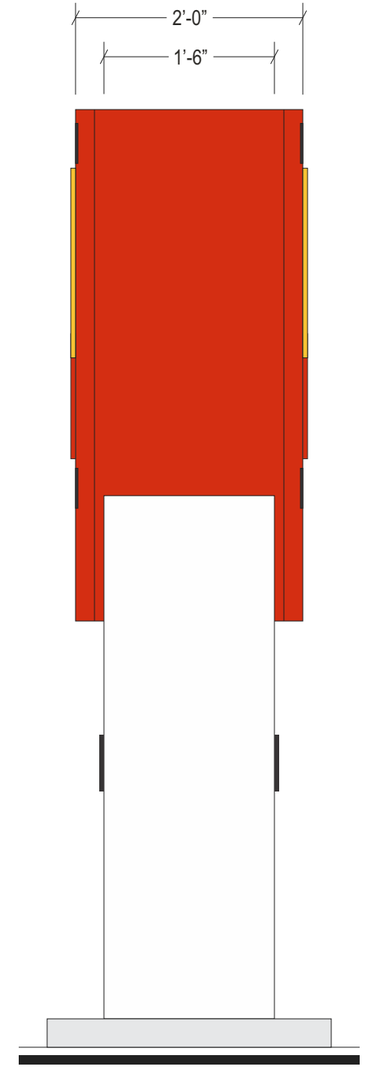
LANDLORD APPROVAL DATE

Revision	Date
1 per request	03-04-24 IL
2 -	00-00-00

Client: Best RV Center
Location: -
Address: 5340 Taylor CT.
City/ST/Zip: Turlock, CA
Phone:
Fax:
Sales: Sean Campbell Designer: IL **Release By:** 00-00-00

USS UNITED SIGN SYSTEMS
C.S.C.L. #718965
5201 Pentecost Drive Modesto, Calif. 95356
1-800-481-SIGN
Phone: 209-543-1320 Fax:209-543-1326

SIGN-M1: D/F LED ILLUMINATED MONUMENT SIGN
Scale: 3/4" = 1'-0"



SIDE VIEW
Scale: 3/4" = 1'-0"

1) This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

2) The location of the disconnect switch after installation shall comply with the Artical 600.6 (A)(1) of the National Electrical Code.

3) ALL WORK TO BE DONE IAW 2022 CBC, CEC, CFC COMPLIANT

FILE: best rv center - turlock

Client Review Status

Revision | Date

1 per request	03-04-24 IL
2 -	00-00-00

Project Information: Date: 02-29-24 | Job #00000 | Page: 6

Client: Best RV Center
Location: -
Address: 5340 Taylor CT.
City/ST/Zip: Turlock, CA
Phone:
Fax:
Sales: Sean Campbell Designer: IL **Release By:** 00-00-00

This is an original drawing created by United Sign Systems. It is loaned as part of an advertising or identification program being planned for you by United SignSystems. It is requested this material is not to be shown to anyone outside your organization, nor used, reproduced, copied or exhibited in any fashion whatsoever. All or part of this design (except for registered trademarks) remain the property of United Sign Systems until transferred actual sale.

COPYRIGHT 2018 United Sign Systems. This artwork is the exclusive property of United Sign Systems and cannot be reproduced without written permission of United Sign Systems

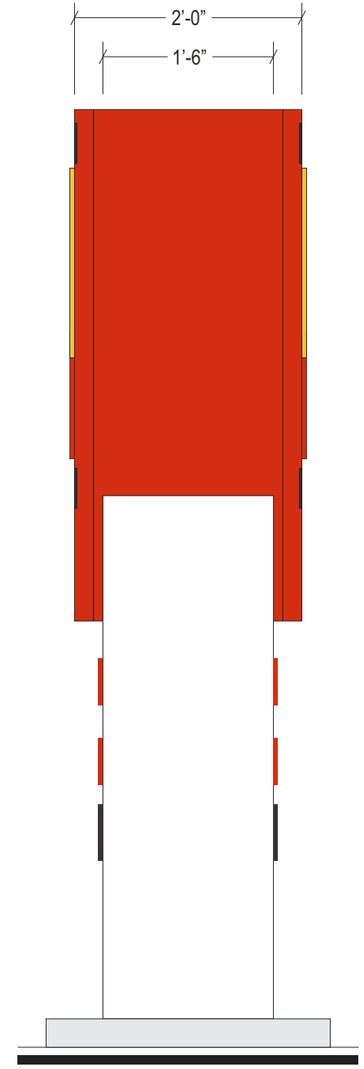
United Sign Systems requires that an "Approved" drawing be obtained from the client prior to any production release or production release revision

CLIENT APPROVAL DATE

LANDLORD APPROVAL DATE

UNITED SIGN SYSTEMS
C.S.C.L. #718965
5201 Pentecost Drive Modesto, Calif. 95356
1-800-481-SIGN
Phone: 209-543-1320 Fax:209-543-1326

SIGN-M2: D/F LED ILLUMINATED MONUMENT SIGN
Scale: 3/4" = 1'-0"



SIDE VIEW
Scale: 3/4" = 1'-0"

OPPOSITE SIDE **Scale: 3/4" = 1'-0"**

1) This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

2) The location of the disconnect switch after installation shall comply with the Artical 600.6 (A)(1) of the National Electrical Code.

3) ALL WORK TO BE DONE IAW 2022 CBC, CEC, CFC COMPLIANT

FILE: best rv center - turlock

Client Review Status

Revision | Date

1 per request	03-04-24 IL
2 -	00-00-00

Project Information: Date: 02-29-24 | Job #00000 | Page: 7

Client: Best RV Center
Location: -
Address: 5340 Taylor CT.
City/ST/Zip: Turlock, CA
Phone:
Fax:
Sales: Sean Campbell Designer: IL **Release By:** 00-00-00

This is an original drawing created by United Sign Systems. It is loaned as part of an advertising or identification program being planned for you by United SignSystems. It is requested this material is not to be shown to anyone outside your organization, nor used, reproduced, copied or exhibited in any fashion whatsoever. All or part of this design (except for registered trademarks) remain the property of United Sign Systems until transferred actual sale.

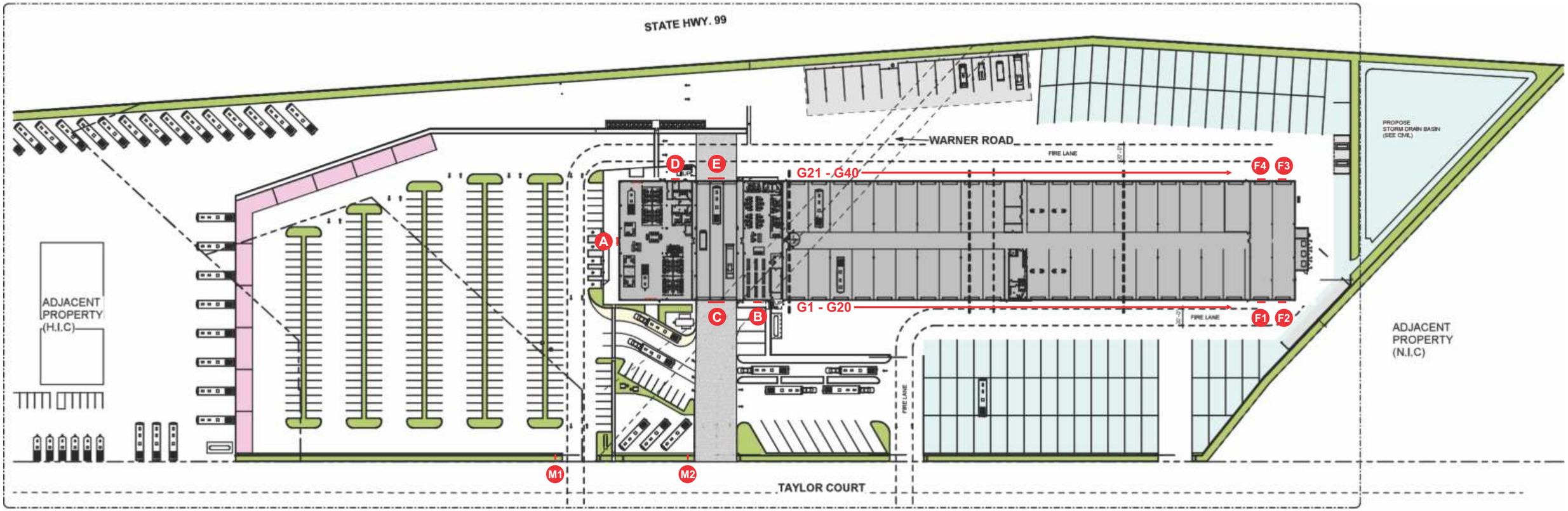
COPYRIGHT 2018 United Sign Systems. This artwork is the exclusive property of United Sign Systems and cannot be reproduced without written permission of United Sign Systems

United Sign Systems requires that an "Approved" drawing be obtained from the client prior to any production release or production release revision

CLIENT APPROVAL DATE

LANDLORD APPROVAL DATE

UNITED SIGN SYSTEMS
C.S.C.L. #718965
5201 Pentecost Drive Modesto, Calif. 95356
1-800-481-SIGN
Phone: 209-543-1320 Fax:209-543-1326



SITE PLAN N.T.S.

north

1) This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

2) The location of the disconnect switch after installation shall comply with the Artical 600.6 (A)(1) of the National Electrical Code.

3) ALL WORK TO BE DONE IAW 2022 CBC, CEC, CFC COMPLIANT

FILE: best rv center - turlock

Client Review Status

Revision

	Date
1 per request	03-04-24 IL
2 -	00-00-00

Date: 02-29-24 | Job #00000 | Page: 8

Project Information

Client: Best RV Center
Location: -
Address: 5340 Taylor CT.
City/ST/Zip: Turlock, CA
Phone:
Fax:
Sales: Sean Campbell Designer: IL Release By: 00-00-00

This is an original drawing created by United Sign Systems. It is loaned as part of an advertising or identification program being planned for you by United SignSystems. It is requested this material is not to be shown to anyone outside your organization, nor used, reproduced, copied or exhibited in any fashion whatsoever. All or part of this design (except for registered trademarks) remain the property of United Sign Systems until transferred actual sale.

COPYRIGHT 2018 United Sign Systems. This artwork is the exclusive property of United Sign Systems and cannot be reproduced without written permission of United Sign Systems

United Sign Systems requires that an "Approved" drawing be obtained from the client prior to any production release or production release revision

CLIENT APPROVAL DATE

LANDLORD APPROVAL DATE

UNITED SIGN SYSTEMS
C.S.C.L. #718965
5201 Pentecost Drive Modesto, Calif. 95356
1-800-481-SIGN
Phone: 209-543-1320 Fax:209-543-1326

January 2, 2024

Mr. Nader Ammari
Best RV Center
5340 Taylor Court
Turlock, CA 95382
Work: (209) 216-5200
Fax: (209) 216-5210
E-mail: NMAmmari@BestRV.com

Subject: CalEEMod Air Quality and Greenhouse Gas Study, SJVAPCD Rule 9510 Indirect Source Review and Risk Prioritization Scoring for a Recreational Vehicle Dealership Upgrade in Turlock, CA

Dear Mr. Ammari:

Yorke Engineering, LLC (Yorke) is pleased to provide this technical letter report which includes the Air Quality (AQ) and Greenhouse Gas (GHG) CEQA significance evaluation, San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 9510 summary, and a health risk screening assessment for the project operations. This addendum report provides California Emissions Estimator Model® (CalEEMod) emissions estimates, criteria pollutant analysis, GHG analysis, and vehicle miles traveled (VMT) estimates for the proposed recreational vehicle (RV) dealership and service center in Turlock, California. The Project site is in Stanislaus County, which is within the SJVAPCD. These evaluations will support an Initial Study (IS) or a Mitigated Negative Declaration (MND) from the County under the California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION

The proposed Project is located at 5100-5300 Taylor Court and 4318 West Warner Road, adjacent to State Route (SR) 99, in the City of Turlock, CA (the City) and involves the development and construction of a two-level 135,840-square-foot RV sales and service building. The proposed project will cover 15.3 acres on three parcels [Assessor's Parcel Number (APN) 045-053-040, 045-053-041, and 045-062-001]. The existing small building at the site will not be demolished, and the new building will be constructed on a new site. The nearest non-residential receptor is a commercial building adjacent to the Project site to the south. The nearest residential receptor is located approximately 230 meters (750 feet) to the west of the Project site. The nearest school to the Project site is Keyes Elementary School, approximately 1,500 meters (4,900 feet) to the northwest of the Project site. The nearest airport is Modesto City-County Airport, approximately 6 miles north of the property.

ASSUMPTIONS

The following basic assumptions were used in developing the emission estimates for the proposed Project using CalEEMod:

- CalEEMod defaults were applied to all phases of the Project, unless otherwise specified.

- Applicable California Statewide Travel Demand Model (CSTDM) or Metropolitan Planning Organization/Regional Transportation Planning Agency (MPO/RTPA) default trip distances for the San Joaquin Valley Air Basin, and Institute of Traffic Engineers (ITE) default trip rates, as contained in CalEEMod, were assumed for the operational traffic analysis.
- Some Project design features including sizes and number of buildings were defined by the Applicant and replaced some CalEEMod default settings.
- CalEEMod construction timelines are generally accurate, unless otherwise stated.
- During the site preparation and grading phases of construction, it is anticipated that no soil will need to be exported from or imported to the Project site.
- During the construction, it is assumed that no demolition will occur.
- The default equipment from CalEEMod for each construction phase is representative of actual construction equipment used during construction.
- The default vehicle trips related to the Automobile Care Center land use were reduced by 90%. The Automobile Care Center is defined as a retail establishment that houses numerous businesses. Since this operation will consist of one entity operating sales and service operations, the vehicle trips would be significantly reduced compared to an operation with multiple businesses with smaller footprints.

LIST OF TABLES

The Project analyses and results are summarized in the following tables:

- Table 1: Land Use Data for CalEEMod Input
- Table 2: SJVAPCD CEQA Thresholds of Significance
- Table 3: Construction Emissions Summary and Significance Evaluation
- Table 4: Operational Emissions Summary and Significance Evaluation
- Table 5: Greenhouse Gas Emissions Summary and Significance Evaluation
- Table 6: Rule 9510 Construction and Operations Emissions Summary
- Table 7: Diesel Particulate Matter Emissions Summary
- Table 8: Health Risk Screening Summary – DPM
- Table 9: CEQA Appendix G Significance Summary

AIR QUALITY AND GREENHOUSE GAS IMPACTS ANALYSES

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains an Environmental Checklist Form which consists of a series of questions that are intended to encourage a thoughtful assessment of impacts. In order to evaluate the questions in the Air Quality and Greenhouse Gas Emissions Sections of the checklist, quantitative significance criteria established by the local air quality agency, such as SJVAPCD, may be relied upon to make

significance determinations based on mass emissions of criteria pollutants and GHGs, as determined in this report.

Project Emissions Estimation

The construction and operation analysis were performed using CalEEMod version 2022.1.1.20, the official statewide land use computer model designed to provide a uniform platform for estimating potential criteria pollutant and GHG emissions associated with both construction and operations of land use projects under CEQA. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The mobile source emission factors used in the model –published by the California Air Resources Board (CARB) – include the Pavley standards and Low Carbon Fuel standards. The model also identifies project design features, regulatory measures, and control (mitigation) measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from the selected measures. CalEEMod was developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the SJVAPCD, the Bay Area Air Quality Management District (BAAQMD), the South Coast Air Quality Management District (SCAQMD), and other California air districts. Default land use data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) were provided by the various California air districts to account for local requirements and conditions. As the official assessment methodology for land use projects in California, CalEEMod is relied upon herein for construction and operational emissions quantification, which forms the basis for the impact analysis.

Based on information received from the Applicant, land use data for CalEEMod input is presented in Table 1. The total parcel area is 15.3 acres. The SJVAPCD quantitative significance thresholds shown in Table 2 were used to evaluate Project emissions impacts (SJVAPCD 2015a,b,c).

Table 1: Land Use Data for CalEEMod Input						
Project Element	**Land Use Type**	**Land Use Subtype**	**Unit Amount**	**Size Metric**	**Lot Acreage (footprint)**	**Floor Surface Area (sf)**
RV Service and Delivery Areas	Retail	Autocare Service Center - Ground Floor	102.04	ksf	102.04	102,040
Office Space	Commercial	Office - Ground Floor	13.45	ksf	13.45	13,450
Office Space	Commercial	Office - Mezzanine	20.35	ksf	-	20,350
Roads and Parking Area	Parking	Parking Lot	459.23	ksf	459.23	459,230
Landscaped Area	Parking	Landscaping	75.67	ksf	75.67	75,670
Roads and Parking Area	Parking	Unenclosed Parking Structure	16.09	ksf	16.09	16,090
Project Site (ksf)					**666.47**	**686,810**
Project Site (acre)					**15.30**	**—**

Source: Applicant 2023, CalEEMod version 2022.1.1.20

Notes:

Electric Utility - Turlock Irrigation District
1 acre = 43,560 sf

Construction start date: 01/08/2024

Operational year: 2026 (based on default construction period and CalEEMod warning "make sure operational year is after final construction year")

Project Specific Trip Rates for VMT Estimates

CalEEMod is the SJVAPCD's accepted air quality model for determining direct and indirect emissions associated with various types of land uses, which it relies on to assist in evaluating project-related emissions for employees or residents traveling to and from a project site. Yorke's evaluation was based on the potential size and use of the building that would be constructed on the site (i.e., 33,800 square feet of office), as well as the trip generation rate (i.e., trips per 1,000 square feet or ksf of occupied building) for the potential land uses. Default trip generation rates are published in the CalEEMod 2016 user guide, Appendix D, which are adopted from the Institute of Transportation Engineers (ITE) trip generation manual, 9th/10th edition. As shown in Table 4.3 of Appendix D of the CalEEMod user guide, Mobile Trip Rates, Trip Purpose, Trip Type by Land Use the default single-building weekday trip generation rate for Auto Care Center is 23.7 trips/ksf on weekdays and Saturdays and 11.9 trips/ksf on Sundays. The default values are based on an Auto Care Center having multiple businesses with a relatively smaller footprint. To reasonably account for the expected trips at the facility, Yorke reduced the trip rate by 90% compared to the default values, to 2.37 trips/ksf (242 trips/day) for weekdays and Saturdays and 1.19 trips/ksf (121 trips/day) on Sundays. The default trip rates for the office portion of the building and the parking areas were utilized.

Table 2: SJVAPCD CEQA Thresholds of Significance		
Pollutant	**Annual Threshold***	**APR-2030 Threshold****
	tons/yr	**lbs/day**
VOC	10	100
NO_X	10	100
CO	100	100
SO_X	27	100
PM_{10}	15	100
$PM_{2.5}$	15	100
Toxic Air Contaminants (including carcinogens and non-carcinogens)	Maximally Exposed Individual risk equals or exceeds 20 in one million	
	Acute: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual	
	Chronic: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual	
Greenhouse Gases	Implement Best Performance Standards (BPS) (see Discussion)	
	Reduce Project GHG Emission by 29% over Business as Usual (see Discussion)	

Source: SJVAPCD 2015a,b; 2018; 2009a,b
*Construction or operation
**Stationary sources only

Criteria Pollutants from Project Construction

A project's construction phase produces many types of emissions, but PM_{10} and $PM_{2.5}$ in fugitive dust and diesel engine exhaust are the pollutants of greatest concern. Fugitive dust emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle exhaust. Construction-related emissions can cause substantial increases in localized concentrations of PM_{10}, as well as affecting PM_{10} compliance with ambient air quality standards on a regional basis. Particulate emissions from construction activities can lead to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces. The use of diesel-powered construction equipment emits ozone precursors oxides of nitrogen (NO_x) and reactive organic gases (ROG), and diesel particulate matter (DPM). Use of architectural coatings and other materials associated with finishing buildings may also emit ROG. CEQA significance thresholds address the impacts of construction activity emissions on local and regional air quality.

The SJVAPCD's approach to CEQA analyses of fugitive dust impacts is to require implementation of effective and comprehensive dust control measures under Regulation VIII – Fugitive PM_{10} Prohibitions – rather than to require detailed quantification of emissions. PM_{10} emitted during construction can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors, making

quantification difficult. Despite this variability in emissions, experience has shown that there are several feasible control measures that can be reasonably implemented to significantly reduce fugitive dust emissions from construction. The SJVAPCD has determined that implementing Best Management Practices (BMPs), primarily through frequent water application, constitutes sufficient controls to reduce PM_{10} impacts to a level considered less than significant.

Criteria Pollutants from Project Operation

The term "project operations" refers to the full range of activities that can or may generate criteria pollutant and GHG emissions when the project is functioning in its intended use. For projects, such as office parks, shopping centers, apartment buildings, residential subdivisions, and other indirect sources, motor vehicles traveling to and from the project represent the primary source of air pollutant emissions. For industrial projects and some commercial projects, equipment operation and manufacturing processes, i.e., permitted stationary sources, can be of greatest concern from an emissions standpoint. CEQA significance thresholds address the impacts of operational emission sources on local and regional air quality.

Results of Criteria Emissions Analyses

Table 3 shows unmitigated and mitigated criteria construction emissions and evaluates mitigated emissions against SJVAPCD significance thresholds.

Table 4 shows unmitigated and mitigated criteria operational emissions and evaluates mitigated emissions against SJVAPCD significance thresholds.

As shown in Tables 3 and 4, mass emissions of criteria pollutants from construction and operation are below applicable SJVAPCD significance thresholds, i.e., Less Than Significant (LTS).

PROJECTED IMPACT: Less Than Significant

Table 3: Construction Emissions Summary and Significance Evaluation

Criteria Pollutants	Unmitigated	Mitigated	Threshold	Significance
	tons/yr	tons/yr	tons/yr	
ROG (VOC)	0.5	0.5	10	LTS
NO_X	2.1	2.1	10	LTS
CO	2.4	2.4	100	LTS
SO_X	0.00	0.00	27	LTS
Total PM_{10}	0.4	0.2	15	LTS
Total $PM_{2.5}$	0.2	0.1	15	LTS

Sources: Applicant 2023, SJVAPCD 2015a,b,c; CalEEMod version 2022.1.1.20
Notes:
Tons/yr includes winter or summer maxima for planned land use
Total PM_{10} / $PM_{2.5}$ comprises fugitive dust plus engine exhaust
LTS - Less Than Significant

Table 4: Operational Emissions Summary and Significance Evaluation				
Criteria Pollutants	Unmitigated	Mitigated	Threshold	Significance
	tons/yr	tons/yr	tons/yr	
ROG (VOC)	0.91	0.91	10	LTS
NO_X	0.43	0.43	10	LTS
CO	2.10	2.10	100	LTS
SO_X	0.0042	0.0042	27	LTS
Total PM_{10}	0.26	0.26	15	LTS
Total $PM_{2.5}$	0.08	0.08	15	LTS

Sources: Applicant 2023, SJVAPCD 2015a,b,c; CalEEMod version 2022.1.1.20
Tons per year are annual emissions for planned land use
Total PM_{10} / $PM_{2.5}$ comprises fugitive dust plus engine exhaust

Greenhouse Gas Emissions from Construction and Operation

Greenhouse gases – primarily carbon dioxide (CO_2), methane (CH_4), and nitrous (N_2O) oxide, collectively reported as carbon dioxide equivalents (CO_2e) – are directly emitted from stationary source combustion of natural gas in equipment such as water heaters, boilers, process heaters, and furnaces. GHGs are also emitted from mobile sources such as on-road vehicles and off-road construction equipment burning fuels such as gasoline, diesel, biodiesel, propane, or natural gas (compressed or liquefied). Indirect GHG emissions result from electric power generated elsewhere (i.e., power plants) used to operate process equipment, lighting, and utilities at a facility. Also, included in GHG quantification is electric power used to pump the water supply (e.g., aqueducts, wells, pipelines) and disposal and decomposition of municipal waste in landfills. (CARB 2022a).

California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2022 standards improved upon the 2019 standards for new construction of, and additions and alterations to, residential, commercial, and industrial buildings. The 2022 standards went into effect on January 1, 2023 (CEC 2022).

Since the Title 24 standards require energy conservation features in new construction (e.g., high-efficiency lighting, high-efficiency heating, ventilating, and air-conditioning (HVAC) systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures, etc.), they indirectly regulate and reduce GHG emissions.

Using CalEEMod, direct on-site and off-site GHG emissions were estimated for construction and operation, and indirect off-site GHG emissions were estimated to account for electric power used by the proposed Project, water conveyance, and solid waste disposal.

Results of Greenhouse Gas Emissions Analysis

Table 5 shows unmitigated and mitigated GHG emissions. For context, these estimated emissions are relatively small, approximately 1,419 MT CO_2e per year, which is about 0.006% of the statewide commercial sector GHG inventory of approximately 22 million MT CO_2e per year (CARB 2022b).

As project design features, the Best RV Project would implement applicable and feasible GHG reduction measures provided in the December 17, 2009, *Final Staff Report, Appendix J: GHG Emission Reduction Measures – Development Projects*. The Project proponent (Applicant) would implement the following measures as applicable and feasible for the type of land use: #1 Bicycle Parking (secure area or lockers) and #A11 Vehicle Idling (5-minute BMP idling limit). (SJVAPCD 2009a)

Table 5: Greenhouse Gas Emissions Summary and Significance Evaluation

Greenhouse Gases	Unmitigated	Mitigated	Threshold	Significance
	MT/yr	MT/yr	MT/yr	
CO_2	1,201	1,201	—	—
CH_4	4.3	4.3	—	—
N_2O	0.4	0.4	—	—
CO_2e	1,419	1,419	Feasible BPS[1]	LTS[1]

Sources: Applicant 2023, SJVAPCD 2009a,b; CalEEMod version 2022.1.1.20
Notes:
Comprises annual operational emissions plus construction emissions amortized over 30 years
[1] LTS - Less Than Significant, with implementation of applicable feasible BPS (see Discussion).

Discussion

The SJVAPCD adopted guidance in its December 17, 2009, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for new Projects under CEQA* for determining GHG emission significance. The guidance provides that a land use project can implement Best Performance Standards (BPS) for the type of land use or reduce project-related GHG emissions by 29% compared to Business-as-Usual (BAU) to show that a project's GHG impacts would be less than significant (SJVAPCD 2009b). However, as discussed below, the BAU approach for determining significance is not applicable to the Best RV Project.

Newhall Ranch Case

The Newhall Ranch case shows how a BAU comparison is not a sufficient means of determining GHG significance in the absence of specific numerical thresholds set by a local agency.

The California Supreme Court's CEQA decision on the Newhall Ranch development case, *Center for Biological Diversity v. California Department of Fish and Wildlife (November 30, 2015, Case No. 217763)*, determined that the project's Environmental Impact Report (EIR) did not substantiate the conclusion that the GHG cumulative impacts would be less than significant. The EIR determined that the Newhall Ranch development project would reduce GHG emissions by 31% from BAU. This reduction was compared to California's target of reducing GHG emissions statewide by 29% from BAU. The Court determined that "the EIR's deficiency stems from taking a quantitative comparison method developed by the Scoping Plan as a measure of the greenhouse gas reduction effort required by the state as a whole, and attempting to use that method, without adjustments, for a purpose very different from its original design." In the Court's final ruling it offered suggestions that were deemed appropriate use of the BAU methodology:

1) Lead agencies can use the comparison to BAU methodology if they determine what reduction a particular project must achieve to comply with statewide goals;

2) Project design features that comply with regulations to reduce emissions may demonstrate that those components of emissions are less that significant; and

3) Lead agencies could also demonstrate compliance with locally adopted climate plans or could apply specific numerical thresholds developed by some local agencies.

Stanislaus County, the Lead CEQA agency for this Project, has not developed specific thresholds for GHGs. The SJVAPCD, a CEQA Trustee [Responsible] Agency for this Project, has developed thresholds to determine significance of a proposed Project – either implement BPS or achieve a 29% reduction from BAU (a specific numerical threshold). However, the SJVAPCD (2009b) has established their BAU and baseline emissions based on the years 2002-2004 and 2020, respectively. The 2020 projected baseline has passed, and at this time, no new guidance has been approved for determining BAU and projected baseline for the next target year. Therefore, the 29% reduction from BAU cannot be applied to the proposed Project to determine significance. Additionally, a BPS threshold has not been established.

Therefore, the GHG analysis for the Best RV Project follows the suggestions from the Court's ruling on the Newhall Ranch development project to determine significance using the project design features. There is no practicable method for determining whether a BAU emissions baseline can be defined or comprehensive BPS reduction applied for this type of facility. This is because the RV sales and service business will serve non-owned mobile sources over which it has no direct control, whether miles driven, vehicle ages, mechanical conditions, emission control retrofits, maintenance and repairs conducted elsewhere, etc. In context, the proposed Project is not a planned residential community, commercial retail center or office building, or a permitted stationary source, where applicable BPS can be designed-into a project and maintained under ownership control. A project versus baseline assessment is not practicable for this type of facility. This situation is consistent with Newhall Ranch.

South Coast AQMD in the Final Negative Declaration for the Philips 66 Los Angeles Refinery Carson Plant – Crude Oil Storage Capacity Project (Dec. 12, 2014; South Coast AQMD, 2014)

The South Coast AQMD finding regarding the Philips 66 Los Angeles Refinery Carson Plant case provides additional insight for determining that the GHG emissions for this Project would be less than significant. Since the City of Bakerfield does not have its own thresholds established at this time, other thresholds or means of determining significance in nearby jurisdictions are deemed acceptable.

The Project follows the approach certified by South Coast AQMD in the *Final Negative Declaration for the Phillips 66 Los Angeles Refinery Carson Plant- Crude Oil Storage Capacity Project on December 12, 2014 (South Coast AQMD, 2014)*. The approach used by South Coast AQMD to assess GHG impacts from that project recognizes that consumers of electricity and transportation fuels are, in effect, regulated by requiring providers and importers of electricity and fuel to participate in the GHG Cap-and-Trade Program and other Programs (e.g., low carbon fuel standard, renewable portfolio standard, etc.). Each such sector-wide program exists within the framework of AB 32 and its descendant laws the purpose of which is to achieve GHG emissions reductions consistent with the AB 32 Scoping Plan. In summary, the Phillips 66 Project would generate GHGs from electricity use and combustion of gasoline/diesel fuels, each of which is regulated near the top of the supply-chain. As such, each citizen of California (including the operator of the Project) will have no choice but to purchase electricity and fuels produced in a way that is acceptable to the California market, regardless of the supplier, under the same rules. Thus, Project GHG emissions will be consistent with the relevant plan (i.e., AB 32 Scoping Plan). The

Project would meet its fair share of the cost to mitigate the cumulative impact of global climate change because the proposed Project will be purchasing energy from the California market, e.g., diesel fuel used by customer trucks. Thus, the Project would have a less than significant impact on applicable GHG reduction plans.

Nevertheless, GHG emissions impacts from implementing the Best RV Project were calculated at the project-specific level for construction and operations (Table 5). Impact analysis for the Project follows the approach certified by South Coast AQMD in the *Final Negative Declaration for the Phillips 66 Los Angeles Refinery Carson Plant - Crude Oil Storage Capacity Project on December 12, 2014 (South Coast AQMD, 2014)*. In summary, this approach considers the cumulative nature of the energy industry and recognizes that consumers of electricity and diesel fuel are in effect regulated by higher level emissions restrictions on the producers of these energy sources. Therefore, the Project's contribution to cumulative global climate change impacts would not be cumulatively considerable. Regardless, the proposed Project will be subject to any new regulations developed by CARB to address GHG emissions.

Conclusions

CEQA requires that all feasible and reasonable mitigation be applied to the Project to reduce the impacts from construction and operations on air quality. The SJVAPCD's "Non-Residential On-Site Mitigation Checklist" was utilized in preparing the mitigation measures and evaluating the project design features. These measures include using CARB-mandated controls that limit the exhaust from construction equipment and using alternatives to diesel when possible. Additional reductions would be achieved through the regulatory process of the air district and CARB as required changes to diesel engines are implemented, which would affect the customer trucks, and limits on idling. While it is not possible to determine whether the Project individually would have a significant impact on global warming or climate change, the Project would potentially contribute to cumulative GHG emissions in California as well as related health effects. As characterized above, the Best RV Project emissions would only be a very small fraction of the statewide GHG emissions inventory.

However, without the necessary science and analytical tools, it is not possible to assess, with certainty, whether the Project's contribution would be cumulatively considerable, within the meaning of CEQA Guidelines Sections 15065(a)(3) and 15130. CEQA, however, does note that the more severe environmental problems the lower the thresholds for treating a project's contribution to cumulative impacts as significant. Given the position of the legislature in AB 32 which states that global warming poses serious detrimental effects, and the requirements of CEQA for the lead agency to determine that a project not have a cumulatively considerable contribution, the effect of the Project's CO_2e contribution may be considered cumulatively considerable. This determination is "speculative", given the lack of clear scientific evidence or other criteria for determining the significance of the Project's contribution of GHG to the air quality in the SJVAB.

Not all the measures listed in SJVAPCD's "Non-Residential On-Site Mitigation Checklist" are currently appropriate or applicable to the proposed Project. While future legislation could further reduce the Project's GHG footprint, the analysis of this is speculative and in accordance with CEQA Guidelines Section 15145, will not be further evaluated. CEQA Guidelines Section 15130 notes that sometimes the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

Global climate change is this type of issue. The causes and effects may not be just regional or statewide, they may also be worldwide.

Given the uncertainties in identifying, let alone quantifying the impact of any single project on global warming and climate change, and the efforts made to reduce emissions of GHGs from the Project through design, in accordance with CEQA Section 15130, any further feasible emissions reductions would be accomplished through CARB regulations adopted pursuant to AB 32. The Best RV Project will comply with all local and statewide air quality and climate plans; therefore, the Project's contribution to cumulative global climate change impacts would not be cumulatively considerable.

PROJECTED IMPACT: Less Than Significant

INDIRECT SOURCE REVIEW

The SJVAPCD Rule 9510 Indirect Source Review (ISR) encourages developers to incorporate clean air measures and reduce emissions of NO_X and PM_{10} from new development projects. Large development projects, including commercial space greater than 10,000 square feet, are subject to the ISR requirements including the submittal of an Air Impact Assessment (AIA) and the implementation of on-site and/or off-site emissions reduction mitigation measures. For construction emissions, Rule 9510 requires a 20% reduction of the total NO_X emissions and a 45% reduction of the total PM_{10} exhaust emissions compared to the statewide average emissions. Additionally, a 33.3% reduction of the project's operational baseline NOx emissions and a 50% reduction of the project's operational baseline PM_{10} emissions over a period of ten years. These reductions can be achieved through on-site mitigation measures or off-site emission reduction fees.

Rule 9510 Project Emissions

As part of the AIA, the construction and operation NO_X and PM_{10} emissions were quantified using CalEEMod and the assumptions listed above. The operation emissions were determined for the first ten years for the Project operation. Per Rule 9510 §3.11, construction emissions are an NO_X or exhaust PM_{10} emissions resulting from the use of internal combustion engines related to construction activity. Per Rule 9510 §3.29, operational emissions are the combination of area and mobile emissions associated with a facility. Table 6 summarizes the NO_X and PM_{10} emissions used to determine the required Rule 9510 emission reductions.

Table 6: Rule 9510 Construction and Operations Emissions Summary							
Description	**Year**	**Start Date**	**ISR Phase**	**NOx Unmitigated (tons/year)**	**NOx Mitigated (tons/year)**	**PM10 Unmitigated (tons/year)**	**PM10 Mitigated (tons/year)**
Construction	2024	1/9/2024	1	2.129	2.129	0.089	0.089
Construction	2025	1/1/2025	2	0.695	0.695	0.027	0.027
Operations	10-yr Average	1/1/2026	3	0.151	0.151	0.243	0.243
Operations	2026	1/1/2026	-	0.190	0.190	0.244	0.244
Operations	2027	1/1/2027	-	0.179	0.179	0.243	0.243
Operations	2028	1/1/2028	-	0.169	0.169	0.243	0.243
Operations	2029	1/1/2029	-	0.160	0.160	0.243	0.243
Operations	2030	1/1/2030	-	0.151	0.151	0.243	0.243
Operations	2031	1/1/2031	-	0.144	0.144	0.243	0.243
Operations	2032	1/1/2032	-	0.137	0.137	0.243	0.243
Operations	2033	1/1/2033	-	0.131	0.131	0.243	0.243
Operations	2034	1/1/2034	-	0.125	0.125	0.242	0.242
Operations	2035	1/1/2035	-	0.120	0.120	0.242	0.242

Notes:

Construction emissions for ISR fees are based on total NOx emissions and PM_{10} exhaust emissions.

Operations emissions are the sum of area and mobile emissions. The average of the emissions over the first 10 years of operation were used to determine the ISR fees.

Rule 9510 Fee Estimates

An off-site emission reduction fee is required for the portion of required emission reductions that are not reduced on-site. The current off-site reduction fees are $9,350 per ton of NOx and $9,011 per ton or PM_{10}. An administrative fee of 4% is also required as part of the fee payment. Based on the construction and operational emission estimates in Table 6, the Rule 9510 fees were estimated using the District's February 2022 *ISR Fee Calculator*.

The fees were calculated to be $5,981.04 for construction emissions and $15,038.40 for operational emissions, for a total fee of $21,019.44, which includes $808.44 for administrative costs. The fees may be remitted to the District prior to the construction start date, or a fee deferral (payment schedule) can be requested. A separate ISR AIA Application Filing Fee of $841.00 for mixed use / non-residential / transportation / transit projects is due upon filing.

HEALTH RISK SCREENING

Health Risk Screening Methodology

The main toxic air contaminant (TAC) from off-road construction equipment and on-road heavy-duty trucks is diesel particulate matter (DPM, as diesel exhaust PM_{10}). DPM has a high toxicity factor, and thus dominates predicted health risks. Therefore, it was the only TAC that was assessed for this project. CalEEMod was used to generate the exhaust PM_{10} emissions due to the Project Operations. To evaluate the portion of the exhaust PM_{10} from operations due to diesel combustion, CARB's On-Road EMFAC database was queried. Approximately 75% of the total fleet exhaust PM_{10} emissions within the SJVAPCD were due to diesel combustion. Therefore, for

internal consistency, operational mobile source exhaust PM_{10} determined with CalEEMod was assumed to be 75% DPM.

Per CalEEMod, total annual VMT is 684,692 miles for 118,240 trips for the "Automobile Care Center" and the "General Office Building" land uses as described above, yielding an average trip length of 5.79 miles. Thus, the 1-mile localized mobile source exhaust emissions are characterized as 17.3% of the total operational mobile source exhaust emissions, i.e., 17.3% of 5.31 pounds per year (lbs/year)[1] of exhaust PM_{10} is 0.92 lbs/year localized, and 75% of this amount is 0.69 lbs/yr DPM localized. Also, construction exhaust PM_{10} (DPM) emissions total 233 pounds. Amortized over a 30-year project life, annual average DPM is 7.77 lbs/yr from construction. Thus, total annualized localized DPM emission are 8.46 lbs/yr in the vicinity of the project site. To assess potential health risk impacts on the nearest sensitive receptor to the project site, i.e., residential land use within 250 meters, localized operational and construction DPM emissions within 1 mile of the Project site are provided in Table 7.

Table 7: Diesel Particulate Matter Emissions Summary

Description	Exhaust PM_{10} Emissions (lbs/year)	Percent DPM	DPM Emissions (lbs/year)
Localized Operations	0.92	75%	0.69
Localized Construction	7.77	100%	7.77
Total Localized DPM			**8.46**

Notes:

Toxic Air Contaminant thresholds of significance are based on the operations of both permitted and non-permitted sources.

Operations emissions used mobile source exhaust emissions. It was assumed 75% of the total fleet exhaust PM emissions were from diesel based on EMFAC fleet emissions from SJVAPCD.

Construction emissions amortized over 30-year project life
Localized emissions are within 1-mile radius of the project site

Consistent with SJVAPCD guidelines, the scoring procedure was conducted using the District's December 2022 *Prioritization Calculator*, which follows CAPCOA's August 2016 *Air Toxic "Hot Spots" Program Facility Prioritization Guidelines.* The results of the health risk screening are provided in Table 8.

Table 8: Health Risk Screening Summary – DPM

Risk Score	Prioritization Score	Threshold	Significance
Cancer Score	4.89	10	LTS
Chronic Score	0.007	1	LTS
Acute Score	0.000	1	LTS

Notes:
Localized emissions are within 1-mile radius of the project site
Receptor distance $100 \leq R < 250$ meters; proximity factor = 0.25
LTS - Less Than Significant

PROJECTED IMPACT: Less Than Significant

[1] 0.002656 tons/year x 2,000 lbs/ton = 5.31 lbs/year exhaust PM_{10}

CONCLUSION

The air quality and GHG impacts of the proposed Best RV project were evaluated and shown to have a less than significant impact. Table 9 provides a summary of the air quality and GHG CEQA significance evaluation. The Rule 9510 evaluation calculated total fees of $21,019.44 for the NO_X and PM_{10} emissions affiliated with the project construction and operations.

Table 9: CEQA Appendix G Significance Summary

Significance Criteria	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Air Quality. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			▲	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			▲	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			▲	
d) Expose sensitive receptors to substantial pollutant concentrations?			▲	
e) Create objectionable odors affecting a substantial number of people?			▲	
Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			▲	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			▲	

CLOSING

Thank you very much for the opportunity to be of assistance to Best RV. Should you have any questions, please contact me at (209) 446-0227 (mobile) or (209) 662-7500 (office).

Sincerely,

for
Jessica Mohatt
Senior Engineer
Yorke Engineering, LLC
JMohatt@YorkeEngr.com

cc: Wendy Fairchild, Yorke Engineering, LLC
Bradford Boyes, Yorke Engineering, LLC

Enclosures/Attachments:

1. CalEEMod Outputs
2. Rule 9510 Forms
3. Prioritization Calculator

AIR QUALITY AND GHG REFERENCES

California Air Resources Board (CARB). 2022a. 2022 Scoping Plan for Achieving Carbon Neutrality. Website (https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents) accessed November 15, 2023.

California Air Resources Board (CARB). 2022b. Current California GHG Emission Inventory Data, 2000-2020 GHG Inventory, 2022 Edition. Website (https://ww2.arb.ca.gov/ghg-inventory-data) accessed November 15, 2023.

California Department of Resources Recycling and Recovery (CalRecycle). 2016. Solid Waste Cleanup Program Weights and Volumes for Project Estimates. Website (https://www.calrecycle.ca.gov) accessed November 15, 2023.

California Emissions Estimation Model® (CalEEMod). 2022. Version 2022.1.1.20. Website (http://www.caleemod.com/) accessed November 17, 2023.

California Energy Commission (CEC). 2022. Building Energy Efficiency Program. Website (https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency) accessed November 15, 2023.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2018. APR-2030, Policy for Project Ambient Air Quality Analysis Applicability Determination under CEQA. June 12, 2018. Website (https://www.valleyair.org/policies_per/policies_per_idx.htm) accessed November 15, 2023.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015a. Air Quality Thresholds of Significance – Criteria Pollutants. Website (http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf) accessed November 15, 2023.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015b. Air Quality Thresholds of Significance – Toxic Air Contaminants. Website (http://www.valleyair.org/transportation/0714-GAMAQI-TACs-Thresholds-of-Significance.pdf) accessed November 15, 2023.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015c. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). Website (https://www.valleyair.org/transportation/GAMAQI.pdf) accessed November 15, 2023.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009a. Final Staff Report Appendix J: GHG Emission Reduction Measures - Development Projects. Website (https://www.valleyair.org/Programs/CCAP/bps/Appendix%20J%20-%20Dec%2017%202009.pdf) accessed November 15, 2023.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009b. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for new Projects under CEQA. Website (http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf) accessed November 15, 2023.

ATTACHMENT 1 – CALEEMOD OUTPUTS

BestRV Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

3.2. Demolition (2024) - Mitigated

3.3. Site Preparation (2024) - Unmitigated

3.4. Site Preparation (2024) - Mitigated

3.5. Grading (2024) - Unmitigated

3.6. Grading (2024) - Mitigated

3.7. Building Construction (2024) - Unmitigated

3.8. Building Construction (2024) - Mitigated

3.9. Building Construction (2025) - Unmitigated

3.10. Building Construction (2025) - Mitigated

3.11. Paving (2025) - Unmitigated

3.12. Paving (2025) - Mitigated

3.13. Architectural Coating (2025) - Unmitigated

3.14. Architectural Coating (2025) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	BestRV
Construction Start Date	1/9/2024
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	29.0
Location	37.543042575285625, -120.90086670907354
County	Stanislaus
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2215
EDFZ	14
Electric Utility	Turlock Irrigation District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Automobile Care Center	102	1000sqft	2.34	102,040	0.00	—	—	—
General Office Building	13.4	1000sqft	0.31	33,790	0.00	—	—	—
Parking Lot	535	1000sqft	12.3	0.00	75,670	—	—	—
Unenclosed Parking Structure	16.1	1000sqft	0.37	16,090	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads
Water	W-5	Design Water-Efficient Landscapes

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.29	39.4	34.4	31.3	0.06	1.45	9.36	10.8	1.33	3.69	5.02	—	6,765	6,765	0.28	0.12	3.32	6,791
Mit.	4.29	39.4	34.4	31.3	0.06	1.45	3.74	5.19	1.33	1.46	2.79	—	6,765	6,765	0.28	0.12	3.32	6,791

% Reduced	—	—	—	—	—	—	60%	52%	—	60%	44%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.42	3.72	36.0	33.7	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,747	6,747	0.28	0.12	0.09	6,772
Mit.	4.42	3.72	36.0	33.7	0.06	1.60	7.80	9.40	1.47	3.97	5.44	—	6,747	6,747	0.28	0.12	0.09	6,772
% Reduced	—	—	—	—	—	—	61%	56%	—	61%	53%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.56	2.70	11.7	13.1	0.02	0.49	1.59	2.08	0.45	0.65	1.10	—	2,678	2,678	0.11	0.07	0.80	2,704
Mit.	1.56	2.70	11.7	13.1	0.02	0.49	0.80	1.29	0.45	0.30	0.75	—	2,678	2,678	0.11	0.07	0.80	2,704
% Reduced	—	—	—	—	—	—	50%	38%	—	54%	32%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.49	2.13	2.38	< 0.005	0.09	0.29	0.38	0.08	0.12	0.20	—	443	443	0.02	0.01	0.13	448
Mit.	0.29	0.49	2.13	2.38	< 0.005	0.09	0.15	0.24	0.08	0.05	0.14	—	443	443	0.02	0.01	0.13	448
% Reduced	—	—	—	—	—	—	50%	38%	—	54%	32%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.29	3.62	34.4	31.3	0.06	1.45	9.36	10.8	1.33	3.69	5.02	—	6,765	6,765	0.28	0.12	3.32	6,791
2025	1.63	39.4	11.4	16.0	0.03	0.44	0.53	0.97	0.41	0.13	0.54	—	3,372	3,372	0.13	0.12	3.17	3,414

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.42	3.72	36.0	33.7	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,747	6,747	0.28	0.12	0.09	6,772
2025	1.60	1.35	11.4	15.4	0.03	0.44	0.53	0.97	0.41	0.13	0.54	—	3,329	3,329	0.12	0.12	0.08	3,367
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.56	1.31	11.7	13.1	0.02	0.49	1.59	2.08	0.45	0.65	1.10	—	2,678	2,678	0.11	0.07	0.80	2,704
2025	0.54	2.70	3.81	5.21	0.01	0.15	0.16	0.31	0.14	0.04	0.18	—	1,081	1,081	0.04	0.04	0.42	1,093
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.29	0.24	2.13	2.38	< 0.005	0.09	0.29	0.38	0.08	0.12	0.20	—	443	443	0.02	0.01	0.13	448
2025	0.10	0.49	0.69	0.95	< 0.005	0.03	0.03	0.06	0.03	0.01	0.03	—	179	179	0.01	0.01	0.07	181

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.29	3.62	34.4	31.3	0.06	1.45	3.74	5.19	1.33	1.46	2.79	—	6,765	6,765	0.28	0.12	3.32	6,791
2025	1.63	39.4	11.4	16.0	0.03	0.44	0.53	0.97	0.41	0.13	0.54	—	3,372	3,372	0.13	0.12	3.17	3,414
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.42	3.72	36.0	33.7	0.06	1.60	7.80	9.40	1.47	3.97	5.44	—	6,747	6,747	0.28	0.12	0.09	6,772
2025	1.60	1.35	11.4	15.4	0.03	0.44	0.53	0.97	0.41	0.13	0.54	—	3,329	3,329	0.12	0.12	0.08	3,367
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.56	1.31	11.7	13.1	0.02	0.49	0.80	1.29	0.45	0.30	0.75	—	2,678	2,678	0.11	0.07	0.80	2,704
2025	0.54	2.70	3.81	5.21	0.01	0.15	0.16	0.31	0.14	0.04	0.18	—	1,081	1,081	0.04	0.04	0.42	1,093

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.29	0.24	2.13	2.38	< 0.005	0.09	0.15	0.24	0.08	0.05	0.14	—	443	443	0.02	0.01	0.13	448
2025	0.10	0.49	0.69	0.95	< 0.005	0.03	0.03	0.06	0.03	0.01	0.03	—	179	179	0.01	0.01	0.07	181

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.02	5.92	2.66	19.1	0.03	0.13	2.01	2.14	0.13	0.51	0.64	240	7,787	8,027	25.7	2.28	21,164	30,515
Mit.	3.02	5.92	2.66	19.1	0.03	0.13	2.01	2.14	0.13	0.51	0.64	240	7,786	8,026	25.7	2.28	21,164	30,513
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.68	4.66	2.80	11.1	0.03	0.12	2.01	2.13	0.12	0.51	0.63	240	7,572	7,812	25.8	2.29	21,155	30,294
Mit.	1.68	4.66	2.80	11.1	0.03	0.12	2.01	2.13	0.12	0.51	0.63	240	7,571	7,810	25.8	2.29	21,155	30,292
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.00	4.97	2.34	11.5	0.02	0.12	1.32	1.44	0.12	0.34	0.45	240	6,889	7,129	25.7	2.25	21,158	29,601
Mit.	2.00	4.97	2.34	11.5	0.02	0.12	1.32	1.44	0.12	0.34	0.45	240	6,888	7,128	25.7	2.25	21,158	29,599
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	0.91	0.43	2.10	< 0.005	0.02	0.24	0.26	0.02	0.06	0.08	39.7	1,141	1,180	4.26	0.37	3,503	4,901

Mit.	0.36	0.91	0.43	2.10	< 0.005	0.02	0.24	0.26	0.02	0.06	0.08	39.7	1,140	1,180	4.26	0.37	3,503	4,901
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.70	1.60	1.31	11.4	0.02	0.02	2.01	2.03	0.02	0.51	0.53	—	2,424	2,424	0.11	0.12	8.96	2,471
Area	1.18	4.25	0.06	6.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Energy	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	5,268	5,268	1.58	2.07	—	5,925
Water	—	—	—	—	—	—	—	—	—	—	—	23.0	68.3	91.3	2.38	0.09	—	179
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
Total	3.02	5.92	2.66	19.1	0.03	0.13	2.01	2.14	0.13	0.51	0.64	240	7,787	8,027	25.7	2.28	21,164	30,515
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.54	1.43	1.50	9.96	0.02	0.02	2.01	2.03	0.02	0.51	0.53	—	2,236	2,236	0.12	0.13	0.23	2,277
Area	—	3.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	5,268	5,268	1.58	2.07	—	5,925
Water	—	—	—	—	—	—	—	—	—	—	—	23.0	68.3	91.3	2.38	0.09	—	179
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
Total	1.68	4.66	2.80	11.1	0.03	0.12	2.01	2.13	0.12	0.51	0.63	240	7,572	7,812	25.8	2.29	21,155	30,294
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.28	1.20	1.02	7.17	0.02	0.01	1.32	1.33	0.01	0.34	0.35	—	1,540	1,540	0.09	0.09	2.58	1,571
Area	0.58	3.70	0.03	3.26	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.4
Energy	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	5,268	5,268	1.58	2.07	—	5,925
Water	—	—	—	—	—	—	—	—	—	—	—	23.0	68.3	91.3	2.38	0.09	—	179
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
Total	2.00	4.97	2.34	11.5	0.02	0.12	1.32	1.44	0.12	0.34	0.45	240	6,889	7,129	25.7	2.25	21,158	29,601
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.23	0.22	0.19	1.31	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	255	255	0.01	0.01	0.43	260
Area	0.11	0.68	0.01	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.22	2.22	< 0.005	< 0.005	—	2.23
Energy	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	872	872	0.26	0.34	—	981
Water	—	—	—	—	—	—	—	—	—	—	—	3.80	11.3	15.1	0.39	0.02	—	29.6
Waste	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.59	0.00	—	126
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,502	3,502
Total	0.36	0.91	0.43	2.10	< 0.005	0.02	0.24	0.26	0.02	0.06	0.08	39.7	1,141	1,180	4.26	0.37	3,503	4,901

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.70	1.60	1.31	11.4	0.02	0.02	2.01	2.03	0.02	0.51	0.53	—	2,424	2,424	0.11	0.12	8.96	2,471
Area	1.18	4.25	0.06	6.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Energy	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	5,268	5,268	1.58	2.07	—	5,925
Water	—	—	—	—	—	—	—	—	—	—	—	23.0	66.7	89.7	2.38	0.09	—	177
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155

Total	3.02	5.92	2.66	19.1	0.03	0.13	2.01	2.14	0.13	0.51	0.64	240	7,786	8,026	25.7	2.28	21,164	30,513
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.54	1.43	1.50	9.96	0.02	0.02	2.01	2.03	0.02	0.51	0.53	—	2,236	2,236	0.12	0.13	0.23	2,277
Area	—	3.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	5,268	5,268	1.58	2.07	—	5,925
Water	—	—	—	—	—	—	—	—	—	—	—	23.0	66.7	89.7	2.38	0.09	—	177
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
Total	1.68	4.66	2.80	11.1	0.03	0.12	2.01	2.13	0.12	0.51	0.63	240	7,571	7,810	25.8	2.29	21,155	30,292
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.28	1.20	1.02	7.17	0.02	0.01	1.32	1.33	0.01	0.34	0.35	—	1,540	1,540	0.09	0.09	2.58	1,571
Area	0.58	3.70	0.03	3.26	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.4
Energy	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	5,268	5,268	1.58	2.07	—	5,925
Water	—	—	—	—	—	—	—	—	—	—	—	23.0	66.7	89.7	2.38	0.09	—	177
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
Total	2.00	4.97	2.34	11.5	0.02	0.12	1.32	1.44	0.12	0.34	0.45	240	6,888	7,128	25.7	2.25	21,158	29,599
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.23	0.22	0.19	1.31	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	255	255	0.01	0.01	0.43	260
Area	0.11	0.68	0.01	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.22	2.22	< 0.005	< 0.005	—	2.23
Energy	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	872	872	0.26	0.34	—	981
Water	—	—	—	—	—	—	—	—	—	—	—	3.80	11.0	14.9	0.39	0.02	—	29.3
Waste	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.59	0.00	—	126
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,502	3,502
Total	0.36	0.91	0.43	2.10	< 0.005	0.02	0.24	0.26	0.02	0.06	0.08	39.7	1,140	1,180	4.26	0.37	3,503	4,901

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.67	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	112	112	0.01	< 0.005	0.01	114
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.32	6.32	< 0.005	< 0.005	0.01	6.42
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.06
Vendor	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	0.00
Hauling	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	0.00

3.2. Demolition (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.67	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	112	112	0.01	< 0.005	0.01	114
Vendor	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	0.00

Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.32	6.32	< 0.005	< 0.005	0.01	6.42
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.06
Vendor	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	0.00
Hauling	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	0.00

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.79	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	0.01	0.01	0.02	132
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.69	3.69	< 0.005	< 0.005	0.01	3.75
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	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	0.00
Hauling	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	0.00

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.79	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	0.01	0.01	0.02	132
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.69	3.69	< 0.005	< 0.005	0.01	3.75
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	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	0.00
Hauling	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	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.82	2.48	0.01	0.12	—	0.12	0.11	—	0.11	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.05	0.51	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.06	1.17	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	167	167	0.01	0.01	0.71	170
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.08	0.90	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	149	149	0.01	0.01	0.02	151
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.03	12.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.13
Vendor	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	0.00
Hauling	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	0.00

3.6. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.82	2.48	0.01	0.12	—	0.12	0.11	—	0.11	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.12	0.12	—	—	—	—	—	—	—

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.51	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.06	1.17	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	167	167	0.01	0.01	0.71	170
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.08	0.90	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	149	149	0.01	0.01	0.02	151
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.03	12.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.09	2.09	< 0.005	< 0.005	< 0.005	2.13
Vendor	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	0.00

Hauling	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	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.64	5.95	6.96	0.01	0.26	—	0.26	0.24	—	0.24	—	1,272	1,272	0.05	0.01	—	1,276
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.09	1.27	< 0.005	0.05	—	0.05	0.04	—	0.04	—	211	211	0.01	< 0.005	—	211
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.26	0.16	2.94	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	420	420	0.02	0.02	1.79	427
Vendor	0.04	0.02	0.79	0.29	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	573	573	0.01	0.09	1.53	601
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.21	2.26	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	375	375	0.03	0.02	0.05	380
Vendor	0.04	0.02	0.84	0.29	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	574	574	0.01	0.09	0.04	600
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.10	1.24	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	205	205	0.01	0.01	0.41	208
Vendor	0.02	0.01	0.44	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	304	304	0.01	0.05	0.35	319
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.9	33.9	< 0.005	< 0.005	0.07	34.4
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	50.4	50.4	< 0.005	0.01	0.06	52.7
Hauling	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	0.00

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.64	5.95	6.96	0.01	0.26	—	0.26	0.24	—	0.24	—	1,272	1,272	0.05	0.01	—	1,276
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.09	1.27	< 0.005	0.05	—	0.05	0.04	—	0.04	—	211	211	0.01	< 0.005	—	211
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.26	0.16	2.94	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	420	420	0.02	0.02	1.79	427
Vendor	0.04	0.02	0.79	0.29	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	573	573	0.01	0.09	1.53	601
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.21	2.26	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	375	375	0.03	0.02	0.05	380

Vendor	0.04	0.02	0.84	0.29	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	574	574	0.01	0.09	0.04	600
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.10	1.24	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	205	205	0.01	0.01	0.41	208
Vendor	0.02	0.01	0.44	0.15	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	304	304	0.01	0.05	0.35	319
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.9	33.9	< 0.005	< 0.005	0.07	34.4
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	50.4	50.4	< 0.005	0.01	0.06	52.7
Hauling	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	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.33	3.07	3.83	0.01	0.13	—	0.13	0.12	—	0.12	—	704	704	0.03	0.01	—	706
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.70	< 0.005	0.02	—	0.02	0.02	—	0.02	—	117	117	< 0.005	< 0.005	—	117
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.23	0.15	2.71	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	411	411	0.02	0.02	1.64	418
Vendor	0.03	0.02	0.76	0.27	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	564	564	0.01	0.08	1.53	590
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.19	2.08	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	367	367	0.01	0.02	0.04	372
Vendor	0.03	0.02	0.81	0.28	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	564	564	0.01	0.08	0.04	589
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.63	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.21	113
Vendor	0.01	0.01	0.23	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	165	165	< 0.005	0.02	0.19	173
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.4	18.4	< 0.005	< 0.005	0.03	18.7

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.4	27.4	< 0.005	< 0.005	0.03	28.7
Hauling	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	0.00

3.10. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.33	3.07	3.83	0.01	0.13	—	0.13	0.12	—	0.12	—	704	704	0.03	0.01	—	706
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.70	< 0.005	0.02	—	0.02	0.02	—	0.02	—	117	117	< 0.005	< 0.005	—	117
Onsite truck	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	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.23	0.15	2.71	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	411	411	0.02	0.02	1.64	418
Vendor	0.03	0.02	0.76	0.27	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	564	564	0.01	0.08	1.53	590
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.19	2.08	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	367	367	0.01	0.02	0.04	372
Vendor	0.03	0.02	0.81	0.28	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	564	564	0.01	0.08	0.04	589
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.63	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.21	113
Vendor	0.01	0.01	0.23	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	165	165	< 0.005	0.02	0.19	173
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.4	18.4	< 0.005	< 0.005	0.03	18.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.4	27.4	< 0.005	< 0.005	0.03	28.7
Hauling	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	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	1.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.81	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	123	123	0.01	< 0.005	0.49	125
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.19	6.19	< 0.005	< 0.005	0.01	6.28
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.02	1.02	< 0.005	< 0.005	< 0.005	1.04
Vendor	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	0.00
Hauling	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	0.00

3.12. Paving (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	1.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.81	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	123	123	0.01	< 0.005	0.49	125
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.19	6.19	< 0.005	< 0.005	0.01	6.28
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.02	1.02	< 0.005	< 0.005	< 0.005	1.04
Vendor	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	0.00
Hauling	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	0.00

3.13. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	39.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	2.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.54	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.2	82.2	< 0.005	< 0.005	0.33	83.6

Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.14	4.14	< 0.005	< 0.005	0.01	4.21
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.70
Vendor	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	0.00
Hauling	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	0.00

3.14. Architectural Coating (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	39.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	2.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.54	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.2	82.2	< 0.005	< 0.005	0.33	83.6
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.14	4.14	< 0.005	< 0.005	0.01	4.21

Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.70
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	1.10	1.04	0.85	7.42	0.02	0.01	1.30	1.32	0.01	0.33	0.34	—	1,573	1,573	0.07	0.08	5.81	1,603
General Office Building	0.60	0.56	0.46	4.02	0.01	0.01	0.70	0.71	0.01	0.18	0.19	—	851	851	0.04	0.04	3.15	868
Parking Lot	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	0.00
Unenclosed Parking Structure	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	0.00
Total	1.70	1.60	1.31	11.4	0.02	0.02	2.01	2.03	0.02	0.51	0.53	—	2,424	2,424	0.11	0.12	8.96	2,471

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	1.00	0.92	0.97	6.46	0.01	0.01	1.30	1.32	0.01	0.33	0.34	—	1,451	1,451	0.08	0.08	0.15	1,478
General Office Building	0.54	0.50	0.53	3.50	0.01	0.01	0.70	0.71	0.01	0.18	0.19	—	785	785	0.04	0.04	0.08	800
Parking Lot	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	0.00
Unenclosed Parking Structure	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	0.00
Total	1.54	1.43	1.50	9.96	0.02	0.02	2.01	2.03	0.02	0.51	0.53	—	2,236	2,236	0.12	0.13	0.23	2,277
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.16	0.15	0.12	0.83	< 0.005	< 0.005	0.14	0.15	< 0.005	0.04	0.04	—	154	154	0.01	0.01	0.26	158
General Office Building	0.08	0.07	0.07	0.48	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.03	—	100	100	0.01	0.01	0.17	102
Parking Lot	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	0.00
Unenclosed Parking Structure	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	0.00
Total	0.23	0.22	0.19	1.31	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	255	255	0.01	0.01	0.43	260

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	1.10	1.04	0.85	7.42	0.02	0.01	1.30	1.32	0.01	0.33	0.34	—	1,573	1,573	0.07	0.08	5.81	1,603
General Office Building	0.60	0.56	0.46	4.02	0.01	0.01	0.70	0.71	0.01	0.18	0.19	—	851	851	0.04	0.04	3.15	868
Parking Lot	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	0.00
Unenclosed Parking Structure	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	0.00
Total	1.70	1.60	1.31	11.4	0.02	0.02	2.01	2.03	0.02	0.51	0.53	—	2,424	2,424	0.11	0.12	8.96	2,471
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	1.00	0.92	0.97	6.46	0.01	0.01	1.30	1.32	0.01	0.33	0.34	—	1,451	1,451	0.08	0.08	0.15	1,478
General Office Building	0.54	0.50	0.53	3.50	0.01	0.01	0.70	0.71	0.01	0.18	0.19	—	785	785	0.04	0.04	0.08	800
Parking Lot	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	0.00
Unenclosed Parking Structure	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	0.00
Total	1.54	1.43	1.50	9.96	0.02	0.02	2.01	2.03	0.02	0.51	0.53	—	2,236	2,236	0.12	0.13	0.23	2,277

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.16	0.15	0.12	0.83	< 0.005	< 0.005	0.14	0.15	< 0.005	0.04	0.04	—	154	154	0.01	0.01	0.26	158
General Office Building	0.08	0.07	0.07	0.48	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.03	—	100	100	0.01	0.01	0.17	102
Parking Lot	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	0.00
Unenclosed Parking Structure	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	0.00
Total	0.23	0.22	0.19	1.31	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	255	255	0.01	0.01	0.43	260

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	1,709	1,709	0.67	0.95	—	2,009
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,154	1,154	0.45	0.64	—	1,356
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	782	782	0.30	0.44	—	919

Unenclos Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	70.6	70.6	0.03	0.04	—	83.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,716	3,716	1.45	2.07	—	4,368
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automob ile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	1,709	1,709	0.67	0.95	—	2,009
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,154	1,154	0.45	0.64	—	1,356
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	782	782	0.30	0.44	—	919
Unenclos ed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	70.6	70.6	0.03	0.04	—	83.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,716	3,716	1.45	2.07	—	4,368
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automob ile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	283	283	0.11	0.16	—	333
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	191	191	0.07	0.11	—	225
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	129	129	0.05	0.07	—	152
Unenclos ed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	11.7	11.7	< 0.005	0.01	—	13.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	615	615	0.24	0.34	—	723

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	1,709	1,709	0.67	0.95	—	2,009
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,154	1,154	0.45	0.64	—	1,356
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	782	782	0.30	0.44	—	919
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	70.6	70.6	0.03	0.04	—	83.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,716	3,716	1.45	2.07	—	4,368
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	1,709	1,709	0.67	0.95	—	2,009
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,154	1,154	0.45	0.64	—	1,356
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	782	782	0.30	0.44	—	919

Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	70.6	70.6	0.03	0.04	—	83.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,716	3,716	1.45	2.07	—	4,368
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	283	283	0.11	0.16	—	333
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	191	191	0.07	0.11	—	225
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	129	129	0.05	0.07	—	152
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	11.7	11.7	< 0.005	0.01	—	13.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	615	615	0.24	0.34	—	723

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.11	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,204	1,204	0.11	< 0.005	—	1,208
General Office Building	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	348	348	0.03	< 0.005	—	349

Parking Lot	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
Unenclosed Parking Structure	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
Total	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	1,552	1,552	0.14	< 0.005	—	1,557
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.11	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,204	1,204	0.11	< 0.005	—	1,208
General Office Building	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	348	348	0.03	< 0.005	—	349
Parking Lot	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
Unenclosed Parking Structure	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
Total	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	1,552	1,552	0.14	< 0.005	—	1,557
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.02	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	199	199	0.02	< 0.005	—	200
General Office Building	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	57.6	57.6	0.01	< 0.005	—	57.7
Parking Lot	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

Unenclosed Parking Structure	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
Total	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	257	257	0.02	< 0.005	—	258

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.11	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,204	1,204	0.11	< 0.005	—	1,208
General Office Building	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	348	348	0.03	< 0.005	—	349
Parking Lot	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
Unenclosed Parking Structure	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
Total	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	1,552	1,552	0.14	< 0.005	—	1,557
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.11	0.06	1.01	0.85	0.01	0.08	—	0.08	0.08	—	0.08	—	1,204	1,204	0.11	< 0.005	—	1,208

General Office Building	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	348	348	0.03	< 0.005	—	349
Parking Lot	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
Unenclosed Parking Structure	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
Total	0.14	0.07	1.30	1.09	0.01	0.10	—	0.10	0.10	—	0.10	—	1,552	1,552	0.14	< 0.005	—	1,557
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	0.02	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	199	199	0.02	< 0.005	—	200
General Office Building	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	57.6	57.6	0.01	< 0.005	—	57.7
Parking Lot	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
Unenclosed Parking Structure	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
Total	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	257	257	0.02	< 0.005	—	258

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	—	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.18	1.08	0.06	6.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Total	1.18	4.25	0.06	6.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	3.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.10	0.01	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.22	2.22	< 0.005	< 0.005	—	2.23
Total	0.11	0.68	0.01	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.22	2.22	< 0.005	< 0.005	—	2.23

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.18	1.08	0.06	6.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Total	1.18	4.25	0.06	6.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	3.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipme	0.11	0.10	0.01	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.22	2.22	< 0.005	< 0.005	—	2.23
Total	0.11	0.68	0.01	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.22	2.22	< 0.005	< 0.005	—	2.23

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	18.4	52.2	70.6	1.91	0.07	—	140
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.58	13.0	17.6	0.47	0.02	—	34.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	3.04	3.04	< 0.005	< 0.005	—	3.57
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.0	68.3	91.3	2.38	0.09	—	179
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	18.4	52.2	70.6	1.91	0.07	—	140

General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.58	13.0	17.6	0.47	0.02	—	34.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	3.04	3.04	< 0.005	< 0.005	—	3.57
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.0	68.3	91.3	2.38	0.09	—	179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	3.05	8.65	11.7	0.32	0.01	—	23.2
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.76	2.15	2.91	0.08	< 0.005	—	5.79
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.50	0.50	< 0.005	< 0.005	—	0.59
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.80	11.3	15.1	0.39	0.02	—	29.6

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Automobile	—	—	—	—	—	—	—	—	—	—	—	18.4	52.2	70.6	1.91	0.07	—	140
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.58	13.0	17.6	0.47	0.02	—	34.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	1.49	1.49	< 0.005	< 0.005	—	1.75
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.0	66.7	89.7	2.38	0.09	—	177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	18.4	52.2	70.6	1.91	0.07	—	140
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.58	13.0	17.6	0.47	0.02	—	34.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	1.49	1.49	< 0.005	< 0.005	—	1.75
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.0	66.7	89.7	2.38	0.09	—	177
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	3.05	8.65	11.7	0.32	0.01	—	23.2

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.76	2.15	2.91	0.08	< 0.005	—	5.79
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.25	0.25	< 0.005	< 0.005	—	0.29
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.80	11.0	14.9	0.39	0.02	—	29.3

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	210	0.00	210	21.0	0.00	—	735
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6.74	0.00	6.74	0.67	0.00	—	23.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	210	0.00	210	21.0	0.00	—	735
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6.74	0.00	6.74	0.67	0.00	—	23.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	34.8	0.00	34.8	3.48	0.00	—	122
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.12	0.00	1.12	0.11	0.00	—	3.90
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.59	0.00	—	126

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	210	0.00	210	21.0	0.00	—	735
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6.74	0.00	6.74	0.67	0.00	—	23.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	210	0.00	210	21.0	0.00	—	735
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6.74	0.00	6.74	0.67	0.00	—	23.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	759

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	34.8	0.00	34.8	3.48	0.00	—	122
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.12	0.00	1.12	0.11	0.00	—	3.90
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.59	0.00	—	126

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,502	3,502
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,502	3,502

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21,155	21,155
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,502	3,502
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,502	3,502

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/9/2024	2/6/2024	5.00	20.0	—
Site Preparation	Site Preparation	2/7/2024	2/21/2024	5.00	10.0	—
Grading	Grading	2/22/2024	4/4/2024	5.00	30.0	—
Building Construction	Building Construction	4/5/2024	5/30/2025	5.00	300	—
Paving	Paving	5/31/2025	6/28/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	6/29/2025	7/27/2025	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—

Demolition	Worker	15.0	10.8	LDA,LDT1,LDT2
Demolition	Vendor	—	7.17	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	10.8	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.17	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	10.8	LDA,LDT1,LDT2
Grading	Vendor	—	7.17	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.2	10.8	LDA,LDT1,LDT2
Building Construction	Vendor	24.9	7.17	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	10.8	LDA,LDT1,LDT2
Paving	Vendor	—	7.17	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	10.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.17	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	10.8	LDA,LDT1,LDT2
Demolition	Vendor	—	7.17	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	10.8	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.17	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	10.8	LDA,LDT1,LDT2
Grading	Vendor	—	7.17	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.2	10.8	LDA,LDT1,LDT2
Building Construction	Vendor	24.9	7.17	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	10.8	LDA,LDT1,LDT2

Paving	Vendor	—	7.17	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	10.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.17	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	204,469	67,995	33,059

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	0.00	—
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	12.6

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Automobile Care Center	0.00	0%
General Office Building	0.00	0%
Parking Lot	12.3	100%
Unenclosed Parking Structure	0.37	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	609	0.24	0.34
2025	0.00	609	0.24	0.34

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Automobile Care Center	242	242	121	82,045	1,034	1,822	913	412,193
General Office Building	131	29.7	9.41	36,195	986	224	70.9	272,498
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Automobile Care Center	242	242	121	82,045	1,034	1,822	913	412,193
General Office Building	131	29.7	9.41	36,195	986	224	70.9	272,498
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	204,469	67,995	33,059

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Automobile Care Center	1,023,912	609	0.2373	0.3390	3,758,229
General Office Building	691,199	609	0.2373	0.3390	1,085,375
Parking Lot	468,572	609	0.2373	0.3390	0.00
Unenclosed Parking Structure	42,285	609	0.2373	0.3390	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Automobile Care Center	1,023,912	609	0.2373	0.3390	3,758,229
General Office Building	691,199	609	0.2373	0.3390	1,085,375
Parking Lot	468,572	609	0.2373	0.3390	0.00
Unenclosed Parking Structure	42,285	609	0.2373	0.3390	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Automobile Care Center	9,600,036	0.00

General Office Building	2,390,519	0.00
Parking Lot	0.00	1,045,109
Unenclosed Parking Structure	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Automobile Care Center	9,600,036	0.00
General Office Building	2,390,519	0.00
Parking Lot	0.00	512,304
Unenclosed Parking Structure	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Automobile Care Center	390	—
General Office Building	12.5	—
Parking Lot	0.00	—
Unenclosed Parking Structure	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Automobile Care Center	390	—
General Office Building	12.5	—
Parking Lot	0.00	—
Unenclosed Parking Structure	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.4	annual days of extreme heat
Extreme Precipitation	1.85	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	72.5
AQ-PM	59.6
AQ-DPM	48.1
Drinking Water	98.3
Lead Risk Housing	61.4
Pesticides	94.1
Toxic Releases	23.5
Traffic	32.3
Effect Indicators	—
CleanUp Sites	32.2
Groundwater	99.6

Haz Waste Facilities/Generators	78.4
Impaired Water Bodies	96.8
Solid Waste	72.4
Sensitive Population	—
Asthma	57.2
Cardio-vascular	73.6
Low Birth Weights	61.9
Socioeconomic Factor Indicators	—
Education	80.2
Housing	2.99
Linguistic	80.7
Poverty	77.1
Unemployment	58.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	35.69870397
Employed	11.51032978
Median HI	43.32092904
Education	—
Bachelor's or higher	22.50737842
High school enrollment	100
Preschool enrollment	54.36930579
Transportation	—
Auto Access	85.40998332

Active commuting	84.10111639
Social	—
2-parent households	60.97780059
Voting	45.97715899
Neighborhood	—
Alcohol availability	91.63351726
Park access	7.288592326
Retail density	5.569100475
Supermarket access	17.43872706
Tree canopy	72.34697806
Housing	—
Homeownership	40.94700372
Housing habitability	44.39881945
Low-inc homeowner severe housing cost burden	52.63698191
Low-inc renter severe housing cost burden	59.11715642
Uncrowded housing	51.79006801
Health Outcomes	—
Insured adults	20.81355062
Arthritis	1.4
Asthma ER Admissions	43.0
High Blood Pressure	2.9
Cancer (excluding skin)	11.3
Asthma	9.8
Coronary Heart Disease	1.4
Chronic Obstructive Pulmonary Disease	0.7
Diagnosed Diabetes	10.1
Life Expectancy at Birth	14.6

Cognitively Disabled	87.2
Physically Disabled	39.7
Heart Attack ER Admissions	26.7
Mental Health Not Good	14.9
Chronic Kidney Disease	2.7
Obesity	11.5
Pedestrian Injuries	56.1
Physical Health Not Good	7.7
Stroke	3.3
Health Risk Behaviors	—
Binge Drinking	78.7
Current Smoker	9.6
No Leisure Time for Physical Activity	19.3
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	61.0
Elderly	44.5
English Speaking	31.9
Foreign-born	38.9
Outdoor Workers	1.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	98.7
Traffic Density	27.4
Traffic Access	0.0
Other Indices	—
Hardship	79.1

Other Decision Support	—
2016 Voting	64.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	90.0
Healthy Places Index Score for Project Location (b)	36.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	General office square footage accounts for the mezzanine
Operations: Vehicle Data	Reduce trips for automobile care center by 90% due to only one business (instead of multiple).

ATTACHMENT 2 – RULE 9510 FORMS

San Joaquin Valley AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Indirect Source Review (ISR) - Air Impact Assessment (AIA) Application

A. Applicant Information

Applicant/Business Name: Best RV Center			
Mailing Address: 5340 Taylor Court	City: Turlock	State: CA	Zip: 95382
Contact: Nader Ammari	Title: Mr.		
Is the Applicant a licensed state contractor? ☒ No ☐ Yes, please provide State License number:			
Phone: (209) 216-5200	Email: NMAmmari@BestRV.com		

B. Agent Information (if applicable)

Agent/Business Name:			
Mailing Address:	City:	State:	Zip:
Contact:	Title:		
Phone:	Email:		

C. Project Information

Project Name: Best RV Center			
Project Location	Street: 5100-5300 Taylor Court	City: Turlock	Zip: 95382
Cross Streets:		County: Stanislaus	
Permitting Agency: Stanislaus County	Planner:	Contact Number: (209) 525-6330	
Permit Type and Number (if known):			
Subject to Project-Level Discretionary Approval? ☐ Yes ☐ No		Last Project-Level Discretionary Approval Date: N/A	
		Last Project-Level Ministerial Approval Date: N/A	

D. Project Description

Please briefly describe the project (e.g.: 300 multi-family residential units apartments or 6 miles road widening):

For **Residential/Non-Residential/Mixed-Use** please check the box next to each applicable land use below:

☒ Commercial / Retail	☐ Educational	☒ Office	☐ Warehouse
☐ Residential	☐ Government	☐ Industrial	☐ Distribution Center
☐ Recreational (e.g. park)	☐ Medical	☐ Manufacturing	☐ Other: _____

For **Transportation/Transit** please check the box next to each applicable land use below:

☐ New Road Construction ☐ Expansion to an Existing Road ☐ Bridge / Overpass ☐ Interchange or Intersection Improvements

Select land use setting: ☐ Urban ☒ Rural

E. Notice of Violation

Is this application being submitted as a result of receiving a Notice of Violation (NOV)? ☒ No ☐ Yes, NOV #:

FOR DISTRICT USE ONLY

Filing Fee Received: _____ Date Paid: _____ Applicant #: _____	Check #: _____ Project #: _____	Date Stamp: Finance	Date Stamp: Permit

F. Voluntary Emission Reduction Agreement (VERA)

Is this project part of a larger project for which there is a VERA with the District? ☒ No ☐ Yes, VERA #:

G. Optional Section

Do you want to receive information about the Healthy Air Living Business Partners Program? ☒ No ☐ Yes

H. Parcel and Land Owner Information

	APN (000-000-00 Format)	Gross Acres	Land Owner
1.	045-053-040	4.7	
2.	045-053-041	1.916	
3.	045-062-001	7.76	

Additional sheets for listing APN numbers can be found on the District's website at www.valleyair.org/ISR.

I. Project Development and Operation

Will the project require demolition of existing structures?	☐ Yes, *complete J*
	☒ No, *complete K*

J. Demolition

Total square feet of building(s) footprint to be demolished:	Number of Building Stories:
Demolition Start Date (Month/Year):	Number of Days for Demolition:

K. Timing

Expected number of work days per week during construction? ☒ 5 days ☐ 6 days ☐ 7 days	
For **Transportation/Transit** projects, *please complete L-1*	
For **Residential/Non-Residential/Mixed-Use** projects, will it be developed in multiple phases?	☒ No, *complete L-2*
	☐ Yes, *complete L-3*

L-1. Transporation / Transit Development and Timing Details

Please note that development timelines provided within this section should reflect actual work time, and should not account for possible project delays.

Start of Construction (Month/Year):	End of Construction (Month/Year):
Number of actual construction days:	
Length of road being constructed: miles	Width of road being constructed: feet
Predominant Soil Type (choose one): ☐ Sand Gravel ☐ Weathered Rock – Earth ☐ Blasted Rock	
Amount of soil imported: cubic yards	Amount of soil exported: cubic yards
Amount of asphalt imported: cubic yards	Amount of asphalt exported: cubic yards
Total area to be disturbed: acres	Maximum area disturbed per day: acres
Average truck capacity: cubic yards	Will water trucks be used? ☐ Yes ☐ No

L-2. Single Phase Development

Start of Construction (Month/Year): 1/9/2024	Gross Acres: 15.3
End of Construction (Month/Year): 7/27/2025	Net Acres (area devoted to buildings/structures): 3.02
First Date of Occupation (Month/Year): 7/28/2025	Paved Parking Area (# of Spaces): 326
Building Square Footage:151,917	Number of Dwelling Units: 0

L-3. Phased Site Development and Building Construction

In addition to the information below you can submit phase specific activity timeline found on District's website at www.valleyair.org/ISR.

1	Start of Construction (Month/Year):	Gross Acres:
	End of Construction (Month/Year):	Net Acres (area devoted to buildings/structures):
	First Date of Occupation (Month/Year):	Paved Parking Area (# of Spaces):
	Building Square Footage:	Number of Dwelling Units:
2	Start of Construction (Month/Year):	Gross Acres:
	End of Construction (Month/Year):	Net Acres (area devoted to buildings/structures):
	First Date of Occupation (Month/Year):	Paved Parking Area (# of Spaces):
	Building Square Footage:	Number of Dwelling Units:

3	Start of Construction (Month/Year):	Gross Acres:
	End of Construction (Month/Year):	Net Acres (area devoted to buildings/structures):
	First Date of Occupation (Month/Year):	Paved Parking Area (# of Spaces):
	Building Square Footage:	Number of Dwelling Units:
4	Start of Construction (Month/Year):	Gross Acres:
	End of Construction (Month/Year):	Net Acres (area devoted to buildings/structures):
	First Date of Occupation (Month/Year):	Paved Parking Area (# of Spaces):
	Building Square Footage:	Number of Dwelling Units:

Additional sheets for phasing information can be found on the District's website at www.valleyair.org/ISR.

M. On-Site Emission Reduction Measures (Mitigation Measures)

Listed below are categories of possible mitigation measures for applicants to implement that will reduce a project's impact on air quality. Check "Yes" next to any measure that will be utilized for this project, and please complete the corresponding page in this form to identify specifics related to that measure. If a category is not applicable to the project, check "No" and provide justification for not selecting the measure. Also, the applicant is encouraged to provide any mitigation measures including supporting documentation that are not listed on this application form for District consideration. For reference, see www.valleyair.org/ISR for potential additional mitigiation measures.

Clean Construction Fleet Mitgation Measure below can be selected for all development types

1. Clean Construction Fleet (Note: Making a commitment to using less polluting construction equipment)
☐ Yes, *please complete mitigation measure 1 below*
☒ No, *please provide justification why not selected:* *Cost and availability of clean fleets may result in project delays*

Operational Mitgation Measure below can be selected for all development types, except for transportation and transit projects

2. Clean On-Road Trucks (e.g. Heavy Duty Trucks, Medium Duty Trucks, and Light Duty Trucks)
Note: Operational fleet will use zero and/or near-zero emissions for all or part of its activities.
☐ Yes, *please complete applicable mitigation measure 2a through 2c below*
☒ No, *please provide justification why not selected:* *Lack of reaadily available on-road clean trucks that meet Best RV's needs*

3. On-Site Zero Emission Off-Road Vehicles and Equipment (e.g. electric forklifts and electric yard trucks)
☐ Yes, *please complete applicable mitigation measure 3 below*
☒ No, *please provide justification why not selected:* *Minimal forklifts/yard trucks will be used on-site*

4. Solar Panels (e.g. incorporate solar panels in the project)
☐ Yes, *please complete applicable mitigation measure 4 below*
☒ No, *please provide justification why not selected:* *Photovoltaic elements were cost prohibitive*

5. Electric Vehicle (EV) Chargers (e.g. incorporate onsite EV charging infrastructure)
☐ Yes, *please complete applicable mitigation measure 5 below*
☒ No, *please provide justification why not selected:* *Installation of EV charging infrastructure is cost prohibitive at this location*

6. Clean Lawn and Garden Equipment (e.g. eletric mowers, electric leaf blowers, electric trimmers, etc.)
☐ Yes, *please complete applicable mitigation measure 6 below*
☒ No, *please provide justification why not selected:* *This site will have minimal landscaped area*

7. Land Use/Location (e.g. increased density, improve walkability design, increase transit, etc.)
☐ Yes, *please complete applicable mitigation measures 7a through 7f below*
☒ No, *please provide justification why not selected:* *This project is located at the current Best RV location*

8. Neighborhood/Site Enhancements (e.g. improve pedestrial network, traffic calming measures, NEV network, etc.)
☐ Yes, *please complete applicable mitigation measures 8a through 8c below*
☒ No, *please provide justification why not selected:* *This project is located in a rural area*

9. Parking Policy/Pricing (e.g. parking cost, on-street market pricing, limit parking supply, etc.)
☐ Yes, *please complete applicable mitigation measure 9a through 9e below*
☒ No, *please provide justification why not selected:* *This project is located in a rural area with limited alternatives to driving*

10. Commute Trip Reduction Programs (e.g. workplace parking charge, employee vanpool/shuttle, ride sharing program, etc.)
☐ Yes, *please complete applicable mitigation measures 10a through 10f below*
☒ No, *please provide justification why not selected:* *This project is located in a rural area which makes alternatives to free parking difficult and employee shifts may be flexible, which makes ride sharing difficult*

11. Hearth (e.g. woodstoves or fireplaces)
☐ Yes, *please complete mitigation measure 11 below*
☒ No, *please provide justification why not selected:* *This project will not include any hearths*

12. Exceed Title 24 (e.g. exceed California Title 24 required energy efficiency for building(s) associated with the project)
☐ Yes, *please complete applicable mitigation measures 12 below*
☒ No, *please provide justification why not selected:* *The project will meet applicable Title 24 requirements and install more efficient equipment if price and availability meet project requiremetns*

N. Review Period

You may request a five (5) day period to review a draft of the District's analysis of your project before it is finalized. However, if you choose this option, it will delay the project's finalization by five (5) business days.

☒ I request to review a draft of the District's analysis.

O. Fee Deferral Schedule

If the project's on-site air pollution reductions (mitigation measure) insufficiently reduced air pollution as outlined in Rule 9510, an off-site fee is assessed based on the excess air pollution. The money collected from this fee will be used by the District to reduce air pollution emissions 'off-site' on behalf of the project.

An Applicant may request a deferral of all or part of the 'off-site' fees up to, but not to exceed, the start date of construction. The start of construction is any of the following, whichever occcurs first: start of grading, start of demolition, or any other site development activities not mentioned above.

☐ I request a Fee Deferral Schedule, and have enclosed the Fee Deferral Schedule Application.

The Fee Deferral Schedule Application, can be found on the District's website at www.valleyair.org/ISR.

P. Change of Project Developer

The Applicant assumes all responsibility for ISR compliance for this project. If the project developer changes, the Applicant must notify the Buyer, and both Buyer and Applicant must file a 'Change of Project Developer' form with the District. If there is a change of project developer, and a 'Change of Project Developer' form is not filed with the District, the Applicant will remain liable for ISR compliance.

The Change of Project Developer form can be found on the District's website at www.valleyair.org/ISR.

Q. Attachments

Required:	***If applicable:***
☒ Tract Map or Project Design Map	☐ Letter from Applicant granting Agent authorization
☒ Vicinity Map	☐ Fee Deferral Schedule Application
☒ Application Filing Fee $841.00 for mixed use / non-residential / transporation / transit projects **OR** $562.00 for residential projects only	☐ Monitoring & Reporting Schedule ☐ Supporting documentation for selected Mitigation Measures

R. Certification Statement

I certify that I have reviewed and completed the entire application and hereby attest that the information relayed within is true and correct to the best of my knowledge. I commit to implementation of those on-site mitigation measures that I have selected above. I am responsible for notifying the District if I will be unable to implement these mitigation measures. If a committed mitigation measure is not implemented, the project may be re-assessed for air quality impacts.

(An authorized Agent may sign the form in lieu of the Applicant if an authorization letter signed by the Applicant is provided).

Name (printed): _____	Title: _____
Signature: _____	Date: _____

Mitigation Measures

Mitigation Measure 1: Construction Clean Fleet

Will the project use a construction clean fleet to achieve the emission reductions required by District Rule 9510?
(By checking "yes" the Applicant is commiting to achieving the following emission reduction requirements: 20% for NOx and 45% for PM10 compared to the statewide average.)

☒ No, *please complete justification in Section M above*
☐ Yes*, *please be aware of the requirements below:*

***If yes**, daily records of the total hours of operation for each piece of equipment greater than 50-horsepower being used on the project site during construction must be maintained. Within 30-days of completing construction of each project phase, a report summarizing total hours of operation by equipment type, equipment model year and horsepower for each piece of construction equipment greater than 50-horsepower must be submitted to the District. To assist in this recordkeeping, the *Construction Clean Fleet Data Template* is available on the District's website at www.valleyair.org/ISR.

Please note: if the required construction emission reductions under Rule 9510 cannot be achieved, fees are required in order to mitigate the remaining balance of emissions. For each project phase, the District will verify that the fleet details achieved the required emission reductions

Mitigation Measure 2a: Clean On-Road Heavy Duty Trucks

Will the project use any operational clean Heavy Duty Trucks (On-road vehicles with a gross vehicle weight greater than 26,000 pounds)?
For example, zero-emission electric trucks and/or near-zero emission trucks meeting CARBs established emission standard of 0.02 g/bhp-hr NOx.

☒ No, *please complete justification in Section M above*
☐ Yes*, *please complete section below:*

1. Number of trucks for Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

2. Trip length in miles each of the following types of trucks will travel one way for the Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

3. Expected number of one-way trips per year for each of the following types of trucks for the Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

***If yes**, by selecting this measure there will be a condition placed on the monitoring and reporting schedule to ensure compliance. Records of the fleet data, including truck type, will be required to be submitted to the District on an annual basis.

Please note: by selecting this measure, you are certifying to the District that the above operational clean fleet vehicles have not been funded by state or District grant programs.

Mitigation Measure 2b: Clean On-Road Medium Duty Vehicles

Will the project use any operational clean Medium Duty Vehicles (On-road vehicles with a gross vehicle weight between 14,001 pounds and 26,000 pounds)?
For example, zero-emission electric vehicles, zero emission last mile delivery trucks or vans and/or near-zero emission vehicles meeting CARB's established emission standard of 0.02 g/bhp-hr NOx.

☒ No, *please complete justification in Section M above*
☐ Yes*, *please complete section below:*

1. Number of trucks for Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

2. Trip length in miles each of the following types of trucks will travel one way for the Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

3. Expected number of one-way trips per year for each of the following types of trucks for the Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

***If yes**, by selecting this measure there will be a condition placed on the monitoring and reporting schedule to ensure compliance. Records of the fleet data, including truck type, will be required to be submitted to the District on an annual basis.

Please note: by selecting this measure, you are certifying to the District that the above operational clean fleet vehicles have not been funded by state or District grant programs.

Mitigation Measure 2c: Clean On-Road Light Duty Vehicles

Will the project use any operational clean Light Duty Vehicles (On-road vehicles with a gross vehicle weight below 14,000 pounds)? For example, zero-emission electric vehicles, zero emission last mile delivery trucks or vans and/or near-zero emission vehicles meeting CARBs established emission standard of 0.02 g/bhp-hr NOx.

☒ No, *please complete justification in Section M above*

☐ Yes*, *please complete section below:*

1. Number of trucks for Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

2. Trip length in miles each of the following types of trucks will travel one way for the Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

3. Expected number of one-way trips per year for each of the following types of trucks for the Project:

zero emission trucks: _____	**near-zero** emission trucks: _____	**other types** of trucks: _____

***If yes**, by selecting this measure there will be a condition placed on the monitoring and reporting schedule to ensure compliance. Records of the fleet data, including truck type, will be required to be submitted to the District on an annual basis.

Please note: by selecting this measure, you are certifying to the District that the above operational clean fleet vehicles have not been funded by state or District grant programs.

Mitigation Measure 3: On-Site Zero Emission Off-Road Vehicles and Equipment

Will the project use any operational on-site zero emission Off-Road Vehicles and Equipment? (e.g. electric forklifts, electric yard trucks, electric aerial lifts)

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

Type of Zero Emission Vehicles and Equipment	No. of Vehicles and Equipment	Hours/Day	Days/Year	Horsepower	Fuel Type (CNG, Hydrogen, or Electric)
1. Yard Truck					
2. Forklifts					
3. Aerial Lifts					
4. Other Equipment					

Please note: by selecting this measure, you are certifying to the District that the above operational off-road vehicles have not been funded by state or District grant programs.

Additional sheets for listing On-Site Zero Emission Vehicles/Equipment can be found on the District's website at www.valleyair.org/ISR.

Mitigation Measure 4: Solar Panels

Will the project include the installation of solar panels?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- Total power output of solar panels to be installed: _____ kW *(e.g.: 200 homes x 3kW=600kW.)*
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?

  ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*

  ☐ Yes, Name of enforcing agency: _____

  Source of Requirement: _____

Mitigation Measure 5: Electric Vehicle (EV) Chargers

Will the project include the installation of electric vehicle (EV) charger(s)?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- Number of charging outlet(s) to be installed *(Note: a charger may have one or more charging outlets)*: _____
- Charging level (e.g.: Level 1, Level 2, or DC Fast Charge): _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Mitigation Measure 6: Clean Landscape Equipment

Will the project utilize clean landscaping equipment? (e.g. electric lawn mowers, electric leaf blowers, etc.) *(Note 3% is the assumed statewide average for landscape equipment)*

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- Percent of electric lawnmower that will be electrically powered: _____
- Percent of leaf blower that will be electrically powered: _____
- Percent of electric chainsaw that will be electrically powered: _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Documentation: Please attach supporting documentation if claiming greater than 3% over statewide average.	☐ Attached

Mitigation Measure 7a: Increase Density

Will the Project be located within 1/2 mile radius of increased density? Density is measured in terms of dwelling units or jobs per acre. A project located in areas of increased density may reduce emissions associated with traffic.
*Note: There are approximately 502.4 acres in a 1/2 mile radius.

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

1. Number of Dwelling Units within 1/2 radius of Project:	
2. Number of Jobs within 1/2 mile radius of Project:	
3. Density: *Density is the 'Number of Dwelling Units' or 'Number of Jobs' within ½ mile radius divided by 502.4 acres.*	**Dwelling Units per Acre:** **Jobs per Acre:**

- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Documentation: Please attach supporting documentation (e.g.: map) to justify the provided jobs and housing.	☐ Attached

Mitigation Measure 7b: Increase Diversity

This mitigation measure applies to a project in an *Urban Area only*. Will the project be predominantly characterized by properties on which various uses, such as office, commercial, institutional, and residential are present within ¼ mile?
Mixed-use development should encourage walking and other non-auto modes of transport and minimize need for external trips.

☒ No, *please complete justification in Section M above*
☐ Yes, *please complete section below:*

- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____
    Source of Requirement: _____

Documentation: Please attach supporting documentation (e.g.: map) to justify the project is characterized by various uses, such as office, commercial, institutional, and residential are within ¼ mile that encourage walking and non-auto modes of transport.	☐ Attached

Mitigation Measure 7c: Improve Walkability Design

Will the project improve walkability?

☒ No, *please complete justification in Section M above*
☐ Yes, *please complete section below:*

1. Square Miles within the Study Area: a. If the distance from the center of the project out to its farthest boundary is less than or equal to ½ mile then the Square Miles within the Study Area will be 0.79. (Enter this value in the blank to the right.) b. If the distance from the center of the project out to its farthest boundary is greater than ½ mile then calculate the area value by: Study Area Square Miles = 3.14 x radius(squared). (Enter this value in the blank to the right.)	Square Miles:

2. Intersection within the Study Area: Number and type of intersections within the project area:	Number of 3-Way Intersections:		x 3 =	
	Number of 4-Way Intersections:		x 4 =	
	Number of 5-Way Intersections:		x 5 =	
	Total Intersections (sum of above) =			

3. Intersection Density within the Study Area: Intersection Density is the Study Area's 'Total Intersections' value (B.) divided by the 'Square Miles' value (A.):	_____ Intersections / sq. mi.

- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____
    Source of Requirement: _____

Documentation: Please attach supporting documentation (e.g.: map) to justify number of intersections within ½ mile of the project.	☐ Attached

Mitigation Measure 7d: Improve Destination Accessibility

Will the project be located within 12 miles from downtown or a job center? The location of the project may increase the potential for pedestrians to walk and bike to these destinations and therefore reduce VMT.

☒ No, *please complete justification in Section M above*
☐ Yes, *please complete section below:*

- Distance to Downtown/Job Center (miles): _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____
    Source of Requirement: _____

Documentation: Please attach supporting documentation (e.g: map) to justify the distance of the project to the Downtown/Job Center.	☐ Attached

Mitigation Measure 7e: Increase Transit Accessibility

Will the project be located near a transit station/stop at least within ¼ mile or near a rail at least within ½ mile that will facilitate the use of transit by people traveling to or from the project site?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- Distance to Rail Station (miles): ☐ ½ mile or less ☐ between ½ mile and 3 miles
- Distance to Transit Station (miles): ☐ ¼ mile
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Documentation: Please attach supporting documentation (e.g.: map) to justify the project is located within ¼ mile of a transit station or within ½ mile of a rail from the project site.	☐ Attached

Mitigation measure 7f: Integrate Below Market Rate Housing

Will the project require all or a portion of the residential units designated as deed-restricted below-market-rate (BMR) housing?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- Percentage of total dwelling units deed-restricted below market rate: _____%
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Documentation: Please attach supporting documentation to justify all or a portion of the residential units that are designated as deed-restricted below-market-rate housing.	☐ Attached

Mitigation Measure 8a: Improve Pedestrian Network

Will the project provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- Select one of the following areas, where pedestrian accommodations will be provided:

  ☐ within Project Site ☐ within Project Site and Connecting Off-Site ☐ Project Site is within a Rural setting
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Mitigation Measure 8b: Provide Traffic Calming Measures

Will this project provide traffic calming measures which encourage people to walk or bike instead of using a vehicle (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others)?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- % Streets with Improvement within ½ mile of project site: ☐ 25% ☐ 50% ☐ 75% ☐ 100%
- % Intersections with Improvement within ½ mile of project site: ☐ 25% ☐ 50% ☐ 75% ☐ 100%
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Mitigation Measure 8c: Implement Neighborhood Electric Vehicle (NEV) Network

Will the project provide a NEV network including the necessary infrastructure such as parking, charging facilities, striping, signage, and educational tools?
*Note: NEVs are classified in the California Vehicle Code as a "low speed vehicle".

☒ No, *please complete justification in Section M above*
☐ Yes, *please complete section below:*

- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____
    Source of Requirement: _____

Mitigation Measure 9a: Limit Parking Supply

Will the Will the project provide fewer parking spaces than the rate provided by the Institute of Transportation and Engineering (ITE) Parking Generation Handbook?

☒ No, *please complete justification in Section M above*
☐ Yes, *please complete section below:*

- % Reduction in Spaces: _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____
    Source of Requirement: _____

Mitigation Measure 9b: Unbundle Parking Cost

Will the project implement a monthly/annual parking charge?

☒ No, *please complete justification in Section M above*
☐ Yes, *please complete section below:*

- Monthly Parking Cost for Project Site ($):_____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____
    Source of Requirement: _____

Mitigation Measure 9c: On-Street Market Pricing

Will this project and the city (in which the project is located) implement a pricing strategy which will increase the on-street public parking (e.g.: meter parking) by at least 25%?

☒ No, *please complete justification in Section M above*
☐ Yes, *please complete section below:*

- % Increase in Price: ☐ 25% ☐ 30% ☐ 40% ☐ 50%
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____
    Source of Requirement: _____

Mitigation Measure 9d: Transit Subsidy

Will the project provide subsidized/discounted daily or monthly public transit passes?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- % of employees to receive public transit passes: _____
- Please select the closest expected Daily Transit Subsidy Amount ($): ☐ $0.75 ☐ $1.50 ☐ $3 ☐ $6
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Mitigation Measure 9e: Implement Employee Parking "Cash-Out"

Will the project require employers to offer employee parking "cash-out"?
The term "cash-out" is used to describe the employer providing employees with a choice of forgoing their current subsidized/free parking for a cash payment.

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- % of employees to receive "cash-out": _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Mitigation Measure 10a: Workplace Parking Charge

Will the project implement workplace parking pricing at its employment centers (e.g., explicitly charging for parking for its employees, not providing employee parking and transportation allowances, educating employees about available alternatives)?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- % of employees paying for parking: _____
- Please select the closest expected Daily Cash out Amount ($): ☐ $1 ☐ $2 ☐ $3 ☐ $6
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Mitigation Measure 10b: Implement School Bus Program

Will the project work with the school district to restore or expand school bus services in the project area and local community?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- % of families expected to using school bus program (those currently attending the school district): _____
- Please select the closest expected Daily Cash out Amount ($): ☐ $1 ☐ $2 ☐ $3 ☐ $6
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Mitigation Measure 10c: Encourage Telecommuting and Alternative Work Schedules

Will the project include the use of telecommuting or alternative work schedules to reduce the number of commute trips by employees?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- Percent of employees to participate in a 9/80 work schedule: ☐ 1% ☐ 3% ☐ 5% ☐ 10% ☐ 25%
- Percent of employees to participate in a 4/40 work schedule: ☐ 1% ☐ 3% ☐ 5% ☐ 10% ☐ 25%
- Percent of employees to participate in telecommuting 1.5 days: ☐ 1% ☐ 3% ☐ 5% ☐ 10% ☐ 25%
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?

  ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*

  ☐ Yes, Name of enforcing agency: _____

  Source of Requirement: _____

Mitigation Measure 10d: Market Commute Trip Reduction Option

Will the project implement marketing strategies to reduce commute trips (e.g., new employee orientation of trip reduction and alternative mode option, event promotions, publications)?
This measure should promote and educate employees on alternative transportation options

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- % of Employees Eligible: _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?

  ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*

  ☐ Yes, Name of enforcing agency: _____

  Source of Requirement: _____

Mitigation Measure 10e: Employee Vanpool/Shuttle

Will this project implement an employer-sponsored vanpool or shuttle?
Employer-sponsored vanpool programs entail an employer purchasing or leasing vans for employee use, and often subsidizing the cost of at lease program administration, if not more. Rider charges are normally set on the basis of vehicle and operating cost.

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- % of employees participating in the vanpool program: _____
- % of vehicles for vanpooling: _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?

  ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*

  ☐ Yes, Name of enforcing agency: _____

  Source of Requirement: _____

Mitigation Measure 10f: Provide Ride Sharing Program

Will the project include a ride-sharing program?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- % of Employees participating in the ride-sharing program: _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?

  ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*

  ☐ Yes, Name of enforcing agency: _____

  Source of Requirement: _____

Mitigation Measure 11: Hearth

Will the project include any woodstoves or fireplaces?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- ☐ Only natural gas hearth
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Mitigation Measure 12: Exceed Title 24

Will the energy efficiency rating of the project's building(s) be greater than California Title 24 requirements?

☒ No, *please complete justification in Section M above*

☐ Yes, *please complete section below:*

- Percent of increase greater than California Title 24 requirements: _____
- Will this mitigation measure be required as a condition of approval by the land use agency, by other county or municipal codes, or other?
  - ☐ No, (*note: if checked "no" this mitigation measure will require District enforcement)*
  - ☐ Yes, Name of enforcing agency: _____

    Source of Requirement: _____

Documentation: Please attach relevant analysis or summary pages of Title 24 documentation.	☐ Attached

ATTACHMENT 3 – PRIORITIZATION CALCULATOR

Name

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in gray areas.
Author or updater	Matthew Cegielski — *Last Update* December 1, 2022
Facility:	Best RV
ID#:	
Project #:	Operations
Unit and Process#	1-0 p1
Operating Hours hr/yr	8,760.00

Receptor Proximity and Proximity Factors		Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100	**1.000**	1.95E+01	2.90E-02	0.00E+00	1.95E+01
100≤R<250	**0.250**	4.89E+00	7.24E-03	0.00E+00	4.89E+00
250≤R<500	**0.040**	7.82E-01	1.16E-03	0.00E+00	7.82E-01
500≤R<1000	**0.011**	2.15E-01	3.19E-04	0.00E+00	2.15E-01
1000≤R<1500	**0.003**	5.86E-02	8.69E-05	0.00E+00	5.86E-02
1500≤R<2000	**0.002**	3.91E-02	5.79E-05	0.00E+00	3.91E-02
2000<R	**0.001**	1.95E-02	2.90E-05	0.00E+00	1.95E-02

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

1-0 p1

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	MW Correction	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Corrected Annual Emissions (lbs/yr)	Corrected Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	**1.0000**	8.46E+00		8.46E+00	0.00E+00	9.66E-04	1.95E+01	2.90E-02	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
							Totals	**1.95E+01**	**2.90E-02**	**0.00E+00**

BEST RV CENTER PROJECT

(PLN2017-0098)

- Stanislaus County -

"TRAFFIC IMPACT ANALYSIS"

Prepared for:

ASSOCIATED ENGINEERING GROUP, INC.

4206 Technology Drive, Suite 4

Modesto, CA 95356

Larry D. Hail, CE, TE, PTOE

PINNACLE TRAFFIC ENGINEERING

831 C Street

Hollister, California 95023

(831) 638-9260 • PinnacleTE.com

December 31, 2018

ATTACHMENT II

EXECUTIVE SUMMARY

The Traffic Impact Analysis (TIA) presents an evaluation of the potential impacts associated with the proposed Best RV Center Project (PLN2017-0098). The existing Best RV Center is located at 5340 Taylor Court in the unincorporated area northwest of Turlock. The Best RV Center currently includes a sales office, service department, parts counter, and RV wash facility. The project includes an expansion in two (2) phases. Phase 1 will provide additional storage area for RV sales inventory and does not propose an increase in the number of employees. Phase 2 will relocate the existing service department and parts counter to the adjacent parcels (formally Peterbilt Truck Sales & Service Center). The County's "rezoning" approval in 2006 was for up to 8 employees which is the "permitted" number of employees for the existing operations. The existing Best RV Center currently has 65 employees (over 8 times permitted level). The total number of employees will increase to 90 with the completion the Phase 2 (82 employees above permitted level).

The project TIA scope was developed in consultation with staff at Stanislaus County and the City of Turlock. The County and City of Turlock (Capital Facilities Fee Nexus Study) have identified a need for improvements at the State Route (SR) 99 / Taylor Road interchange. The County will be providing partial funding for the improvements. Therefore, the project will be required to provide a fair-share contribution towards the improvements. The TIA presents an evaluation of the potential project impacts on weekday operations at the selected study intersections on Taylor Road (N. Golden State Boulevard, SR 99 Northbound and Southbound Ramps, and Taylor Court).

The Preliminary Trip Generation Analysis prepared for the project indicates that operations at the existing Best RV Center (65 employees) generate approximately 512 daily trips (two-way trip ends), with 50 vehicle trips during the AM peak hour and 48 trips during the PM peak hour. The completion of Phase 2 will generate a "net" increase over the 2006 level of 646 daily trips, with 64 trips during the AM peak hour and 61 trips during the PM peak hour. The Saturday mid-day (MD) peak hour trip generation is 70-75% higher than the average week day peak hour. Daily volumes on Taylor Court are significant lower on a typical Saturday (-16%) and Sunday (-35%). The weekday trips associated with the 2006 permitted, 2018 existing, and proposed Phase 2 operations were assigned to the study street system based on a review of existing travel patterns.

The evaluation of existing conditions (2018) was based on new traffic count data collected at the study intersections. The average daily traffic (ADT) volumes for the Taylor Road street segments were estimated by assuming the weekday PM peak hour comprises about 9-10% of the daily total. Existing ADT volumes along Taylor Road and N. Golden State Boulevard are within acceptable limits as defined by the County (LOS D or better), except Taylor Road east of N. Golden State Boulevard. Based on the City's LOS threshold for a 2-lane arterial the existing ADT are within the LOS C range. The evaluation of peak hour operations indicates that average vehicle delays at the N. Golden State Boulevard and Taylor Court intersections are within acceptable limits during both peak hours. However, delays are currently in the LOS E-F range at the SR 99 / Taylor Road interchange intersections during one or both peak hours. Observations of actual traffic operations

verified the existing congestion, especially during the PM peak hour. The existing peak hour volumes at the Taylor Road / SR 99 Southbound Ramps intersection exceed the minimum 70% signal warrant criteria during both peak hours (PM peak hour volumes also exceed 100% criteria).

An analysis of existing plus project conditions was conducted by adjusting the 2018 volumes to reflect conditions with the 2006 permitted level of operations. The existing volumes were again adjusted to reflect the existing conditions with the Phase 2 level of operations. The identification of potentially significant impacts was evaluated using "level of significance" criterion defined by the County and CEQA. Existing plus project ADT volumes on Taylor Road and N. Golden State Boulevard will remain within acceptable limits, except on Taylor Road east of N. Golden State Boulevard (all project scenarios). As previously stated, based on the City's 2-lane arterial LOS threshold the existing plus project ADT volumes will remain in the LOS C range (all project scenarios).

Average delays at the N. Golden State Boulevard and Taylor Court intersections will remain within acceptable limits. However, delays will remain at unacceptable levels at the SR 99 / Taylor Road interchange intersections during one or both peak hours (LOS E-F). Based on the County's LOS thresholds the project will have a potentially significant impact on peak hour operations at the SR 99 / Taylor Road interchange (current 2018 and Phase 2 operations). The existing volumes with the 2006 permitted and Phase 2 operations exceed the minimum 70% signal warrant criteria during both peak hours (even without any traffic generated by the Best RV Center site). The existing plus project volumes (2006 permitted or proposed Phase 2) also exceed the 100% signal warrant criteria during the PM peak hour. An evaluation of access concluded there is sufficient stopping and corner sight distance for vehicles traveling through the Taylor Road / Taylor Court intersection.

The evaluation of future conditions was based on the most current General Plan ADT projections obtained from the City of Turlock. The General Plan material also included the future roadway classifications needed to provide acceptable LOS. Taylor Road west of SR 99 will have a 4-lane expressway section, while the section between SR 99 and N. Golden State Boulevard will have a 6-lane expressway section. Taylor Road east of N. Golden State Boulevard will continue to be classified as a 2-lane collector street. N. Golden State Boulevard south of Taylor Road will also have a 6-lane expressway section.

The County and City have indicated that there is no specific improvement project for the SR 99 / Taylor Road interchange at this time. Caltrans also does not have a current improvement project for the SR 99 / Taylor Road interchange. Since the General Plan traffic projections didn't include intersection peak hour turning movements, an evaluation of the General Plan scenario was limited to the analysis roadway segment LOS. It's noted that the development of future improvements for the SR 99 / Taylor Road interchange will require that a detailed Project Study Report (PSR) be prepared for Caltrans approval. The preparation of an Intersection Control Evaluation (ICE) for the ramp intersections will also more than likely be required to identify the best design for each side of the SR 99 freeway.

The General Plan ADT projections provided by the City are considered representative of base-line conditions. The evaluation of potential project impacts presents an analysis of the "net" increase in employee trips between 2006 and through the completion of Phase 2 (+82 employees). Since the General Plan ADT traffic projection data was obtained from the City of Turlock, the City's LOS thresholds for roadway segments was used for the General Plan analysis. The General Plan ADT base-line projections on Taylor Road and N. Golden State Boulevard will be within acceptable limits. Traffic generated by the Best RV Center site development (between the 2006 permitted operations and through Phase 2) will not significantly impact future daily operations.

As previously stated, the project will be required to provide a fair-share contribution towards the future improvements at the SR 99 / Taylor Road interchange. The City's Capital Facilities Fee (CFF) Nexus Study provides an estimate for the future improvements at the SR 99 / Taylor Road interchange ($10,363,703). Based on the City's General Plan ADT projections the Best RV Center site development (2006 through the completion of Phase 2) comprises 2.11% of the General Plan plus project volumes on the west side of SR 99 and 0.50% of the General Plan plus project volumes on the east side of SR 99. It's estimated that a combined 290 ADT of the project trips would use SR 99 north and south of Taylor Road, which would comprise 1.13% of the General Plan plus project volumes using the interchange ramps. The project will also be subject to the County's Public Facilities Fee, which is estimated at $48,656. It's noted that the Best RV Center project may be eligible for some fee credits since Phase 2 will be developed on the former Peterbilt Truck Sales & Service Center site.

As documented in the existing conditions analysis, existing ADT volumes on Taylor Road east of N. Golden State Boulevard are within the LOS E range (based on County's LOS thresholds). However, based on the City's LOS thresholds for a 2-lane arterial the existing ADT volume are within the LOS C range. The City's General Plan ADT projections for this segment of Taylor Road indicate that future daily volumes would be lower than existing ADT volumes. The General Plan plus project ADT projections will be within the LOS B range, and therefore, no mitigation measures are proposed for this segment of Taylor Road.

The analysis of existing peak hour operations documented delays within the LOS E-F range at the SR 99 Southbound Ramps intersection, on Taylor Road, and on the SR 99 northbound off ramp during one or both peak hour periods. The existing peak hour volumes at the SR 99 Southbound Ramps intersection exceed the minimum 70% signal warrant criteria (PM peak hour volumes also exceed 100% warrant criteria). The installation of "all-way" stop control at the SR 99 Southbound Ramps intersection as a possible "interim" solution would create significant vehicle queues on the southbound off ramp. The installation of signal control would result in average delays within the LOS B range but would create significant queues on the southbound off ramp, possibly extending up to the SR 99 freeway section. Providing 2 lanes for the free-flowing left turn movement on the on-ramp may reduce congestion and delays but would not reduce the significant delays on Taylor Road. There are no feasible mitigation measures that will reduce congestion and delays at the SR 99 / Taylor Road interchange without significant improvements to the interchange.

The analysis of existing plus project operations identified potentially significant project impacts at the SR 99 Northbound and Southbound Ramps intersections (current 2018 and proposed Phase 2 operations). Therefore, the project's mitigation measures include payment of the County's Public Facilities Fee and the negotiation of a reasonable fair-share contribution towards the future improvements at the SR 99 / Taylor Road interchange. The project applicant should also consider developing Transportation Demand Management strategies to reduce employee vehicle peak hour trips (e.g. provide incentives to employees to carpool / rideshare, provide shuttle service for employees, provide bicycle storage facilities, etc). The mitigation measures section also includes a number of recommendations for the local roadway network, which are provided for the County's and City's consideration only.

TABLE OF CONTENTS

Report Section — Page

1.0 INTRODUCTION 1

2.0 EXISTING CONDITIONS 3
- Network Description 3
- Traffic Volumes 4
- Level of Service Analysis 4
- Observations of Peak Period Operations 9
- Signal Warrant Analysis 10

3.0 PROJECT CONDITIONS 11
- Description 11
- Project Trip Generation Estimates 11
- Project Weekday Traffic Volumes 15
- Existing Plus Project Traffic Volumes 15
- Level of Significance Criterion 19
- Level of Service Analysis 19
- Signal Warrant Analysis 21
- Project Access 21

4.0 GENERAL PLAN CONDITIONS 23
- Project Traffic Volumes for General Plan Analysis 23
- Level of Service Analysis 26
- Project's Fair-Share Contribution (SR 99 / Taylor Road Interchange) 26
- County's Public Facilities Fee 27

5.0 Mitigation Measures and Recommendations 28
- Local Roadway Recommendations 29

LIST OF TABLES

Table 1 - Existing Roadway Segment LOS Analysis 7
Table 2 - LOS and Vehicle Delay Criterion 8
Table 3 - Existing Intersection LOS Analysis 9
Table 4A - Best RV Center "Weekday" Trip Generation Rates and Trips 14
Table 4B - Best RV Center "Weekend Day" Trip Generation Rates and Trips 15
Table 5 - Existing Plus Project Roadway Segment (ADT) LOS Analysis 19
Table 6 - Existing Plus Project Intersection LOS Analysis 20
Table 7 - GP and GP Plus Project Roadway Segment (ADT) LOS Analysis 26

LIST OF FIGURES

Figure 1 - Project Location Map …..……. 2
Figure 2A - Existing Geometry …….…… 5
Figure 2B - Existing Traffic Volumes ….……..….. 6
Figure 3A - Project Site Plan (Phase 1) ……..…….. 12
Figure 3B - Project Site Plan (Phase 2) …… 13
Figure 4A - Project Traffic Volumes (2006 Operations) ……..……...… 16
Figure 4B - Project Traffic Volumes (2018 Operations) ……...……...… 17
Figure 4C - Project Traffic Volumes (Phase 2 Operations) ……..……...… 18
Figure 5 - General Plan Traffic Volumes ……..……... 24
Figure 6 - Project Volumes - Net Increase - (Phase 2 - 2006) …….…….…. 25

APPENDIX MATERIAL

- Existing Weekday Peak Hour Count Summary
- Weekday AM and PM Peak Period Traffic Count Data (Tuesday - Sept. 25, 2018)
- Saturday and Sunday Traffic Count Data (Sept. 22 & 23, 2018)
- Level of Service (LOS) LOS Descriptions
- Stanislaus County Roadway Segment Level of Service (LOS) Criteria
- City of Turlock Average Daily Traffic (ADT) Thresholds
- Synchro 9 Software LOS Worksheets
- Best RV Center Weekday and Weekend Data Trip Generation Calculation Data
- Existing Plus Project Volumes (2006 and Phase 2 Operations)
- 2014 California MUCTD Traffic Signal Warrant Graphs
- Vehicle Speed Data on Taylor Road at Taylor Court
- Best RV Center Preliminary Trip Generation Analysis (PTE; May 21, 2018)

1.0 INTRODUCTION

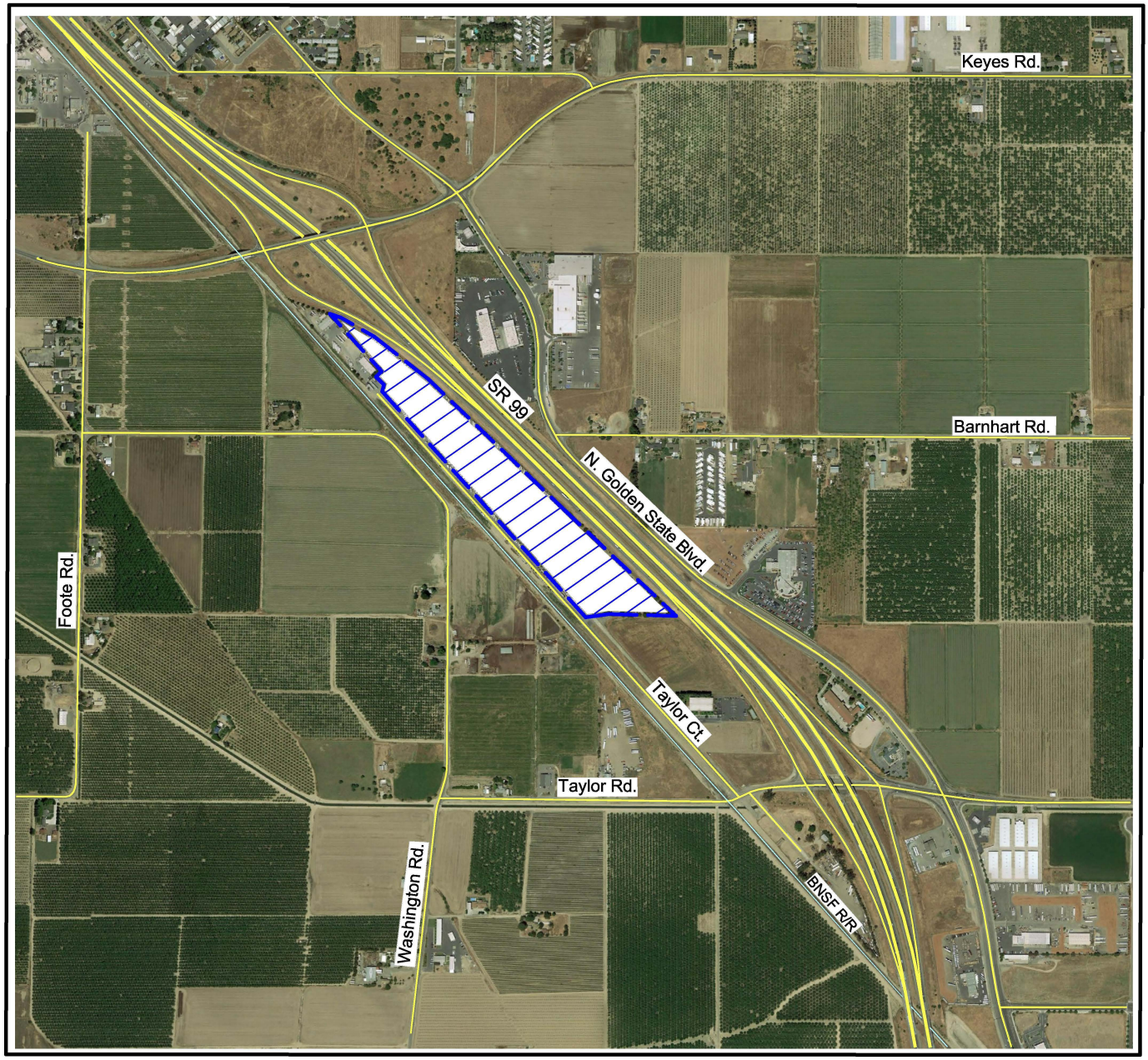
The Traffic Impact Analysis (TIA) presents an evaluation of the potential impacts associated with the proposed Best RV Center Project (PLN2017-0098). The existing Best RV Center is located at 5340 Taylor Court in the unincorporated area northwest of the City of Turlock. The project includes an expansion in two (2) phases. Phase 1 will provide additional storage area for RV sales inventory which will be located on the adjacent parcels to the northwest. Phase 2 will relocate the existing service department and parts counter to the adjacent parcels to the southeast. The project will remodel the existing facility and include various new infrastructure improvements to facilitate the expansion. The existing Best RV Center currently has 65 employees. No new employees will be needed for Phase 1. The total number of employees will increase to 90 with the completion the Phase 2 improvements. Access to the existing site is currently provided via two (2) driveways on Taylor Court. There will be an additional driveway for Phase 1 and two (2) new driveways for with Phase 2. The general location of the project site is shown on Figure 1.

County staff requested a traffic analysis to evaluate the potential project impacts on local traffic operations. A Preliminary Trip Generation Analysis was prepared as part of the initial analysis (May 21, 2018; a copy is included with the Appendix Material). The Preliminary Trip Generation Analysis quantified the "net" increase in vehicle trips associated with the proposed project. The City of Turlock has identified a need for improvements at the existing State Route (SR) 99 / Taylor Road interchange, as documented in the City's Capital Facilities Fee (CFF) Nexus Study (Final Report; Nov. 12, 2013). Stanislaus County will be providing partial funding for the future interchange improvements and needs to determine the proposed project's fair-share percentage towards the improvements. The TIA scope was developed in consultation with staff at Stanislaus County and the City of Turlock. The TIA presents an evaluation of the potential project impacts on weekday traffic operations at the following study intersections:

<u>Study Intersections</u>

1. Taylor Road / N. Golden State Boulevard (Signalized)
2. Taylor Road / SR 99 Northbound Ramps (NB Stop Control)
3. Taylor Road / SR 99 Southbound Ramps (EB and WB Stop Control)
4. Taylor Road / Taylor Court (SB and NB Stop Control)

The TIA also provides an evaluation of access on Taylor Road at Taylor Court and an evaluation of future General Plan traffic operations. The TIA has been prepared according to the requirements in the County's General Plan Circulation Element and guidelines published by Caltrans (Guide for the Preparation of Traffic Impact Studies, 2002).



LEGEND

= Project Site

NORTH

PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 1
PROJECT LOCATION MAP

2.0 EXISTING CONDITIONS

The local roadway network serving the project site includes SR 99, Taylor Road, N. Golden State Boulevard, and Taylor Court. The following is a brief description of the local network and an evaluation of existing traffic operations.

Network Description

SR 99 is a north-south freeway in Stanislaus County that provides regional access through the Central Valley between northern and southern California. SR 99 in the vicinity of Taylor Road has three (3) travel lanes in each direction. Access to and from Taylor Road is provided via a grade-separated interchange. The SR 99 southbound off ramp is free-flowing at Taylor Road, with east-west stop sign control on Taylor Road. The SR 99 northbound off ramp is stop sign controlled at Taylor Road. The SR 99 / Taylor Road interchange is a "diamond" interchange with about 500-feet between the southbound and northbound ramp intersections. There are also SR 99 grade-separated interchanges at Keyes Road to the north and Monte Vista Avenue to the south.

Taylor Road is a designated a Principal Arterial (Other Principal Arterial) in the County's General Plan Circulation Element (Figure II-1, Road Circulation Diagram). The City of Turlock's CFF Nexus Study classifies Taylor Road as an existing collector street. Taylor Road extends east from Washington Road through the unincorporated area of Stanislaus County and along the northern City limits of Turlock. Taylor Road between Washington Road and SR 99 and east of N. Golden State Boulevard has a single travel lane in each direction. There are exclusive left turn lanes on Taylor Road for traffic entering the SR 99 southbound and northbound on ramps. Taylor Road is signalized at the N. Golden State Boulevard intersection, which is approximately 400-feet east of the SR 99 Northbound Ramps intersection. Between SR 99 and N. Golden State Boulevard Taylor Road has two (2) westbound lanes (shared through-right turn and free-flowing right turn). Though the eastbound section between SR 99 and N. Golden State Boulevard is only striped with a single lane the existing width (24-25') is sufficient to accommodate two (2) eastbound lanes. During peak demand periods the eastbound section functions as having two (2) lanes adjacent to the SR 99 northbound off ramp.

N. Golden State Boulevard north of Taylor Road is a designated a Minor Arterial in the County's General Plan Circulation Element (Figure II-1, Road Circulation Diagram). The City of Turlock's CFF Nexus Study classifies N. Golden State Boulevard as an existing expressway south of Taylor Road. North and south of Taylor Road, N. Golden State Boulevard has two (2) travel lanes in each direction. As previously stated, N. Golden State Boulevard is signalized at Taylor Road. The signal operations include north-south split phasing and east-west left turn phasing. This major intersection provides primary access to and from SR 99 in the northwestern portion of the City of Turlock.

Taylor Court is a local collector street that serves the Best RV Center, Thermo King, and Wood Furniture Gallery. Taylor Court has a single travel lane in each direction with a 24-foot width and no paved shoulders. Taylor Court is stop sign controlled at Taylor Road, opposite a commercial driveway (storage for pre-fabricated homes and large trucks).

The existing lane geometry at the study intersections and the number of travel lanes on the local street system are graphically illustrated on Figure 2A.

Stanislaus Regional Transit (StaRT) and Turlock Transit provide bus service through Turlock but do not currently have any bus stops along Taylor Road or near the project site. Currently, there are no formal bike lane facilities along Taylor Road (near the SR 99 interchange), N. Golden State Boulevard (near Taylor Road), or Washington Road (south of Taylor Road). However, the City's General Plan (Figure 5-3) does show proposed Class II bike lane routes for these roadways.

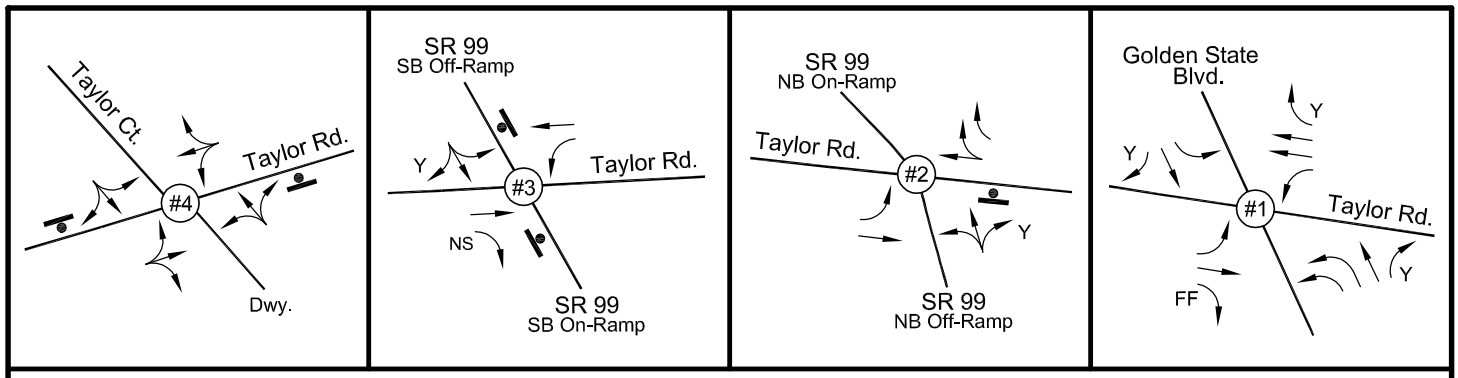
Traffic Volumes

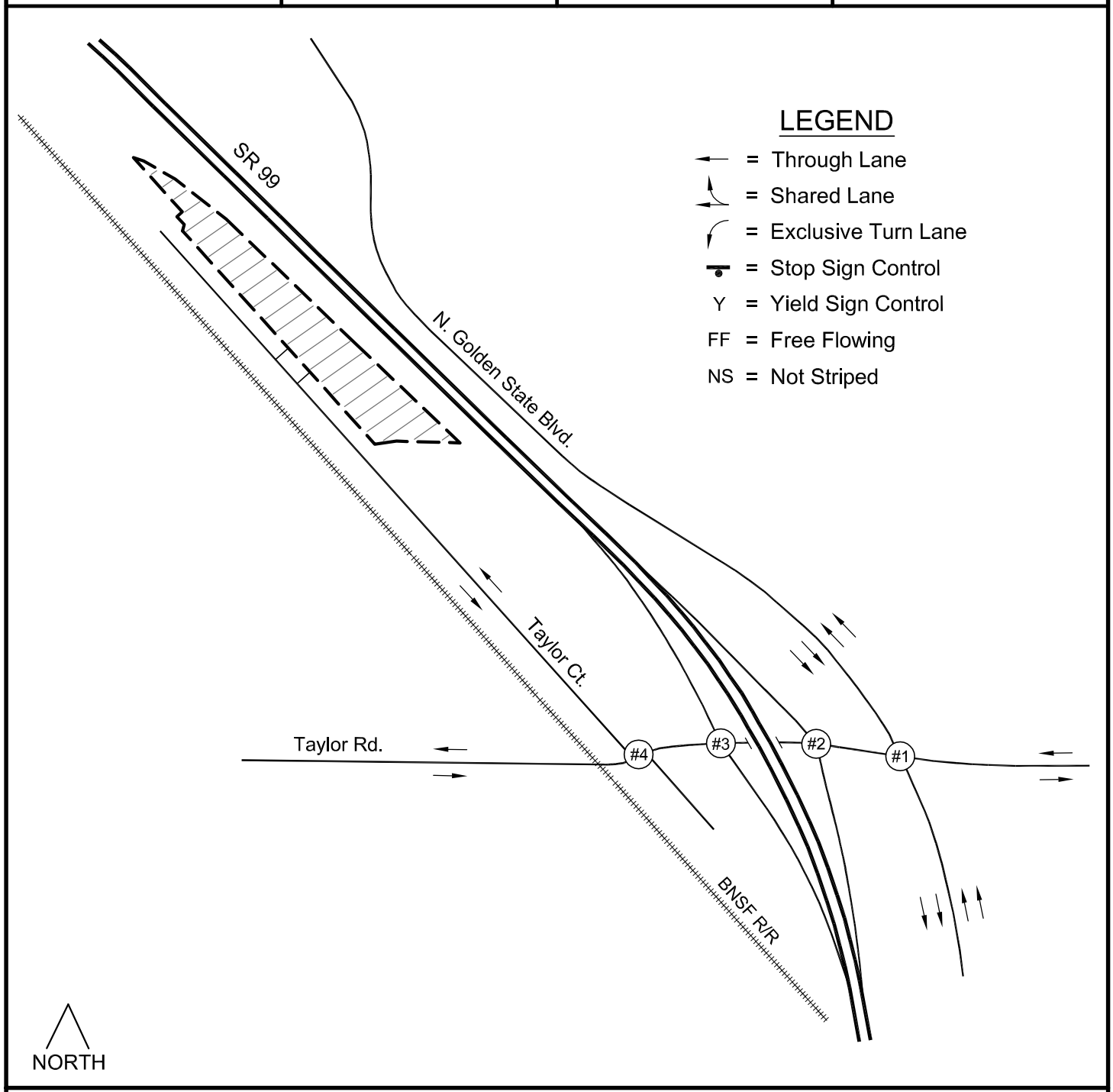
To document existing conditions new traffic count data was collected at the study intersections. The data was collected on an average weekday (Sept. 25, 2018) during the morning (7:00 - 9:00 AM) and afternoon (4:00 - 6:00 PM) commuter peak periods. The traffic count data was evaluated to determine the highest 60-minute volume (4 consecutive 15-minute periods) within each period for all the study intersections. This balances the volumes between each study intersection and represents a single peak hour for the four (4) closely spaced study intersections along Taylor Road. The morning peak hour was recorded between 7:00 & 8:00 AM and the afternoon peak hour was documented between 4:45 & 5:45 PM.

The average daily traffic (ADT) volume data for the selected street segments were estimated by assuming the weekday PM peak hour comprises about 9-10% of the daily total. Historic traffic count data provided by the City of Turlock was also referenced. The weekday ADT volumes for Taylor Court (near the Best RV Center) were also referenced from the data collected for the Preliminary Trip Generation Analysis (May 2018). The existing weekday peak hour and ADT volumes are illustrated on Figure 2B. The TIA scope also included collecting new traffic count data on a Saturday and Sunday (Sept. 22 & 23, 2018) to document existing weekend day trip generation characteristics associated with the Best RV Center current operations. The Saturday and Sunday traffic count data is evaluated under the project trip generation sub-section. Copies of the weekday peak hour traffic count summary calculations and new traffic count data are included with the Appendix Material.

Level of Service Analysis

Recent State legislative changes have moved away from using vehicle delay or "level of service" (LOS) as a metric to define significant impacts under CEQA law, and have shifted emphasis of

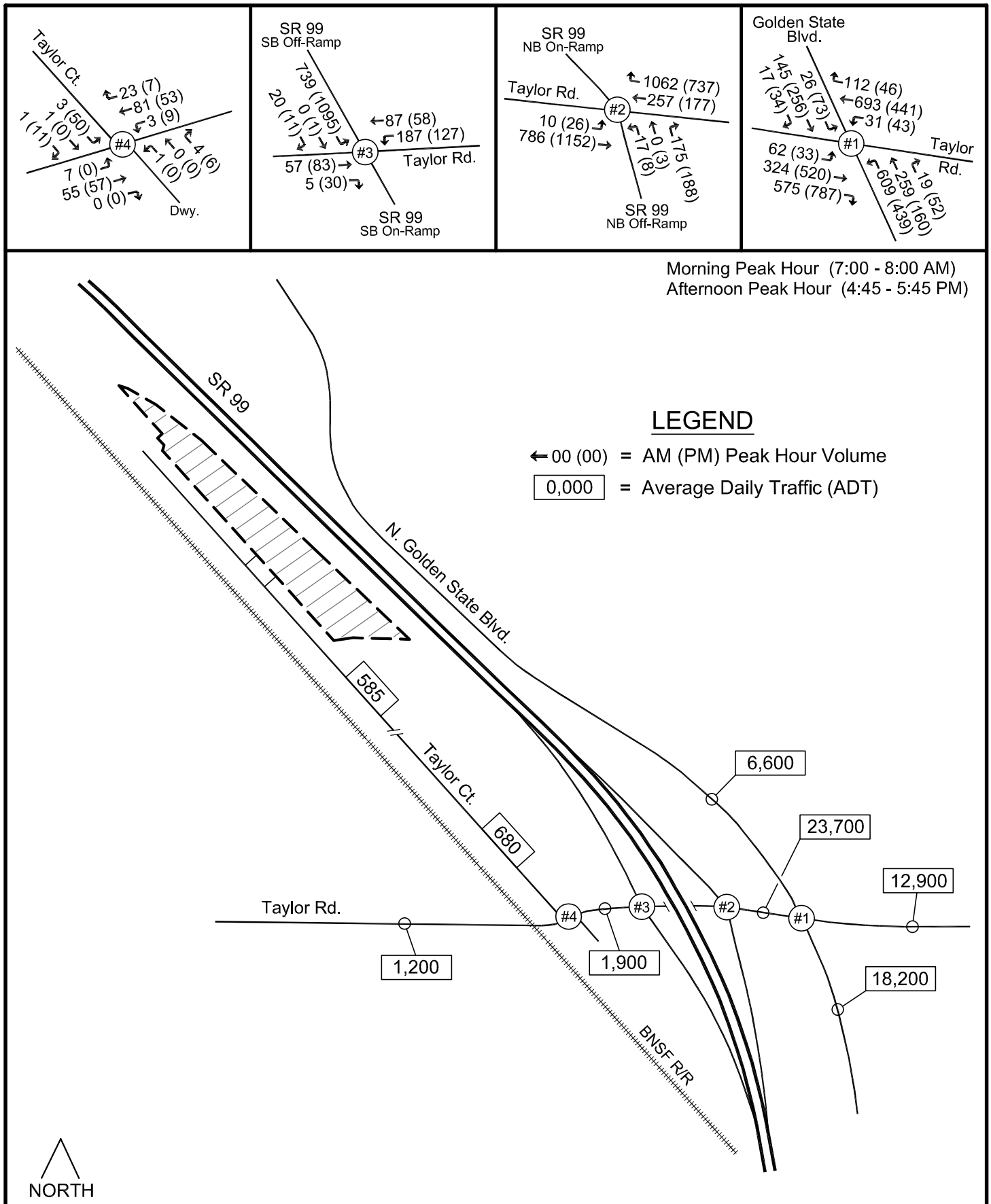




PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 2A
EXISTING
GEOMETRY



PINNACLE
TRAFFIC
ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 2B
EXISTING
TRAFFIC VOLUMES

transportation analysis to transit-oriented design, the reduction of vehicle trips, and safety. However, as stated in the County's General Plan Circulation Element methodologies in the Highway Capacity Manual (HCM) can still be used to determine LOS to evaluate impacts of new development. Based on consultation with County staff, the analysis of impacts associated with the Best RV Center project is limited to the evaluation of roadway and intersection LOS.

Various LOS methodologies are used to evaluate traffic operations. Operating conditions range from LOS "A" (free-flowing) to LOS "F" (forced-flow). The County strives to maintain LOS D (or better) operations on roadway segments and LOS C (or better) operations at intersections. The Caltrans traffic study guidelines (Guide for the Preparation of Traffic Impact Studies, Dec. 2002) state, Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities. A brief description of the LOS values is included in the Appendix.

Roadway segment LOS can be estimated by comparing the ADT volumes with standard threshold criteria. The County's Circulation Element provides "Roadway Segment LOS Criteria" to evaluated daily volumes (vehicles / day / lane). The City of Turlock also has LOS thresholds for roadway segments based on ADT volume. The roadway segment classifications, number of lanes, existing ADT volumes, and existing LOS values are provided in Table 1. It's noted that though Taylor Road is a designated a Principal Arterial in the County's Circulation Element the evaluation of existing conditions was performed using the thresholds for a "major" collector street since there isn't threshold criteria for a 2-lane arterial. A copy of the Stanislaus County and City of Turlock ADT volume thresholds are included with the Appendix Material.

Table 1 - Existing Roadway Segment LOS Analysis

Roadway Segment	Classification	No. of Lanes	ADT – LOS
Taylor Rd. w/o Taylor Ct. (a)	Major Collector	2	1,200 – B
Taylor Rd., Taylor Ct. - SR 99 (a)	Major Collector	2	1,900 – B
Taylor Rd., SR 99 - N. Golden State Blvd. (b)	Minor Arterial	4	23,700 – C
Taylor Rd., e/o N. Golden State Blvd. (c)	Major Collector	2	12,900 – E
N. Golden State Blvd., n/o Taylor Rd. (d)	Minor Arterial	4	6,600 – B
N. Golden State Blvd., s/o Taylor Rd. (e)	Expressway	4	18,200 – A

(a) LOS based on the County's threshold for a "major collector" (rural)
(b) LOS based on the County's threshold for a "minor arterial"
(c) LOS based on the County's threshold for a "major collector" (urban)
(d) LOS based on the County's threshold for a "minor arterial"
(e) LOS based on the City's threshold for an "expressway"

The data in Table 1 indicates that the existing ADT volumes on Taylor Road west of N. Golden State Boulevard and on N. Golden State Boulevard north of Taylor Road are within acceptable limits as defined by Stanislaus County (LOS D or better). Existing ADT volumes on Taylor Road east of N. Golden State Boulevard are within the LOS E range. However, it's noted that existing ADT volumes on Taylor Road east of N. Golden State Boulevard are within the LOS C range based on the City's LOS threshold for a 2-lane arterial. Existing ADT volumes on N. Golden State Boulevard south of Taylor Road are within the LOS A range based on the City's LOS thresholds.

The evaluation of "peak hour" traffic operations at intersections is based on various methodologies outlined in the 2010 Highway Capacity Manual (HCM). The methodologies analyze operations based on vehicle "control" delay. Control delay includes the delay associated with vehicles slowing in advance of an intersection, time spent stopped, time spent as vehicles move up in the queue, and time needed for vehicles to accelerate to their desired speed. Delays at signalized and all-way stop controlled intersections are evaluated for the overall peak hour as an "average" delay. The methodologies for un-signalized intersections also evaluates the delays for the "critical" movement (e.g. stop sign controlled approaches and main line left turn). Table 2 presents the LOS and vehicle delay criterion for signalized and un-signalized intersections.

Table 2 - LOS and Vehicle Delay Criterion

LOS Value	Intersection Control Type	
	Signalized Control	Two-Way & All-Way Stop Sign Control
	Control Delay per Vehicle (seconds / vehicle)	
A	< or = 10	0 - 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

The Synchro 9 software was used to perform the LOS analysis at the study intersections. The existing "peak hour factors" (PHF) were used to represent operations during the "peak" 15-minute period within the peak hour. The results of the existing intersection LOS analysis are presented in Table 3. Copies of the Synchro 9 LOS worksheets are included with the Appendix Material.

The data in Table 3 indicates that average delays at the N. Golden State Boulevard and Taylor Court intersections are within acceptable limits during both peak hours (LOS C or better). Average delays are also within acceptable limits at the SR 99 Northbound Ramps intersection, but delays on the SR 99 northbound off ramp are within the LOS F range during the PM peak hour. Average delays at the SR 99 Southbound Ramps intersection and delays on Taylor Road (both approaches) are within the LOS E-F range during both peak hours. The LOS analysis also reported a 95th

percentile queue of 7-8 vehicles on the SR 99 northbound off ramp during the PM peak hour. Significant queues were also reported on Taylor Road at the SR 99 Southbound Ramps intersection.

Table 3 - Existing Intersection LOS Analysis

Study Intersection on Taylor Road	Traffic Control	Average Delay - LOS	
		AM Pk. Hr.	PM Pk. Hr.
N. Golden State Blvd.	Signal	24.3 – C	27.5 – C
SR 99 - NB Ramps (a)	NB Stop	3.7 – A (23.4 – C)	10.7 – B (>50 - F)
SR 99 - SB Ramps (a)	EB-WB Stop	>50 – F (>50 – F)	46.8 – E (>50 – F)
Taylor Ct. (a)	SB-NB Stop	0.9 – A (9.6 – A)	3.7 – A (9.6 – A)

(a) Highest delay on stop sign controlled approaches

Observations of Peak Period Operations

Observations of existing operations were conducted during the morning (7:00 - 9:00 AM) and afternoon (4:00 - 6:00 PM) commuter periods (Sept. 25, 2018). As previously stated, the morning peak hour was 7:00 - 8:00 AM and the afternoon peak hour was 4:45 - 5:45 PM. It's noted that the total intersection volumes during the AM peak hour (7:00-8:00 AM) at the N. Golden State Boulevard and SR 99 NB Ramps intersections were about 35-40% higher than the total intersection volumes between 8:00 and 9:00 AM. During the AM peak hour the directional demands were higher in the northbound direction on N. Golden State Boulevard and SR 99, and the westbound direction on Taylor Road. The directional demands during the PM peak hour were higher in the southbound (N. Golden State Boulevard and SR 99) and eastbound (Taylor Road) directions.

No significant queuing was observed during the AM peak hour, expect on Taylor Road at the SR 99 Southbound Ramps intersection. The majority of vehicle queues cleared during each signal cycle at the Taylor Road / N. Golden State Boulevard intersection. During the afternoon commuter period the intersection volumes were more consistent throughout the 2 hour period. There was a steady stream of vehicles exiting SR 99 on the southbound off ramp during the PM peak period. Significant delays and queuing on Taylor Road at the SR 99 Southbound Ramps intersection and on the SR 99 northbound off ramp were observed, and directly related to the steady stream of vehicles exiting SR 99. Eastbound vehicles on Taylor Road were occasionally observed backing up from N. Golden State Boulevard to the SR 99 Southbound Ramps intersection but did not extend on the SR 99 southbound off ramp. As previously mentioned, during peak demand periods the eastbound section of Taylor Road near the SR 99 northbound off ramp functions as having two (2) lanes. Though this section is only striped with a single eastbound lane the existing width is sufficient to accommodate two (2) lanes. Delays and queuing on the SR 99 northbound off ramp were also related to vehicles not being able to easily access the eastbound left turn lane at the N.

Golden State Boulevard intersection. Notwithstanding the congestion on Taylor Road during the PM peak hour, the majority of vehicle queues cleared during most signal cycles at the Taylor Road / N. Golden State Boulevard intersection. Much of the congestion during the PM peak period was related to the close spacing of intersections on Taylor Road at the SR 99 interchange.

Signal Warrant Analysis

The analysis of existing conditions documented significant delays on Taylor Road at the SR 99 Southbound Ramps intersection during the AM and PM peak hours. Typically, the installation of traffic signal control will potentially reduce delays on the stop sign controlled approaches but will increase delays on the free-flowing approaches. The potential benefits associated with traffic signal control also include various safety factors.

The existing peak hour traffic volumes at the Taylor Road / SR 99 Southbound Ramps intersection were reviewed to determine if the minimum "peak hour volume" signal warrant criteria is satisfied (2014 California Manual on Uniform Traffic Control Devices, MUTCD). The existing volumes exceed the minimum 70% signal warrant criteria during the AM and PM peak hours. The existing PM peak hour volumes also exceed the 100% signal warrant criteria. However, a review of the traffic count data indicates that existing conditions may not satisfy either the four (4) or eight (8) hour volume signal warrant criteria. The existing volumes (Figure 2B) on the SR 99 northbound off ramp (left and through movements) are well below the minimum side street approach volume that would warrant the consideration of installing signal control (75 vehicles per hour, vph). A copy of the MUTCD "peak hour volume" signal warrant graph is included with the Appendix Material.

3.0 PROJECT CONDITIONS

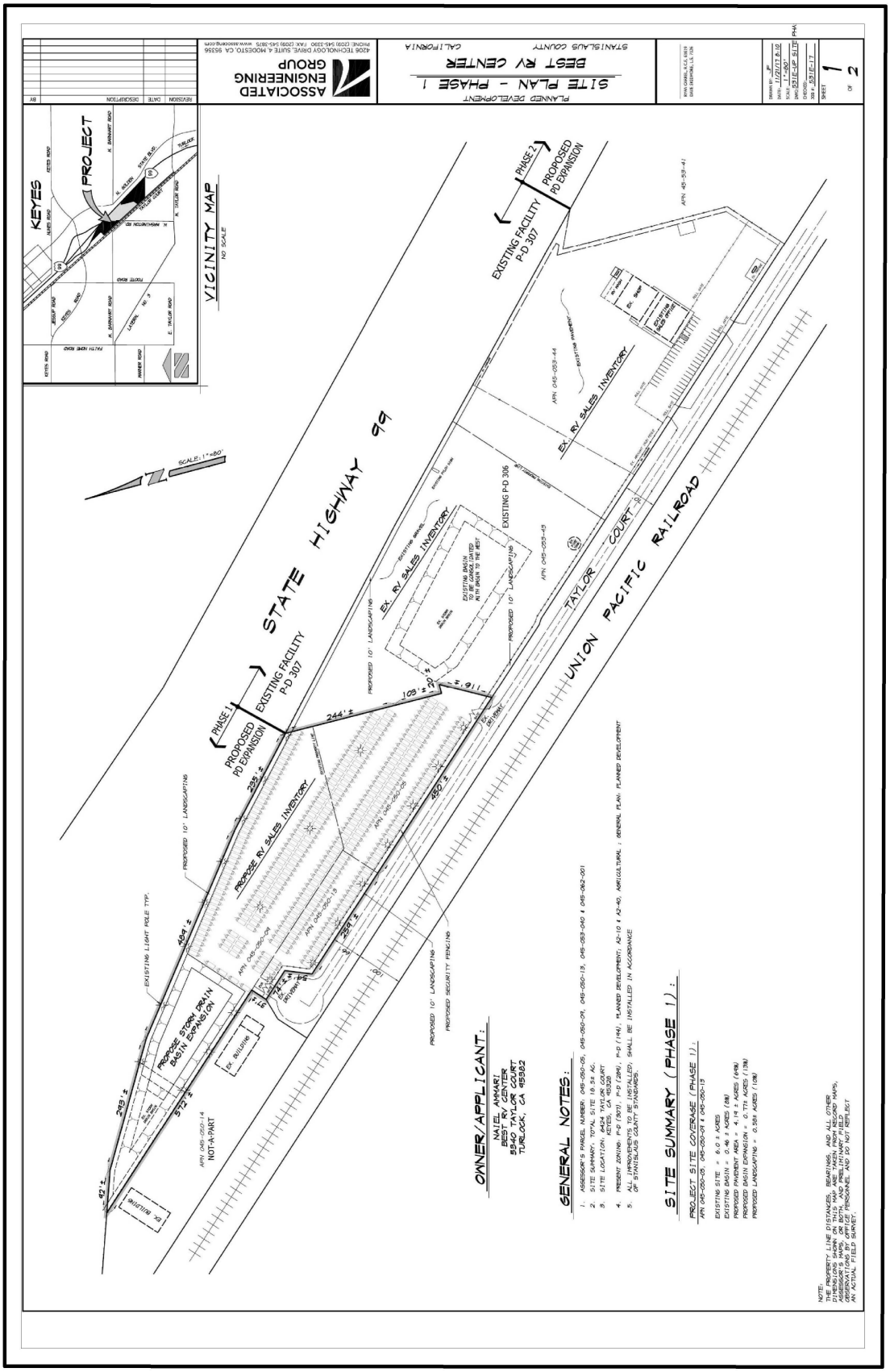
The following is a description of the proposed project, an estimate of the trip generation quantities, an assignment of the project trips to the local street system, and an evaluation of the potential project impacts on existing traffic operations. A review of the project access on Taylor Road is also provided.

Description

The Best RV Center currently includes a sales office, service department, parts counter, and RV wash facility. The sales office, parts counter and RV wash facility are open daily from 9:00 AM to 6:00 PM (7 days a week). The service department is open Monday through Friday between 9:00 AM and 5:00 PM. As previously stated, the Best RV Center project includes an expansion in two (2) phases. Phase 1 will provide additional storage area for RV sales inventory and does not propose an increase in the number of employees. Phase 2 will relocate the existing service department and parts counter to the adjacent parcels to the southeast (formally Peterbilt Truck Sales & Service Center). The project will also remodel the existing facility and include various new infrastructure improvements to facilitate the expansion (e.g. RV staging area, storm drain basins, landscaping & fencing, etc). The existing Best RV Center currently has 65 employees. It's noted that the project description in the County's "rezoning" application in 2006 only included an estimate of up to 8 employees. Therefore, this is considered the "permitted" number of employees for the operations at the existing Best RV Center. The total number of employees will increase to 90 upon the completion the Phase 2 improvements. Access will continue to be provided via multiple driveways on the east side Taylor Court. A copy of the Phase 1 and Phase 2 site plans are provided on Figures 3A and 3B, respectively.

Project Trip Generation Estimates

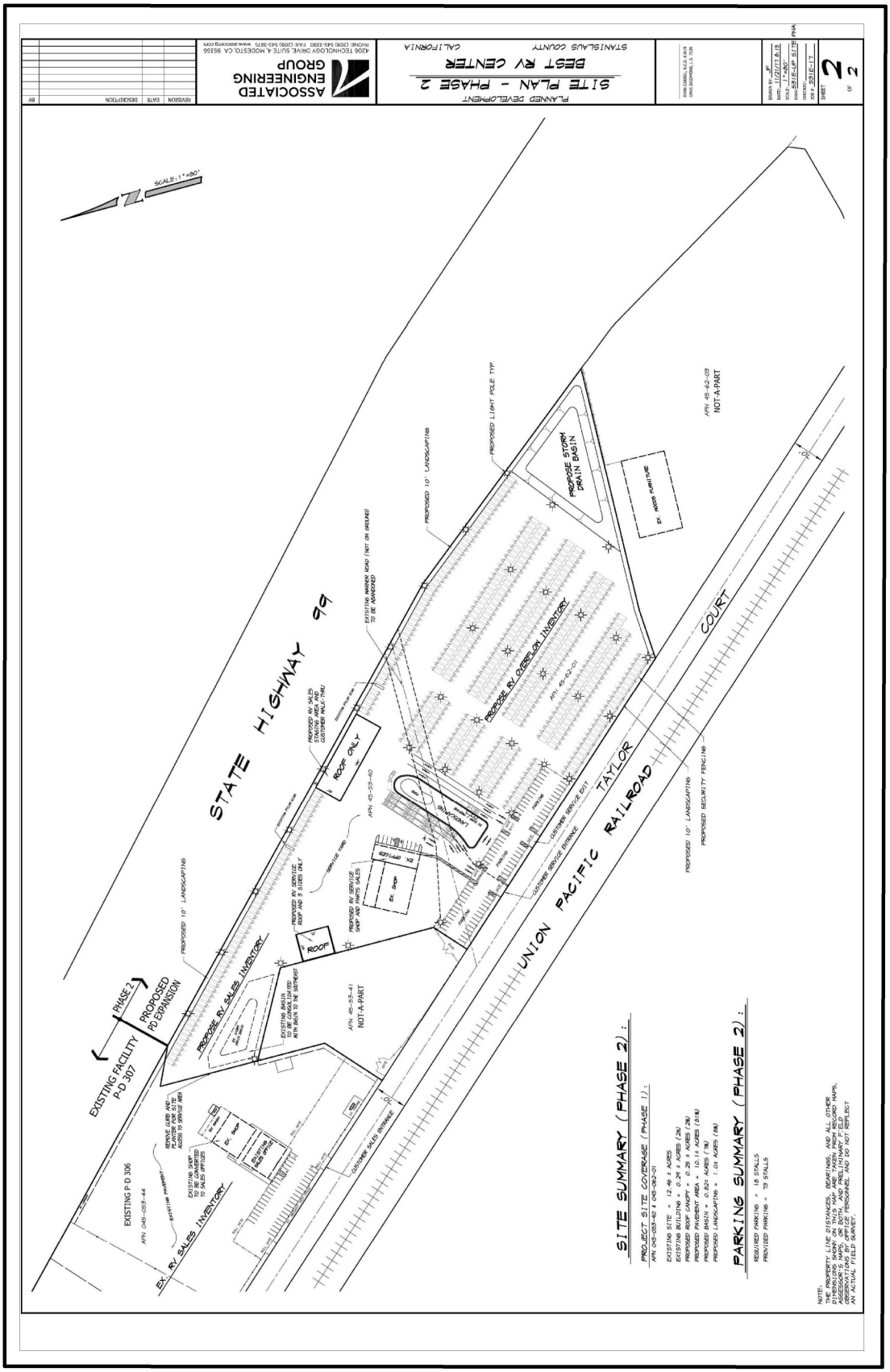
Weekday - As discussed in the Introduction (Section 1.0), the initial project analysis included the preparation of a Preliminary Trip Generation Analysis (May 21, 2018). The preliminary analysis documented the number of weekday peak hour trips associated with the existing operations and quantified the "net" increase in trips associated with the proposed project (Phase 1 and 2). The trip generation associated with the existing weekday operations was based on new traffic count data collected along Taylor Court. Detailed descriptions of the Taylor Count traffic count data and derivation of the trip generation rates are included in the Preliminary Trip Generation Analysis (included with the Appendix Material). The "average" weekday peak hour trip generation rates for the 2006 (permitted), 2018 (current), and proposed (upon completion of Phase 2) operations are presented in Table 4A. A copy of the weekday trip rate calculations is included with the Appendix Material. It's noted that the number of weekday daily trips is based on data in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition), Land Use (LU) Code 842 (Recreational Vehicle Sales).



PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 3A
PROJECT SITE PLAN
(PHASE 1)



PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 3B
PROJECT SITE PLAN
(PHASE 2)

Table 4A - Best RV Center "Weekday" Trip Generation Rates and Trips

Project Component	Number of Vehicle Trips				
	AM Peak Hour		PM Peak Hour		Daily
	In	Out	In	Out	
Trip Generation Rate per Employee: - Best RV Center Existing Operations	0.663	0.106	0.219	0.525	7.88 (a)
2006 Permitted Operations (8 Employees) -	5	1	2	4	64
Current 2018 Operations (65 Employees) -	43	7	14	34	512
Completion of Phase 2 (90 Employees) -	60	10	20	47	710
"Net" Change (2018 - 2006):	+38	+6	+12	+30	+448
"Net" Change (Phase 2 - 2006):	+55	+9	+18	+43	+646

(a) Rate based on data in ITE Trip Generation Manual (10th Ed.), LU Code 842

The data in Table 4A indicates that the existing Best RV Center operations generate approximately 0.769 trips per employee during the AM peak hour and 0.744 trips per employee during the PM peak hour. The existing trip generation rates are considered reasonable as these actual rates are very close to the average rates in the ITE Trip Generation Manual. The existing 2018 operations generate about 8 times more traffic as compared to the permitted number of employees in 2006. The completion of Phase 2 will generate a "net" increase over the 2006 trip generation of 646 daily trips, 64 trips during the AM peak hour (55 in & 9 out) and 61 trips during the PM peak hour (18 in & 43 out).

As described under the Existing Conditions (Section 2.0), the morning peak hour for all the study intersections along Taylor Road was between 7:00 and 8:00 AM. A review the traffic count data demonstrates that the morning peak hour on Taylor Court was between 8:00 and 9:00 AM, which is reflective of the Best RV Center opening at 9:00 AM. Traffic on Taylor Court was about 51% higher between 8:00 and 9:00 AM, but the total volumes at the Taylor Road / Taylor Court intersection were about 9% lower during the same period. The weekday trip generation presented in the Table 4A represents the morning peak hour for the existing operations at the Best RV Center (8:00 - 9:00 AM). It's noted that the traffic count data during the afternoon peak hour was more consistent throughout the period.

Weekend Day - Similar to the methodology for documenting the existing weekday peak hour trip generation, new traffic count data was collected along Taylor Court on a Saturday and Sunday (Sept. 22 & 23, 2018). The new data was used to identify the Saturday Mid-Day (MD) peak hour (highest 60-minute period between 1:00 and 3:00 PM) and the corresponding trip generation associated with the operations at the existing Best RV Center. The Saturday MD peak hour was between 1:00 and 2:00 PM (48 vph). Data provided by the project applicant indicates there were 36 employees at work on Saturday. The Saturday MD peak hour trip generation rates and number

of trips are presented in Table 4B. A copy of the weekend day trip rate calculations is included with the Appendix Material.

Table 4B - Best RV Center "Saturday" Trip Generation Rates and Trips

Project Component	Number of Vehicle Trips	
	Mid-Day Peak Hour	
	In	Out
Trip Generation Rate per Employee: - Best RV Center Existing Operations	0.694	0.611
2018 Current Operations (36 Employees) -	25	22

The data in Table 4B indicates that the existing Best RV Center operations generate approximately 1.305 trips per employee during a Saturday MD peak hour. The Saturday MD peak hour trip generation rates is 70-75% higher than the weekday peak hour trip generation, which is expected.

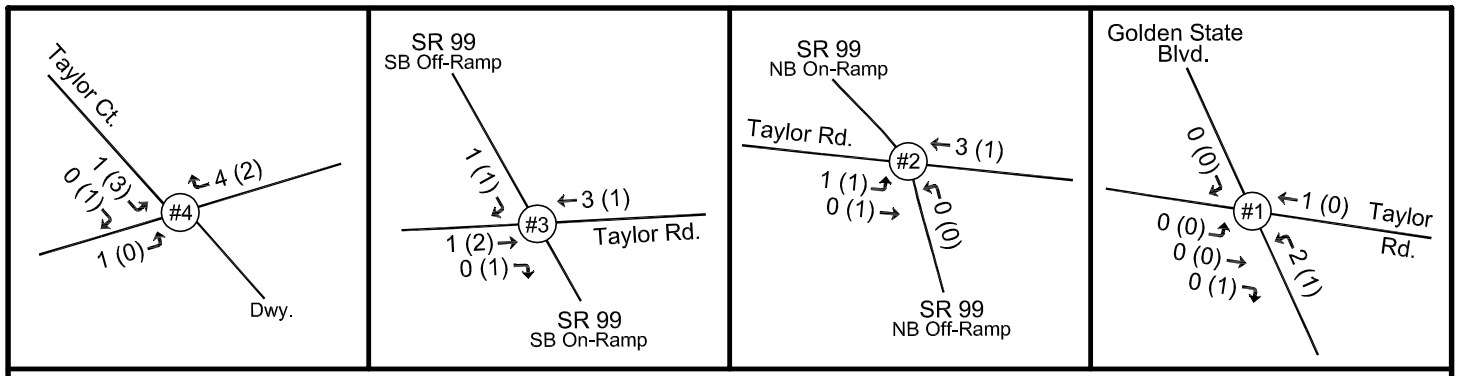
The ADT volumes on Taylor Court for both weekend days were compared to the average weekday volume documented in the Preliminary Trip Generation Analysis and illustrated on Figure 2B (between project site and Wood Furniture Gallery, 585 ADT). Daily traffic on Saturday was about 16% lower than the average weekday volume. Sunday traffic was approximately 35% lower than the average weekday volume.

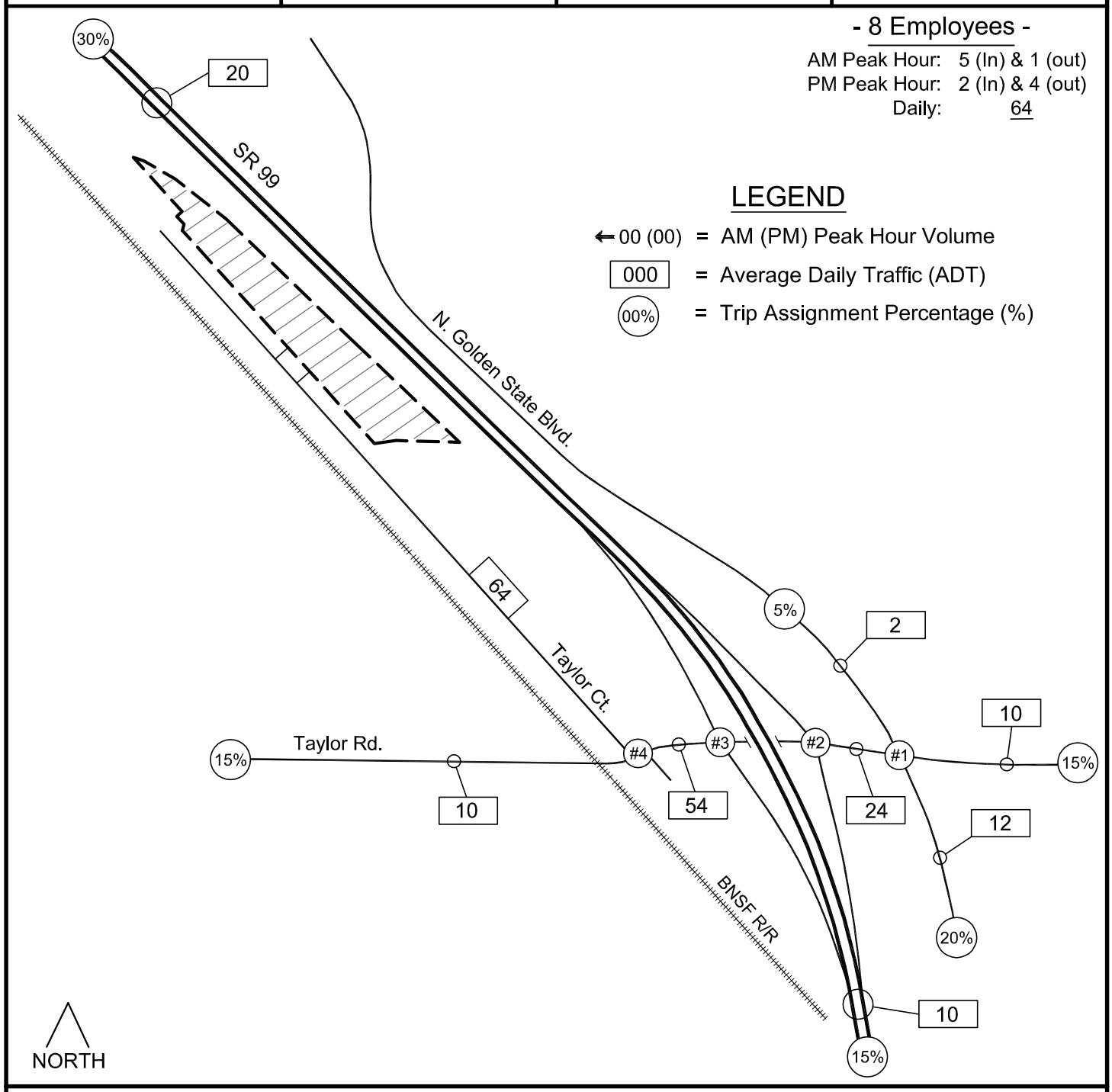
Project Weekday Traffic Volumes

As stated in the Introduction (Section 1.0), the TIA presents an evaluation of the potential project impacts on weekday traffic operations. The trips associated with each project site scenario were assigned to the local street system based on a review of existing peak hour travel patterns at the SR 99 / Taylor Road and Taylor Road / N. Golden State Boulevard intersection. The trip assignment percentages and Project Traffic Volumes are illustrated on Figures 4A (2006 Operations), 4B (2018 current operations), and 4C (upon completion of Phase 2).

Existing Plus Project Traffic Volumes

As previously described, the existing traffic volumes on Figure 2B represent the existing plus project scenario for the current 2018 operations at the Best RV Center. The existing traffic volumes were adjusted to reflect the existing conditions with the 2006 permitted level of operations at the Best RV Center ((existing – 2018) + 2006), representing the existing plus project volumes with the 2006 permitted operations. The existing volumes were again adjusted to reflect the existing conditions with the proposed Phase 2 level of operations ((Phase 2 - 2018) + existing), representing the existing plus project volumes for the proposed operations associated with the completion of Phase 2. Exhibits illustrating the existing plus project scenario volumes for the 2006 permitted and proposed Phase 2 operations are included with the Appendix Material.

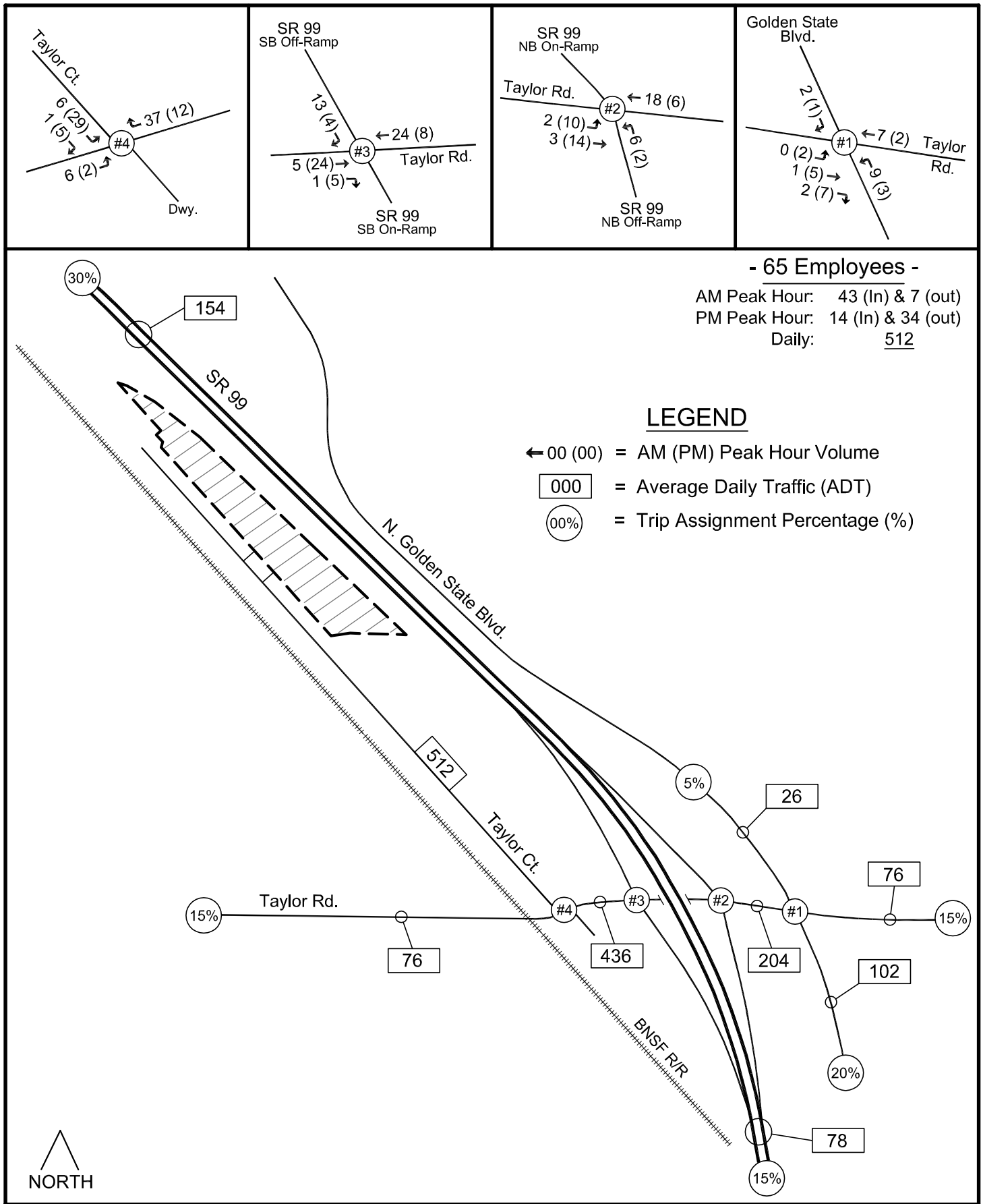




PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

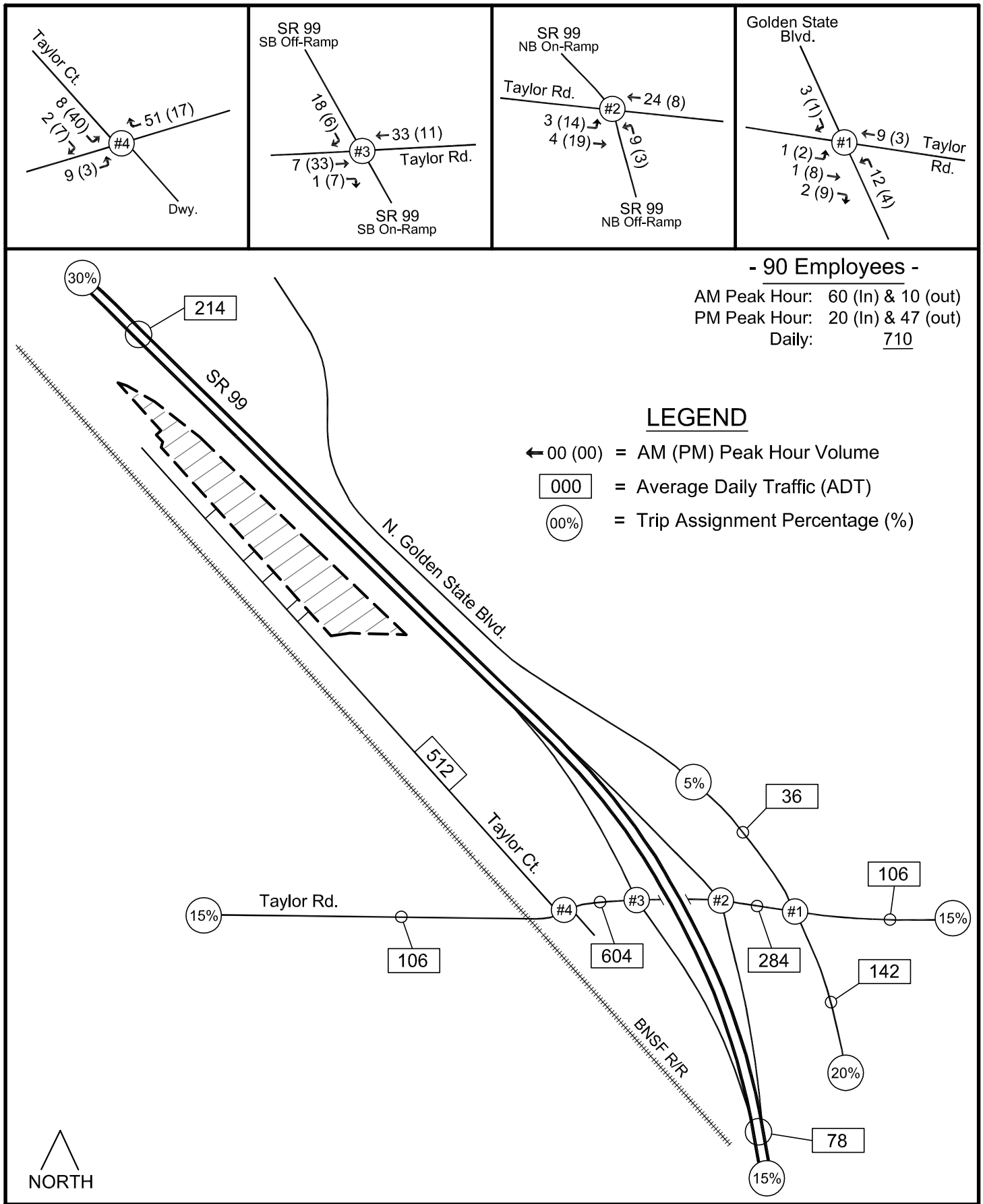
FIGURE 4A
PROJECT
TRAFFIC VOLUMES
(2006 OPERATIONS)



PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 4B
PROJECT TRAFFIC VOLUMES
(2018 OPERATIONS)



PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 4C
PROJECT
TRAFFIC VOLUMES
(PHASE 2 OPERATIONS)

Level of Significance Criterion

The identification of potentially significant project-specific impacts was evaluated using "level of significance" criterion defined by the County and CEQA. The following general criterion were used to determine if any potentially significant impacts are attributable to the project:

- Project would substantially increase traffic relative to existing load and capacity
- Project traffic would result in operations below the acceptable thresholds:
  - Roadway, LOS D or better
  - Intersections, LOS C or better
- Project would add traffic to existing roadways / intersections that already exceed the acceptable thresholds
- Project would substantially increase hazards due to design feature or incompatible uses
- Project would result in inadequate emergency access

Level of Service Analysis

Similar to the existing conditions analysis, the existing plus project ADT volumes were compared to the standard County and City threshold criteria. The existing plus project ADT volumes and LOS values are provided in Table 5.

Table 5 - Existing Plus Project Roadway Segment (ADT) LOS Analysis

Roadway Segment	ADT – LOS		
	2006 Operations	2018 Ex. Operations	Completion of Phase 2
Taylor Rd. w/o Taylor Ct. (a)	1,134 – B	1,200 – B	1,230 – B
Taylor Rd., Taylor Ct. - SR 99 (a)	1,518 – B	1,900 – B	2,068 – C
Taylor Rd., SR 99 - N. Golden State Blvd. (b)	23,520 – C	23,700 – C	23,780 – C
Taylor Rd., e/o N. Golden State Blvd. (c)	12,834 – E	12,900 – E	12,930 – E
N. Golden State Blvd., n/o Taylor Rd. (d)	6,576 – B	6,600 – B	6,610 – B
N. Golden State Blvd., s/o Taylor Rd. (e)	18,110 – A	18,200 – A	18,240 – A

(a) LOS based on the County's threshold for 2-lane "major collector" (rural)
(b) LOS based on the County's threshold for 4-lane "minor arterial"
(c) LOS based on the County's threshold for 2-lane "major collector" (urban)
(d) LOS based on the County's threshold for 4-lane "minor arterial"
(e) LOS based on the City's threshold for 4-lane "expressway"

The data in Table 5 indicates that existing plus project ADT volumes on Taylor Road west of N. Golden State Boulevard and on N. Golden State Boulevard north of Taylor Road will remain

within acceptable limits as defined by Stanislaus County (LOS D or better). Existing plus project ADT volumes on Taylor Road east of N. Golden State Boulevard will continue in the LOS E range, without or with the project traffic (all scenarios). However, based on the City's 2-lane arterial LOS threshold the existing plus project ADT volumes will be in the LOS C range (all scenarios). Existing plus project ADT volumes on N. Golden State Boulevard south of Taylor Road will remain in the LOS A range based on the City's LOS thresholds. Based on the County's LOS thresholds the project will have a potentially significant impact on Taylor Road east of N. Golden State Boulevard (current 2018 and future Phase 2 operations).

To evaluate the potential project impacts on peak hour operations, the study intersections were again analyzed using the Synchro 9 software and existing PHF (representing operations during the peak 15-minute period within the peak hour). The results of the existing plus project intersection LOS analysis are presented in Table 6. Copies of the Synchro 9 LOS worksheets are included with the Appendix Material.

Table 6 - Existing Plus Project Intersection LOS Analysis

Study Intersection on Taylor Road	Traffic Control	Peak Hour	Average Delay - LOS		
			2006 Operations	Existing 2018 Operations	Proposed Phase 2 Operations
N. Golden State Blvd.	Signal	AM PM	24.2 – C 27.3 – C	24.3 – C 27.5 – C	24.4 – C 27.6 – C
SR 99 – NB Ramps (a)	NB Stop	AM PM	3.7 – A (23.4 – C) 10.0 – B (>50 - F)	3.7 – A (23.4 – C) 10.7 – B (>50 - F)	3.7 – A (23.4 – C) 11.3 – B (>50 - F)
SR 99 – SB Ramps (a)	EB-WB Stop	AM PM	>50 - F (>50 - F) 24.3 – C (>50 – F)	>50 - F (>50 - F) 46.8 – E (>50 – F)	>50 - F (>50 - F) >50 – F (>50 – F)
Taylor Ct. (a)	SB-NB Stop	AM PM	0.6 – A (9.6 – A) 2.6 – A (9.3 – A)	0.9 – A (9.6 – A) 3.7 – A (9.6 – A)	1.1 – A (9.6 – A) 4.0 – A (9.7 – A)

(a) Highest delay on stop sign controlled approaches

The data in Table 6 indicates that average delays at the N. Golden State Boulevard and Taylor Court intersections will remain within acceptable limits during both peak hours (LOS C or better). Average delays at the SR 99 Northbound Ramps intersection will also remain with acceptable limits, but delays on the SR 99 northbound off ramp will remain in the LOS F range during the PM peak hour. Average delays at the SR 99 Southbound Ramps intersection and delays on Taylor Road (both approaches) will be in the LOS E-F range during both peak hours. Based on the

County's LOS thresholds the project will have a potentially significant impact on peak hour operations at the SR 99 Northbound Ramps and SR 99 Southbound Ramps intersections (current 2018 and future Phase 2 operations).

Signal Warrant Analysis

The analysis of existing plus project conditions documented significant delays on Taylor Road at the SR 99 Southbound Ramps intersection during both peak hours. The existing plus project peak hour volumes at the Taylor Road / SR 99 Southbound Ramps intersection were again reviewed to determine if the minimum "peak hour volume" signal warrant criteria would be satisfied (2014 MUTCD). The existing traffic volumes with the 2006 permitted and proposed Phase 2 operations exceed the minimum 70% signal warrant criteria during the AM and PM peak hours. A review of the 70% signal warrant graph indicates that the minimum criteria would even be exceeded without any traffic generated by the Best RV Center site. The existing plus project volumes (2006 permitted or proposed Phase 2) also exceed the 100% signal warrant criteria during the PM peak hour. The existing plus project volumes (proposed Phase 2) on the SR 99 northbound off ramp (left and through movements) are well below the minimum side street approach volume that would warrant the consideration of installing signal control (75 vehicles per hour, vph). A copy of the MUTCD "peak hour volume" signal warrant graph is included with the Appendix Material.

Project Access

As previously stated, the TIA includes an evaluation of access on Taylor Road at Taylor Court. Taylor Road extends west of Taylor Court along a short horizonal curve to the north (R=250' & L=135') over the BNSF railroad tracks. Taylor Road extends east of Taylor Court along a short horizonal curve to the south (R=600' & L=220') towards the SR 99 interchange. There is also a small vertical curve on Taylor Road at the BNSF railroad crossing, which is gated.

The evaluation of sight distance was based on the Caltrans criterion. The criterion are described in the Highway Design Manual (HDM, Chapter 200 and Chapter 400). Stopping sight distance is the minimum distance required by a driver to bring a vehicle to a complete stop after an object on the roadway has become visible. Corner sight distance is the minimum time required for a waiting vehicle (e.g. on a side street or driveway) to either cross all lanes of through traffic, or cross the near lanes of through traffic and turn left or right, without requiring the through traffic to radically alter their speed.

Taylor Road has a single travel lane in each direction adjacent to Taylor Court. Looking east along Taylor Road from Taylor Court the line of sight is relatively unobstructed. Westbound vehicles on Taylor Road and southbound vehicles on the SR 99 Southbound off ramp can be seen at the SR 99 Southbound Ramps intersection (450-500'). The westbound vehicles on Taylor Court are stop controlled, and therefore, are not traveling at a high speed when approaching Taylor Court. Vehicles on the SR 99 Southbound off-ramp are yield controlled and were also not observed

traveling at a high speed as they make the right turn on to Taylor Road. The line of sight looking west along Taylor Road from Taylor Court is somewhat obstructed by existing vegetation (on north side of Taylor Road west of Taylor Court) and multiple commercial signs within the public right-of-way (Best RV Center and Thermo King).

The evaluation of sight distance at Taylor Court included collecting a random sampling of vehicle speeds on Taylor Road (copy included with Appendix Material). As previously described, Taylor Road extends west of Taylor Court along a short horizonal curve and there is a small vertical curve over the BNSF railroad tracks. Eastbound vehicles on Taylor Road were observed slowing down on the approach to Taylor Court to go through the horizontal curve and over the railroad tracks. The average speed of eastbound vehicles was recorded at 30 MPH and the 85th percentile speed was calculated at 33 MPH.

Sight distance for eastbound vehicles was measured by placing a portable delineator on the north side of Taylor Road (near stop limit line on Taylor Court) and at a 15' setback (Caltrans criteria). Eastbound stopping sight distance was measured at 435' (adequate for 50 MPH). The corner sight distance was measured at 415', which is adequate for 35 MPH. The sight distance measurements demonstrate that there is sufficient stopping and corner sight distance at the Taylor Road / Taylor Court intersection. It's noted that sight distance on Taylor Road could be improved by trimming the existing vegetation and relocating the commercial signs outside the public right-of-way.

4.0 GENERAL PLAN CONDITIONS

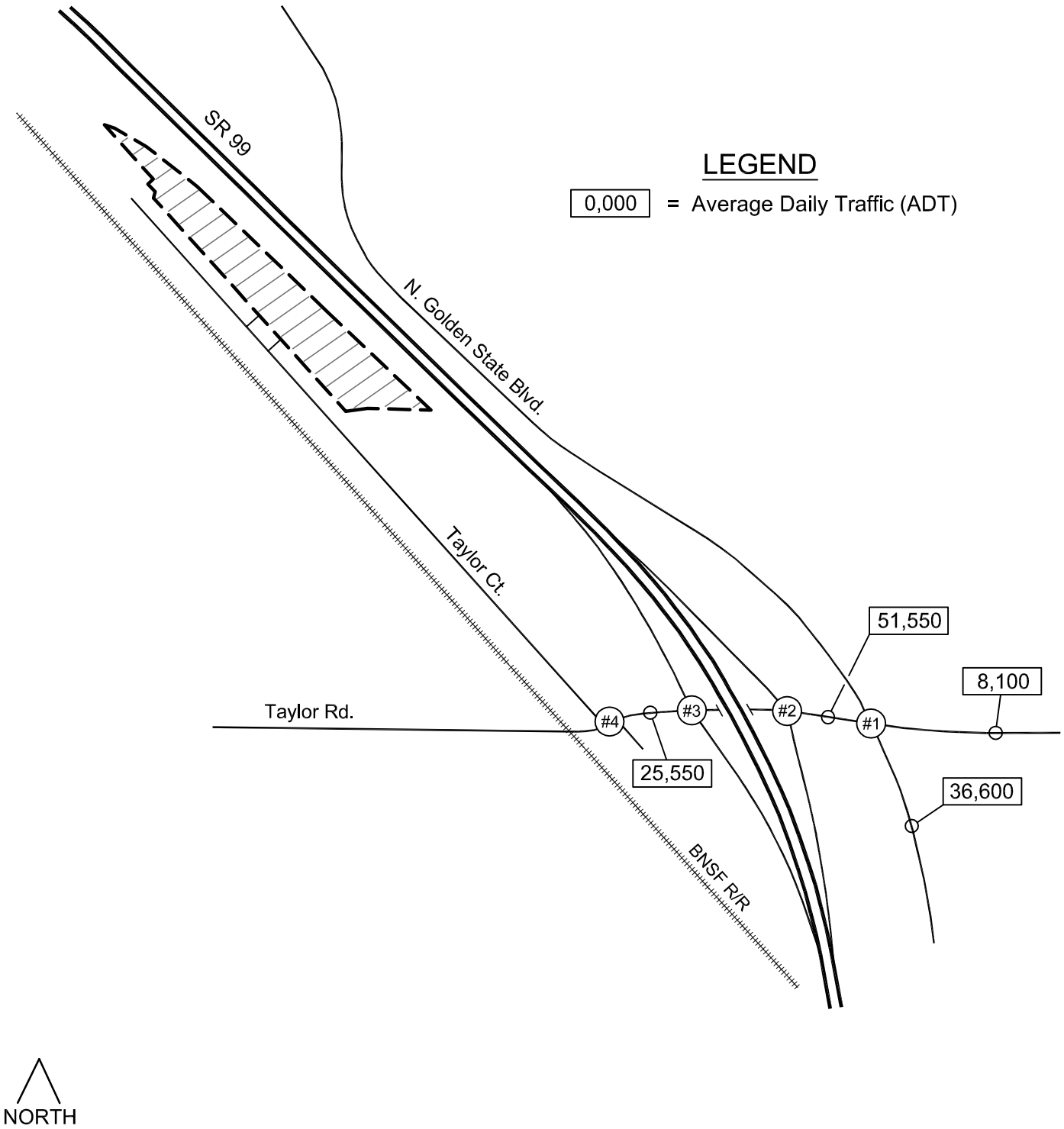
The TIA scope defined for the Best RV Center project included an evaluation of General Plan traffic conditions. As stated in the Introduction (Section 1.0), the City of Turlock's CFF Nexus Study has identified a need for improvements at the State Route (SR) 99 / Taylor Road interchange. The evaluation of existing operations (Section 2.0) confirms that vehicle delays are currently in the LOS E-F range at the SR 99 / Taylor Road interchange intersections during one or both peak hours. Stanislaus County will be participating in the funding of the interchange improvements and will be requiring new projects is this portion of the County to pay their fair-share towards the future interchange improvements. Therefore, County staff has requested that the Best RV Center TIA include a determination of the project's fair-share percentage towards the future SR 99 / Taylor Road interchange improvements.

The most current General Plan information for Taylor Road and N. Golden State Boulevard was obtained from the City of Turlock. The information includes the General Plan ADT projections and future roadway classifications needed to provide acceptable LOS. The General Plan traffic data does not include any peak hour direction turning movement projections, but it's assumed that the weekday PM peak hour would continue comprises about 9-10% of the daily total. The City's General Plan ADT projections for Taylor Road and N. Golden State Boulevard are illustrated on Figure 5.

The City's General Plan information indicates that Taylor Road west of SR 99 will have a 4-lane expressway section, while the section between SR 99 and N. Golden State Boulevard will have a 6-lane expressway section. Taylor Road east of N. Golden State Boulevard will continue to be classified as a 2-lane collector street. N. Golden State Boulevard south of Taylor Road will also have a 6-lane expressway section. The County and City of Turlock have indicated that there is no specific project for the needed SR 99 / Taylor Road interchange improvements at this time. Though Caltrans currently has a project for improvements at the SR 99 / Fulkerth Road interchange (completion scheduled for December 2019), there is no improvement project for the SR 99 / Taylor Road interchange at this time.

Project Traffic Volumes for General Plan Analysis

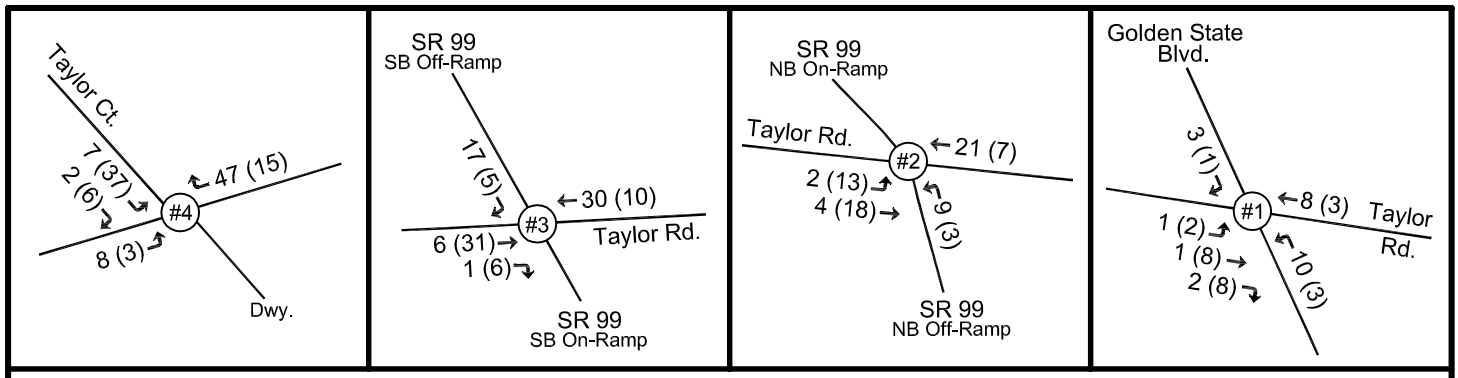
The General Plan ADT traffic projections illustrated on Figure 5 are considered representative of base-line conditions for this scenario. As described under the Project Conditions (Section 3.0), the existing Best RV Center currently has 65 employees. Upon completion of the proposed Phase 2 project, the Best RV Center will have a total of 90 employees. However, the County's "rezoning" approval in 2006 only included an estimate of up to 8 employees. Therefore, the evaluation of potential project impacts presents an analysis of the "net" increase in employee trips between 2006 and through the completion of Phase 2 (+82 employees). The "net" increase in trips associated with the Best RV Center site development (between 2006 and through Phase 2) are illustrated in Figure 6 (project volumes on Figure 4C - project volumes on Figure 4A).



PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 5
GENERAL PLAN
TRAFFIC VOLUMES



- +82 Employees -

AM Peak Hour: 55 (In) & 9 (out)
PM Peak Hour: 18 (In) & 43 (out)
Daily: 646

LEGEND

← 00 (00) = AM (PM) Peak Hour Volume

000 = Average Daily Traffic (ADT)

194
SR 99
N. Golden State Blvd.
646
Taylor Ct.
34
96
Taylor Rd.
#4
#3
#2
#1
96
550
260
130
BNSF R/R
96
NORTH

PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

FIGURE 6
PROJECT VOLUMES
- NET INCREASE -
(PHASE 2 - 2006)

Level of Service Analysis

Similar to the analysis conducted for the existing and project conditions, the General Plan base-line ADT projections (Figure 5) and General Plan plus project ADT volumes (Figure 5 plus Figure 6) were compared to the standard threshold criteria. Since the General Plan ADT traffic projection data was obtained from the City of Turlock, the City's LOS thresholds for roadway segments was used for the General Plan analysis. The General Plan roadway segments, General Plan base-line ADT projections (Figure 5), General Plan plus project ADT volumes, and LOS values are provided in Table 7.

Table 7 - General Plan and General Plan Plus Project
Roadway Segment (ADT) LOS Analysis

Roadway Segment	ADT – LOS	
	GP Base-Line	GP Plus Project "Net" Increase (Phase 2 - 2006)
Taylor Rd. w/o SR 99 (a)	25,550 – B	26,100 – B
Taylor Rd., SR 99 - N. Golden State Blvd. (b)	51,550 – D	51,810 – D
Taylor Rd., e/o N. Golden State Blvd. (c)	8,100 – B	8,196 – B
N. Golden State Blvd., s/o Taylor Rd. (b)	36,600 – B	36,730 – B

(a) LOS based on the City's threshold for 4-lane "expressway"
(b) LOS based on the City's threshold for a 6-lane "expressway"
(c) LOS based on the City's threshold for a 2-lane "collector"

The data in Table 7 indicates that the General Plan ADT base-line projections on Taylor Road and N. Golden State Boulevard will be within acceptable limits as defined by Stanislaus County (LOS D or better). In addition, the traffic generated by the Best RV Center site development (between the 2006 permitted operations and through Phase 2) will not significantly impact future daily operations. Since there is no specific improvement project for the SR 99 / Taylor Road interchange at this time and the General Plan traffic projections didn't include any peak hour direction turning movements, the analysis of intersection peak hour operations was beyond the scope for the Best RV Center TIA. It's noted that the development of future geometric improvements for the SR 99 / Taylor Road interchange will require that a detailed Project Study Report (PSR) be prepared for Caltrans approval. The preparation of an Intersection Control Evaluation (ICE) for the SR 99 / Taylor Road ramp intersections will also more than likely be required to identify the best design for each side of the SR 99 freeway.

Project's Fair-Share Contribution (SR 99 / Taylor Road Interchange)

Information in the City of Turlock's CFF Nexus Study outlines the fees associated with the various land uses for the CFF Benefit Zones (Downtown Pedestrian Priority Area, Master Plan Area, and

City Infill Area). However, the Best RV Center site is not located within either of the CFF Benefit Zones. The City's CFF Nexus Study does provide an estimate for the future improvements at the SR 99 / Taylor Road interchange (CFF Update Table - $10,363,703). Based on the City's General Plan ADT projections the Best RV Center site development (2006 through the completion of Phase 2) comprises approximately 2.11% of the General Plan plus project volumes on the west side of SR 99 (550 / 26,100) and about 0.50% of the General Plan plus project volumes on the east side of SR 99 (260 / 51,810). The project volumes on Figure 6 indicate that 194 ADT would use SR 99 to the north and 96 ADT would use SR 99 to the south (a total of 290 ADT on SR 99), with the remaining trips using Taylor Road east or west of SR 99. Therefore, the Best RV Center site development would comprise approximately 1.13% of the General Plan plus project volumes using the SR 99 interchange ramps (290 / (51,810 - 26,100)). The project applicant shall negotiate the fair-share contribution towards the future SR 99 / Taylor Road interchange improvements with the County and City of Turlock. As discussed with County and City staff, further development of the Best RV Center site may be eligible for some fee credits since Phase 2 will be developed on the former site of the Peterbilt Truck Sales & Service Center.

County's Public Facilities Fee

The Best RV Center project will also be subject to the County's Public Facilities Fee, which is outlined in the Comprehensive Public Facilities Impact Fee Update Study. The public facilities fee also includes the County's Regional Traffic Impact Fee (RTIF). The County's 2018 fee schedule does not include a specific category for a RV sales or service facility. The land use category that best matches the Best RV site development is the "small retail" commercial category (<50,000 SF). Phase 1 of the Best RV Center project does not include any additional building space. Phase 2 includes two (2) new small buildings (3 sides with roof only). The proposed RV sales staging area is 10,800 SF (60' x 180') and the proposed RV service area is 4,320 SF (60' x 72'). The total area associated with Phase 2 is 15,120 SF (10,800 + 4,320). The County's Public Facilities Fee for a small retail use in the unincorporated areas is $3,218 / 1,000 SF. Therefore, the County's Public Facilities Fee is estimated at $48,656 (15.12 x $3,218). Again, it's noted that the project applicant shall negotiate the Public Facilities Fee with County staff as the further development of the Best RV Center site may be eligible for some fee credits (Phase 2 will be developed on the former Peterbilt Truck Sales & Service Center site).

5.0 MITIGATION MEASURES AND RECOMMENDATIONS

As documented in the existing conditions analysis, existing ADT volumes on Taylor Road east of N. Golden State Boulevard are within the LOS E range based on the County's LOS thresholds. However, based on the City's LOS thresholds for a 2-lane arterial the existing ADT volume are within the LOS C range. The City's General Plan projections for this segment of Taylor Road indicate that future daily volumes would be lower than existing volumes. The General Plan plus project ADT projections will be within the LOS B range, and therefore, no mitigation measures are proposed for this segment of Taylor Road.

The analysis of existing peak hour operations documented delays within the LOS E-F range at the SR 99 Southbound Ramps intersection, on Taylor Road, and on the SR 99 northbound off ramp during one or both peak hour periods. Observations conducted during the morning and afternoon commuter peak periods verified the existing congestion, especially during the PM peak hour. The existing AM and PM peak hour volumes at the SR 99 Southbound Ramps intersection exceed the minimum 70% signal warrant criteria (PM peak hour volumes also exceed 100% warrant criteria).

The installation of "all-way" stop control at the SR 99 Southbound Ramps intersection as a possible "interim" solution would create significant vehicle queues on the southbound off ramp. The installation of signal control at the SR 99 Southbound Ramps intersection would result in average delays within the LOS B range but would create significant queues on the southbound off ramp, possibly extending up to the SR 99 freeway section. It was also thought that widening the SR 99 southbound office ramp to provide 2 lanes for the free-flowing left turn movement may reduce congestion and delays. However, when modeled (Synchro 9 software) this improvement did not reduce the significant delays on Taylor Road. The Synchro 9 LOS worksheets are included with the Appendix Material. There are no feasible mitigation measures that will reduce congestion and delays at the SR 99 / Taylor Road interchange. Significant improvements to the SR 99 / Taylor Road interchange will be required to provide acceptable LOS.

The analysis of existing plus project operations identified potentially significant project impacts at the SR 99 Northbound and Southbound Ramps intersections (current 2018 and proposed Phase 2 operations). As stated under the Existing Conditions (Section 2.0), much of the congestion during the PM peak period was related to the close spacing of intersections on Taylor Road at the SR 99 interchange. Again, there are no feasible mitigation measures that will reduce congestion and delays at the SR 99 / Taylor Road interchange without significant improvements. Therefore, the project's proposed mitigation measures include payment of the County's Public Facilities Fee and negotiation of a reasonable fair-share contribution towards the future improvements at the SR 99 / Taylor Road interchange.

The project applicant should consider developing Transportation Demand Management (TDM) strategies to reduce employee vehicle peak hour trips (e.g. provide incentives to employees to carpool / rideshare, provide shuttle service for employees, provide bicycle storage facilities, etc).

Local Roadway Recommendations

The following recommendations are based on the project area site visit and analysis of existing conditions, and are provided for the County's and City's consideration only:

- Restripe stop limit line and STOP pavement markings on Taylor Court at Taylor Road
- Trim existing vegetation on north side of Taylor Road, west of Taylor Court to improve sight distance at the Taylor Road / Taylor Court intersection
- Relocate existing commercial signs within the public right-of-way (northwest corner) to improve sight distance at the Taylor Road / Taylor Court intersection
- Install KEEP CLEAR pavement markings on Taylor Road for eastbound traffic at the SR 99 northbound off ramp
- Work with Stanislaus Regional Transit (StaRT) and Turlock Transit to develop local bus stops on Taylor Road
- Develop bike lane facility improvements along Taylor Road
- Consider restriping the existing eastbound lane between the SR 99 Southbound Ramps and N. Golden State Boulevard intersections to provide two (2) through eastbound lanes

END

APPENDIX MATERIAL

- Existing Weekday Peak Hour Count Summary
- Weekday AM and PM Peak Period Traffic Count Data (Tuesday - Sept. 25, 2018)
- Saturday and Sunday Traffic Count Data (Sept. 22 & 23, 2018)
- Level of Service (LOS) LOS Descriptions
- Stanislaus County Roadway Segment Level of Service (LOS) Criteria
- City of Turlock Average Daily Traffic (ADT) Thresholds
- Synchro 9 Software LOS Worksheets
- Best RV Center Weekday and Weekend Data Trip Generation Calculation Data
- Existing Plus Project Volumes (2006 and Phase 2 Operations)
- 2014 California MUCTD Traffic Signal Warrant Graphs
- Vehicle Speed Data on Taylor Road at Taylor Court
- Best RV Center Preliminary Trip Generation Analysis (PTE; May 21, 2018)

PINNACLE TRAFFIC ENGINEERING

831 C Street • Hollister, CA 95023 • (831) 638-9260
PinnacleTE.com

Best RV Center Project; Stanislaus County, CA

- Existing Weekday Peak Hour Count Summary (Tuesday - Sept. 25, 2018) -

- Taylor Road Study Intersection Totals -

Period	Taylor Court	SB 99 SB Ramps	SB 99 NB Ramps	Golden State	15-Min. Totals	60-Min. Totals
7:00 - 7:15 AM:	43	198	514	593	1,348	
7:15 - 7:30 AM:	47	295	641	749	1,732	
7:30 - 7:45 AM:	44	278	568	747	1,637	
7:45 - 8:00 AM:	44	330	584	779	1,737	6,454
8:00 - 8:15 AM:	39	222	441	593	1,295	6,401
8:15 - 8:30 AM:	41	204	368	470	1,083	5,752
8:30 - 8:45 AM:	35	247	418	515	1,215	5,330
8:45 - 9:00 AM:	48	273	444	536	1,301	4,894
	AM Peak Hour: 7:00 - 8:00			**PHF = 6,454 / 4 x 1,737 = 0.929**		

7:00 - 8:00 AM:	178	1,101	2,307	2,868
8:00 - 9:00 AM:	163	946	1,671	2,114
% Difference:	**109%**	**116%**	**138%**	**136%**

- Taylor Road Study Intersection Totals -

Period	Taylor Court	SB 99 SB Ramps	SB 99 NB Ramps	Golden State	15-Min. Totals	60-Min. Totals
4:00 - 4:15 PM:	29	284	497	605	1,415	
4:15 - 4:30 PM:	35	315	486	622	1,458	
4:30 - 4:45 PM:	46	323	537	626	1,532	
4:45 - 5:00 PM:	30	352	557	684	1,623	6,028
5:00 - 5:15 PM:	72	360	598	746	1,776	6,389
5:15 - 5:30 PM:	49	348	577	749	1,723	6,654
5:30 - 5:45 PM:	43	354	556	700	1,653	6,775
5:45 - 6:00 PM:	34	310	458	594	1,396	6,548
	PM Peak Hour: 4:45 - 5:45 PM			**PHF = 6,775 / 4 x 1,776 = 0.954**		

4:45 - 5:45 PM:	194	1,414	2,288	2,879
4:00 - 5:00 PM:	140	1,274	2,077	2,537
% Difference:	**139%**	**111%**	**110%**	**113%**

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Golden State Blvd & W Taylor Rd
City: Turlock
Control: Signalized

Project ID: 18-07334-005
Date: 9/25/2018

Total

NS/EW Streets:	N Golden State Blvd				N Golden State Blvd				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	1	1	0	1	1	1	0	1	1	1	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	143	37	2	0	4	14	5	0	9	64	90	0	5	207	13	0	593
7:15 AM	157	48	2	0	9	38	6	0	10	101	144	0	4	205	25	0	749
7:30 AM	151	62	7	0	7	62	3	0	22	70	156	0	11	154	42	0	747
7:45 AM	158	112	8	0	6	31	3	0	21	87	183	0	11	127	32	0	779
8:00 AM	98	52	4	0	12	41	6	0	4	89	110	0	21	133	23	0	593
8:15 AM	80	47	8	0	5	25	5	0	6	72	81	0	8	114	19	0	470
8:30 AM	57	27	3	0	7	41	3	0	10	95	105	0	11	137	19	0	515
8:45 AM	81	29	3	0	19	28	4	0	11	102	124	0	7	110	18	0	536
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	925	414	37	0	69	280	35	0	93	680	993	0	78	1187	191	0	4982
APPROACH %'s :	67.22%	30.09%	2.69%	0.00%	17.97%	72.92%	9.11%	0.00%	5.27%	38.51%	56.23%	0.00%	5.36%	81.52%	13.12%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	609	259	19	0	26	145	17	0	62	322	573	0	31	693	112	0	2868
PEAK HR FACTOR :	0.964	0.578	0.594	0.000	0.722	0.585	0.708	0.000	0.705	0.797	0.783	0.000	0.705	0.837	0.667	0.000	0.920
	0.798				0.653				0.822				0.893				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	1	1	0	1	1	1	0	1	1	1	0	1	1.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	103	31	3	0	11	43	7	0	11	138	146	0	8	89	15	0	605
4:15 PM	86	45	6	0	20	46	5	0	5	122	170	0	11	96	10	0	622
4:30 PM	98	28	4	0	12	36	4	0	9	130	177	0	13	105	10	0	626
4:45 PM	115	45	12	0	14	45	12	0	12	134	170	0	12	101	12	0	684
5:00 PM	131	40	10	0	17	69	4	0	9	132	204	1	6	110	13	0	746
5:15 PM	115	36	12	0	19	77	14	0	6	113	208	0	18	119	12	0	749
5:30 PM	78	39	18	0	23	65	4	0	5	139	202	0	7	111	9	0	700
5:45 PM	66	39	8	0	16	62	7	0	3	127	164	0	14	79	9	0	594
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	792	303	73	0	132	443	57	0	60	1035	1441	1	89	810	90	0	5326
APPROACH %'s :	67.81%	25.94%	6.25%	0.00%	20.89%	70.09%	9.02%	0.00%	2.36%	40.80%	56.80%	0.04%	9.00%	81.90%	9.10%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	439	160	52	0	73	256	34	0	32	518	784	1	43	441	46	0	2879
PEAK HR FACTOR :	0.838	0.889	0.722	0.000	0.793	0.831	0.607	0.000	0.667	0.932	0.942	0.250	0.597	0.926	0.885	0.000	0.961
	0.899				0.825				0.965				0.889				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 NB ramps & W Taylor Rd
City: Turlock
Control: 1-Way Stop (NB)

Project ID: 18-07334-004
Date: 9/25/2018

Total

NS/EW Streets:	SR 99 NB ramps				SR 99 NB ramps				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	1	1	0	0	0	0.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	37	0	0	0	0	0	4	119	0	0	0	70	283	0	514
7:15 AM	4	0	44	0	0	0	0	0	4	215	0	0	0	71	303	0	641
7:30 AM	6	0	47	0	0	0	0	0	1	204	0	0	0	54	255	1	568
7:45 AM	6	0	47	0	0	0	0	0	1	248	0	0	0	61	221	0	584
8:00 AM	3	1	37	0	0	0	0	0	3	159	0	0	0	48	190	0	441
8:15 AM	1	0	28	0	0	0	0	0	8	133	0	0	0	46	152	0	368
8:30 AM	4	0	28	0	0	0	0	0	3	185	0	0	0	46	152	0	418
8:45 AM	6	1	39	0	0	0	0	0	3	199	0	0	0	53	143	0	444
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	31	2	307	0	0	0	0	0	27	1462	0	0	0	449	1699	1	3978
APPROACH %'s :	9.12%	0.59%	90.29%	0.00%					1.81%	98.19%	0.00%	0.00%	0.00%	20.89%	79.06%	0.05%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	17	0	175	0	0	0	0	0	10	786	0	0	0	256	1062	1	2307
PEAK HR FACTOR :	0.708	0.000	0.931	0.000	0.000	0.000	0.000	0.000	0.625	0.792	0.000	0.000	0.000	0.901	0.876	0.250	0.900
	0.906								0.799				0.882				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	0	0	0	1	1	0	0	0	0.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	57	0	0	0	0	0	3	238	0	0	0	39	160	0	497
4:15 PM	1	1	31	0	0	0	0	0	5	268	0	0	0	31	149	0	486
4:30 PM	0	0	46	0	0	0	0	0	10	269	0	0	0	30	182	0	537
4:45 PM	1	1	43	0	0	0	0	0	4	280	0	0	0	47	181	0	557
5:00 PM	4	1	53	0	0	0	0	0	11	289	0	0	0	51	189	0	598
5:15 PM	2	0	48	0	0	0	0	0	7	276	0	0	0	47	197	0	577
5:30 PM	1	1	44	0	0	0	0	0	4	307	0	0	0	31	168	0	556
5:45 PM	1	0	31	0	0	0	0	0	5	259	0	0	0	35	127	0	458
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	4	353	0	0	0	0	0	49	2186	0	0	0	311	1353	0	4266
APPROACH %'s :	2.72%	1.09%	96.19%	0.00%					2.19%	97.81%	0.00%	0.00%	0.00%	18.69%	81.31%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	8	3	188	0	0	0	0	0	26	1152	0	0	0	176	735	0	2288
PEAK HR FACTOR :	0.500	0.750	0.887	0.000	0.000	0.000	0.000	0.000	0.591	0.938	0.000	0.000	0.000	0.863	0.933	0.000	0.957
	0.858								0.947				0.933				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 99 SB ramps & W Taylor Rd
City: Turlock
Control: 2-Way Stop (EB/WB)

Project ID: 18-07334-003
Date: 9/25/2018

Total

NS/EW Streets:	SR 99 SB ramps				SR 99 SB ramps				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	1	0	0	0.5	0.5	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	113	2	2	0	0	13	1	0	43	24	0	0	198
7:15 AM	0	0	0	0	205	0	3	0	0	17	0	0	50	20	0	0	295
7:30 AM	0	0	0	0	181	0	8	0	0	20	1	0	51	17	0	0	278
7:45 AM	0	0	0	0	240	0	7	0	0	10	3	0	44	26	0	0	330
8:00 AM	0	0	0	0	146	0	9	0	0	10	3	0	39	15	0	0	222
8:15 AM	0	0	0	0	127	1	10	0	0	18	1	0	38	9	0	0	204
8:30 AM	0	0	0	0	172	2	7	0	0	14	2	0	39	11	0	0	247
8:45 AM	0	0	0	0	189	1	13	0	0	13	1	0	33	23	0	0	273
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1373	6	59	0	0	115	12	0	337	145	0	0	2047
APPROACH %'s :					95.48%	0.42%	4.10%	0.00%	0.00%	90.55%	9.45%	0.00%	69.92%	30.08%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	772	0	27	0	0	57	7	0	184	78	0	0	1125
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.804	0.000	0.750	0.000	0.000	0.713	0.583	0.000	0.902	0.750	0.000	0.000	0.852
					0.809				0.762				0.936				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	1	0	0	0.5	0.5	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	225	1	5	0	0	16	2	0	31	4	0	0	284
4:15 PM	0	0	0	0	246	2	8	0	0	23	1	0	30	5	0	0	315
4:30 PM	0	0	0	0	258	1	4	0	0	24	7	0	23	6	0	0	323
4:45 PM	0	0	0	0	282	0	3	0	0	10	5	0	41	11	0	0	352
5:00 PM	0	0	0	0	262	1	4	0	0	26	14	0	32	21	0	0	360
5:15 PM	0	0	0	0	263	0	1	0	0	27	8	0	32	17	0	0	348
5:30 PM	0	0	0	0	288	0	3	0	0	24	5	0	24	10	0	0	354
5:45 PM	0	0	0	0	248	2	6	0	0	13	6	0	26	9	0	0	310
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2072	7	34	0	0	163	48	0	239	83	0	0	2646
APPROACH %'s :					98.06%	0.33%	1.61%	0.00%	0.00%	77.25%	22.75%	0.00%	74.22%	25.78%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1095	1	11	0	0	87	32	0	129	59	0	0	1414
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.951	0.250	0.688	0.000	0.000	0.806	0.571	0.000	0.787	0.702	0.000	0.000	0.982
					0.951				0.744				0.887				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Taylor Ct & W Taylor Rd
City: Turlock
Control: 1-Way Stop (SB)

Project ID: 18-07334-002
Date: 9/25/2018

Total

NS/EW Streets:	Taylor Ct				Taylor Ct				W Taylor Rd				W Taylor Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	4	0	0	0	1	0	0	12	0	0	1	23	2	0	43
7:15 AM	0	0	0	0	0	1	0	0	3	18	0	0	1	20	3	1	47
7:30 AM	1	0	0	0	2	0	0	0	1	16	0	0	1	17	6	0	44
7:45 AM	0	0	0	0	1	0	0	0	3	9	0	0	0	18	12	1	44
8:00 AM	0	0	1	0	2	0	0	0	2	11	0	0	0	18	4	1	39
8:15 AM	0	0	0	0	5	0	0	0	1	12	0	0	5	13	5	0	41
8:30 AM	0	0	1	0	1	0	0	0	2	14	0	0	2	5	8	2	35
8:45 AM	0	0	1	0	2	0	0	0	1	9	0	0	1	14	20	0	48
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	7	0	13	1	1	0	13	101	0	0	11	128	60	5	341
APPROACH %'s :	12.50%	0.00%	87.50%	0.00%	86.67%	6.67%	6.67%	0.00%	11.40%	88.60%	0.00%	0.00%	5.39%	62.75%	29.41%	2.45%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	1	0	4	0	3	1	1	0	7	55	0	0	3	78	23	2	178
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.375	0.250	0.250	0.000	0.583	0.764	0.000	0.000	0.750	0.848	0.479	0.500	0.947
	0.313				0.625				0.738				0.855				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	6	0	1	0	0	13	1	0	0	4	3	1	29
4:15 PM	0	0	0	0	5	0	0	0	0	16	0	0	0	10	3	1	35
4:30 PM	0	0	4	0	7	0	0	0	2	23	0	0	2	6	2	0	46
4:45 PM	0	0	1	0	7	0	0	0	0	8	0	0	0	11	3	0	30
5:00 PM	0	0	1	0	22	0	7	0	0	14	0	0	8	16	3	1	72
5:15 PM	0	0	3	0	11	0	3	0	0	17	0	0	0	13	0	2	49
5:30 PM	0	0	1	0	10	0	1	0	0	20	0	0	1	8	1	1	43
5:45 PM	1	0	0	0	7	0	1	0	0	7	1	0	2	10	4	1	34
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	10	0	75	0	13	0	2	118	2	0	13	78	19	7	338
APPROACH %'s :	9.09%	0.00%	90.91%	0.00%	85.23%	0.00%	14.77%	0.00%	1.64%	96.72%	1.64%	0.00%	11.11%	66.67%	16.24%	5.98%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	0	5	0	50	0	12	0	0	58	1	0	11	47	8	5	198
PEAK HR FACTOR :	0.250	0.000	0.417	0.000	0.568	0.000	0.429	0.000	0.000	0.725	0.250	0.000	0.344	0.734	0.500	0.625	0.688
	0.500				0.534				0.738				0.634				

Prepared by NDS/ATD

VOLUME

Taylor Ct Bet. Dwy 1 & Wood Furniture Gallery

Day: Saturday
Date: 9/22/2018

City: Turlock
Project #: CA18_7333_001

DAILY TOTALS	NB	SB	EB	WB	Total
	246	248	0	0	494

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	6		7						13	
00:15	0		0						0		12:15	6		8						14	
00:30	0		0						0		12:30	2		3						5	
00:45	0		0						0		12:45	5	19	11	29					16	48
01:00	0		0						0		13:00	5		7						12	
01:15	0		0						0		13:15	5		4						9	
01:30	1		1						2		13:30	5		8						13	
01:45	0	1	0	1					0	2	13:45	10	25	4	23					14	48
02:00	0		0						0		14:00	6		5						11	
02:15	1		1						2		14:15	5		4						9	
02:30	1		1						2		14:30	4		10						14	
02:45	0	2	0	2					0	4	14:45	1	16	4	23					5	39
03:00	1		1						2		15:00	8		9						17	
03:15	0		0						0		15:15	3		5						8	
03:30	1		1						2		15:30	6		2						8	
03:45	0	2	0	2					0	4	15:45	8	25	7	23					15	48
04:00	0		1						1		16:00	3		4						7	
04:15	1		1						2		16:15	1		3						4	
04:30	0		0						0		16:30	4		4						8	
04:45	0	1	1	3					1	4	16:45	5	13	7	18					12	31
05:00	1		1						2		17:00	3		8						11	
05:15	0		0						0		17:15	4		5						9	
05:30	1		1						2		17:30	2		5						7	
05:45	0	2	0	2					0	4	17:45	0	9	7	25					7	34
06:00	0		0						0		18:00	1		14						15	
06:15	0		0						0		18:15	1		8						9	
06:30	4		0						4		18:30	1		8						9	
06:45	1	5	0						1	5	18:45	0	3	1	31					1	34
07:00	2		0						2		19:00	1		4						5	
07:15	0		0						0		19:15	1		2						3	
07:30	2		0						2		19:30	1		0						1	
07:45	2	6	0						2	6	19:45	1	4	0	6					1	10
08:00	5		0						5		20:00	0		1						1	
08:15	5		4						9		20:15	1		0						1	
08:30	12		2						14		20:30	0		0						0	
08:45	10	32	0	6					10	38	20:45	1	2	0	1					1	3
09:00	8		6						14		21:00	0		0						0	
09:15	2		0						2		21:15	0		0						0	
09:30	7		2						9		21:30	1		1						2	
09:45	3	20	1	9					4	29	21:45	0	1	0	1					0	2
10:00	4		3						7		22:00	0		0						0	
10:15	7		2						9		22:15	0		0						0	
10:30	10		2						12		22:30	0		0						0	
10:45	13	34	7	14					20	48	22:45	2	2	2	2					4	4
11:00	7		6						13		23:00	0		0						0	
11:15	4		3						7		23:15	0		0						0	
11:30	6		3						9		23:30	1		1						2	
11:45	4	21	14	26					18	47	23:45	0	1	0	1					0	2
TOTALS		126		65						191	TOTALS		120		183						303
SPLIT %		66.0%		34.0%						38.7%	SPLIT %		39.6%		60.4%						61.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	246	248	0	0	494

AM Peak Hour	10:15	11:30			10:15	PM Peak Hour	13:15	17:45			12:45
AM Pk Volume	37	32			54	PM Pk Volume	26	37			50
Pk Hr Factor	0.712	0.571			0.675	Pk Hr Factor	0.650	0.661			0.781
7 - 9 Volume	38	6	0	0	44	4 - 6 Volume	22	43	0	0	65
7 - 9 Peak Hour	08:00	07:45			08:00	4 - 6 Peak Hour	16:30	16:45			16:30
7 - 9 Pk Volume	32	6	0	0	38	4 - 6 Pk Volume	16	25	0	0	40
Pk Hr Factor	0.667	0.375	0.000	0.000	0.679	Pk Hr Factor	0.800	0.781	0.000	0.000	0.833

Prepared by NDS/ATD

VOLUME

Taylor Ct Bet. Dwy 1 & Wood Furniture Gallery

Day: Sunday
Date: 9/23/2018

City: Turlock
Project #: CA18_7333_001

DAILY TOTALS	NB	SB	EB	WB	Total
	193	189	0	0	382

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	7		5						12	
00:15	1		1						2		12:15	6		5						11	
00:30	1		0						1		12:30	6		0						6	
00:45	0	2	1	2					1	4	12:45	6	25	4	14					10	39
01:00	0		0						0		13:00	6		7						13	
01:15	0		1						1		13:15	3		8						11	
01:30	1		1						2		13:30	9		11						20	
01:45	0	1	0	2					0	3	13:45	7	25	5	31					12	56
02:00	0		0						0		14:00	8		7						15	
02:15	1		0						1		14:15	8		7						15	
02:30	1		1						2		14:30	5		8						13	
02:45	0	2	0	1					0	3	14:45	2	23	1	23					3	46
03:00	0		1						1		15:00	4		9						13	
03:15	0		0						0		15:15	5		5						10	
03:30	0		0						0		15:30	0		2						2	
03:45	0		0	1					0	1	15:45	2	11	4	20					6	31
04:00	0		0						0		16:00	2		0						2	
04:15	0		0						0		16:15	8		3						11	
04:30	0		0						0		16:30	2		7						9	
04:45	0		0						0		16:45	3	15	8	18					11	33
05:00	0		0						0		17:00	4		6						10	
05:15	0		0						0		17:15	1		9						10	
05:30	0		0						0		17:30	2		3						5	
05:45	0		0						0		17:45	1	8	6	24					7	32
06:00	0		0						0		18:00	1		14						15	
06:15	0		0						0		18:15	0		6						6	
06:30	0		0						0		18:30	1		2						3	
06:45	0		0						0		18:45	1	3	1	23					2	26
07:00	1		0						1		19:00	1		1						2	
07:15	1		0						1		19:15	0		0						0	
07:30	2		0						2		19:30	0		0						0	
07:45	1	5	0						1	5	19:45	2	3	2	3					4	6
08:00	1		1						2		20:00	0		0						0	
08:15	5		2						7		20:15	0		0						0	
08:30	8		1						9		20:30	0		0						0	
08:45	11	25	1	5					12	30	20:45	0		0						0	
09:00	4		0						4		21:00	0		0						0	
09:15	4		2						6		21:15	1		1						2	
09:30	5		1						6		21:30	0		0						0	
09:45	4	17	1	4					5	21	21:45	1	2	1	2					2	4
10:00	2		2						4		22:00	0		0						0	
10:15	2		2						4		22:15	1		0						1	
10:30	2		0						2		22:30	0		0						0	
10:45	6	12	0	4					6	16	22:45	0	1	0						0	1
11:00	1		5						6		23:00	0		0						0	
11:15	3		3						6		23:15	0		0						0	
11:30	4		1						5		23:30	0		0						0	
11:45	5	13	3	12					8	25	23:45	0		0						0	
TOTALS		77		31						108	TOTALS		116		158						274
SPLIT %		71.3%		28.7%						28.3%	SPLIT %		42.3%		57.7%						71.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	193	189	0	0	382

AM Peak Hour	08:15	11:30			11:45	PM Peak Hour	13:30	17:15			13:30
AM Pk Volume	28	14			37	PM Pk Volume	32	32			62
Pk Hr Factor	0.636	0.700			0.771	Pk Hr Factor	0.889	0.571			0.775
7 - 9 Volume	30	5	0	0	35	4 - 6 Volume	23	42	0	0	65
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:15	16:30			16:15
7 - 9 Pk Volume	25	5	0	0	30	4 - 6 Pk Volume	17	30	0	0	41
Pk Hr Factor	0.568	0.625	0.000	0.000	0.625	Pk Hr Factor	0.531	0.833	0.000	0.000	0.932

Prepared by National Data & Surveying Services

Driveway In & Out

Location: Driveway #4 north of the end of Taylor Ct
City: Turlock

Date: 09/22/2018
Day: Saturday

TIME	Vehicle		
	In	Out	TOTAL
1:00 PM	0	1	***1***
1:15 PM	0	0	***0***
1:30 PM	0	0	***0***
1:45 PM	0	0	***0***
2:00 PM	1	1	***2***
2:15 PM	0	0	***0***
2:30 PM	0	0	***0***
2:45 PM	0	0	***0***
Totals	**1**	**2**	***3***

The ability of a highway system to carry traffic is expressed in terms of it's "Service Level" at critical locations, usually intersections. Service levels are defined as follows:

"LOS A" Conditions primarily describe free-flowing operations. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.

"LOS B" Conditions describe reasonably unimpeded operations. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.

"LOS C" Conditions describe stable operations. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.

"LOS D" Conditions describe less stable operations in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.

"LOS E" Conditions describe unstable operations and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.

"LOS F" Conditions describe flow at extreme low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity (V/C) ratio greater than 1.0.

Where a conflict between the roadway classifications of the Circulation Element and the most current Public Works Plans and Specifications may exist, the Director of Public Works shall determine the appropriate street section to be used for roadway design and construction. Zoning Ordinance standards will continue to be enforced using the previously adopted roadway classifications until a zoning ordinance amendment, reflecting the roadway classifications above, is completed.

TABLE II-1
ROADWAY SEGMENT LEVELS OF SERVICE (LOS) CRITERIA

	Street Classification	Total Lanes	Level of Service Thresholds (vehicles / per day / per lane)				
			A	B	C	D	E
Urban	50 Ft Local (Urban)	2	350	950	1,700	2,950	5,000
	60 Ft Minor Collector	2	350	950	1,700	2,950	5,000
	80 Ft Major Collector	2	700	1,900	3,400	5,900	10,000
	80 Ft Major Collector	4	2,520	4,230	5,940	7,110	9,000
	110 Ft Minor Arterial	4	3,000	5,000	7,000	8,400	10,000
	110 Ft Minor Arterial	6	3,400	5,625	7,875	9,450	11,250
	135 Ft Principal Arterial	4	3,750	6,250	8,750	10,500	12,500
	135 Ft Principal Arterial	6	4,500	7,500	10,500	12,600	15,000
Industrial	70 Ft Minor Collector	2	350	950	1,700	2,950	5,000
	110 Ft Major Collector	2	700	1,900	3,400	5,900	10,000
Rural	60 Ft Local	2	350	950	1,700	2,950	5,000
	60 Ft Minor Collector	2	350	950	1,700	2,950	5,000
	80 Ft Major Collector	2	350	950	1,700	2,950	5,000
	80 Ft Major Collector	4	1,400	2,350	3,300	3,950	5,000
	110 Ft Minor Arterial	4	3,000	5,000	7,000	8,400	10,000
	135 Ft Principal Arterial	4	3,750	6,250	8,750	10,500	12,500
	135 Ft Principal Arterial	6	4,500	7,500	10,500	12,600	15,000

TABLE C-2: LOS THRESHOLDS					
	LOS "A"	LOS "B"	LOS "C"	LOS "D"	LOS "E"
All Facilities (Volume-to-Capacity Ratio (V/C))	<0.6	0.6-0.7	0.7-0.8	0.8-0.9	0.9-1.0
	AVERAGE DAILY TRAFFIC (ADT) – TOTAL OF BOTH DIRECTIONS				
ROADWAY TYPE	A	B	C	D	E
Eight-Lane Freeway	96,000	112,000	128,000	144,000	160,000
Six-Lane Freeway	72,000	84,000	96,000	108,000	120,000
Four-Lane Freeway	48,000	56,000	64,000	72,000	80,000
Six-Lane Expressway	35,000	40,000	46,000	52,000	57,000
Four-Lane Expressway	23,000	27,000	31,000	35,000	38,000
Six-Lane Arterial	29,000	34,000	39,000	44,000	48,000
Four-Lane Arterial	20,000	23,000	26,000	29,000	32,000
Two-Lane Arterial	10,000	12,000	13,000	15,000	16,000
Four-Lane Collector	15,000	17,000	20,000	22,000	24,000
Two-Lane Collector	8,000	9,000	10,000	11,000	12,000

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	324	575	31	693	112	609	259	19	26	145	17
Future Volume (veh/h)	62	324	575	31	693	112	609	259	19	26	145	17
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1937	1900	1863	1976	1863	1900	1976	1900	1900	1976
Adj Flow Rate, veh/h	67	348	0	33	745	0	655	278	0	28	156	0
Adj No. of Lanes	1	1	1	1	2	1	2	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0	2	0	0	0	0	0
Cap, veh/h	94	653	555	61	1129	536	902	498	440	205	215	190
Arrive On Green	0.05	0.34	0.00	0.03	0.32	0.00	0.26	0.26	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1810	1937	1647	1810	3539	1680	3442	1900	1680	1810	1900	1680
Grp Volume(v), veh/h	67	348	0	33	745	0	655	278	0	28	156	0
Grp Sat Flow(s),veh/h/ln	1810	1937	1647	1810	1770	1680	1721	1900	1680	1810	1900	1680
Q Serve(g_s), s	2.6	10.3	0.0	1.3	12.9	0.0	12.3	9.0	0.0	1.0	5.6	0.0
Cycle Q Clear(g_c), s	2.6	10.3	0.0	1.3	12.9	0.0	12.3	9.0	0.0	1.0	5.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	653	555	61	1129	536	902	498	440	205	215	190
V/C Ratio(X)	0.72	0.53	0.00	0.54	0.66	0.00	0.73	0.56	0.00	0.14	0.73	0.00
Avail Cap(c_a), veh/h	268	1107	941	166	1823	865	1773	979	865	472	496	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.1	19.0	0.0	33.7	20.8	0.0	23.8	22.6	0.0	28.3	30.4	0.0
Incr Delay (d2), s/veh	9.8	0.7	0.0	7.3	0.7	0.0	1.1	1.0	0.0	0.3	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.6	0.0	0.8	6.3	0.0	6.0	4.8	0.0	0.5	3.2	0.0
LnGrp Delay(d),s/veh	42.8	19.7	0.0	41.0	21.5	0.0	25.0	23.6	0.0	28.6	35.0	0.0
LnGrp LOS	D	B		D	C		C	C		C	C	
Approach Vol, veh/h		415			778			933			184	
Approach Delay, s/veh		23.4			22.3			24.5			34.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.5	6.9	28.4		23.1	8.2	27.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.5	6.5	40.5		36.5	10.5	36.5
Max Q Clear Time (g_c+I1), s		7.6	3.3	12.3		14.3	4.6	14.9
Green Ext Time (p_c), s		0.6	0.0	8.5		4.3	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	520	787	43	441	46	439	160	52	73	256	34
Future Volume (veh/h)	33	520	787	43	441	46	439	160	52	73	256	34
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1937	1900	1863	1976	1863	1900	1976	1900	1900	1976
Adj Flow Rate, veh/h	35	547	0	45	464	0	462	168	0	77	269	0
Adj No. of Lanes	1	1	1	1	2	1	2	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	0	2	0	0	0	0	0
Cap, veh/h	61	721	613	72	1337	635	629	347	307	327	343	303
Arrive On Green	0.03	0.37	0.00	0.04	0.38	0.00	0.18	0.18	0.00	0.18	0.18	0.00
Sat Flow, veh/h	1810	1937	1647	1810	3539	1680	3442	1900	1680	1810	1900	1680
Grp Volume(v), veh/h	35	547	0	45	464	0	462	168	0	77	269	0
Grp Sat Flow(s),veh/h/ln	1810	1937	1647	1810	1770	1680	1721	1900	1680	1810	1900	1680
Q Serve(g_s), s	1.5	19.8	0.0	2.0	7.5	0.0	10.1	6.3	0.0	2.9	10.8	0.0
Cycle Q Clear(g_c), s	1.5	19.8	0.0	2.0	7.5	0.0	10.1	6.3	0.0	2.9	10.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	61	721	613	72	1337	635	629	347	307	327	343	303
V/C Ratio(X)	0.57	0.76	0.00	0.63	0.35	0.00	0.73	0.48	0.00	0.24	0.78	0.00
Avail Cap(c_a), veh/h	156	1296	1102	204	2461	1168	1248	689	609	690	725	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	22.0	0.0	37.8	17.8	0.0	30.8	29.3	0.0	28.0	31.3	0.0
Incr Delay (d2), s/veh	8.2	1.7	0.0	8.8	0.2	0.0	1.7	1.0	0.0	0.4	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	10.8	0.0	1.1	3.7	0.0	5.0	3.4	0.0	1.5	6.1	0.0
LnGrp Delay(d),s/veh	46.2	23.6	0.0	46.6	18.0	0.0	32.5	30.3	0.0	28.4	35.3	0.0
LnGrp LOS	D	C		D	B		C	C		C	D	
Approach Vol, veh/h		582			509			630			346	
Approach Delay, s/veh		25.0			20.5			31.9			33.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		18.9	7.7	34.3		19.1	7.2	34.7
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		30.5	9.0	53.5		29.0	6.9	55.6
Max Q Clear Time (g_c+I1), s		12.8	4.0	21.8		12.1	3.5	9.5
Green Ext Time (p_c), s		1.6	0.0	8.0		2.5	0.0	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	27.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	786	0	0	257	1062	17	0	175	0	0	0
Future Vol, veh/h	10	786	0	0	257	1062	17	0	175	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	Yield	-	-	None
Storage Length	145	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	2	0	0	2	2	0	0	2	0	0	0
Mvmt Flow	11	845	0	0	276	1142	18	0	188	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	276	0	-	-	-	0	1143	1143	845
Stage 1	-	-	-	-	-	-	867	867	-
Stage 2	-	-	-	-	-	-	276	276	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.318
Pot Cap-1 Maneuver	1299	-	0	0	-	0	223	202	363
Stage 1	-	-	0	0	-	0	415	373	-
Stage 2	-	-	0	0	-	0	775	685	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	1299	-	-	-	-	-	221	0	363
Mov Cap-2 Maneuver	-	-	-	-	-	-	221	0	-
Stage 1	-	-	-	-	-	-	412	0	-
Stage 2	-	-	-	-	-	-	775	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	23.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	398	1299	-	-
HCM Lane V/C Ratio	0.519	0.008	-	-
HCM Control Delay (s)	23.4	7.8	-	-
HCM Lane LOS	C	A	-	-
HCM 95th %tile Q(veh)	2.9	0	-	-

Intersection	
Int Delay, s/veh	10.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	1152	0	0	177	737	8	3	188	0	0	0
Future Vol, veh/h	26	1152	0	0	177	737	8	3	188	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	Yield	-	-	None
Storage Length	145	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	2	2	0	0	2	0	0	0
Mvmt Flow	27	1213	0	0	186	776	8	3	198	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	186	0	-	-	-	0	1453	1453	1213
Stage 1	-	-	-	-	-	-	1267	1267	-
Stage 2	-	-	-	-	-	-	186	186	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.318
Pot Cap-1 Maneuver	1401	-	0	0	-	0	145	132	222
Stage 1	-	-	0	0	-	0	267	242	-
Stage 2	-	-	0	0	-	0	851	750	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	1401	-	-	-	-	-	142	0	222
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	0	-
Stage 1	-	-	-	-	-	-	262	0	-
Stage 2	-	-	-	-	-	-	851	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	82.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	231	1401	-	-
HCM Lane V/C Ratio	0.907	0.02	-	-
HCM Control Delay (s)	82.1	7.6	-	-
HCM Lane LOS	F	A	-	-
HCM 95th %tile Q(veh)	7.6	0.1	-	-

Intersection	
Int Delay, s/veh	311.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	57	5	187	87	0	0	0	0	739	0	20
Future Vol, veh/h	0	57	5	187	87	0	0	0	0	739	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	50	135	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	2	0	0	0	0	0	2	0	0
Mvmt Flow	0	61	5	201	94	0	0	0	0	795	0	22

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1601	11	1621	1590	-			0	0	0
Stage 1	-	1601	-	0	0	-			-	-	-
Stage 2	-	0	-	1621	1590	-			-	-	-
Critical Hdwy	-	6.5	6.2	7.12	6.5	-			4.12	-	-
Critical Hdwy Stg 1	-	5.5	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.5	-			-	-	-
Follow-up Hdwy	-	4	3.3	3.518	4	-			2.218	-	-
Pot Cap-1 Maneuver	0	107	1076	~ 83	109	0			-	-	-
Stage 1	0	167	-	-	-	0			-	-	-
Stage 2	0	-	-	~ 130	169	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	107	1076	~ 45	109	-			-	-	-
Mov Cap-2 Maneuver	-	107	-	~ 45	109	-			-	-	-
Stage 1	-	167	-	-	-	-			-	-	-
Stage 2	-	-	-	~ 82	169	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	70.9	$ 1228.6	
HCM LOS	F	F	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	107	1076	45	109	-	-	-
HCM Lane V/C Ratio	0.573	0.005	4.468	0.858	-	-	-
HCM Control Delay (s)	76.4	8.4	$ 1742.8	123.5	-	-	-
HCM Lane LOS	F	A	F	F	-	-	-
HCM 95th %tile Q(veh)	2.7	0	22.8	5	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	57	5	187	87	0	0	0	0	739	0	20
Future Volume (veh/h)	0	57	5	187	87	0	0	0	0	739	0	20
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1976	1976	1863	1976	0				1900	1938	1976
Adj Flow Rate, veh/h	0	61	0	201	94	0				795	0	0
Adj No. of Lanes	0	1	1	1	1	0				0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	2	0	0				0	0	0
Cap, veh/h	0	465	395	461	465	0				997	0	0
Arrive On Green	0.00	0.24	0.00	0.24	0.24	0.00				0.54	0.00	0.00
Sat Flow, veh/h	0	1976	1680	1336	1976	0				1846	0	0
Grp Volume(v), veh/h	0	61	0	201	94	0				795	0	0
Grp Sat Flow(s),veh/h/ln	0	1976	1680	1336	1976	0				1846	0	0
Q Serve(g_s), s	0.0	1.0	0.0	5.6	1.5	0.0				13.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.0	0.0	6.6	1.5	0.0				13.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	465	395	461	465	0				997	0	0
V/C Ratio(X)	0.00	0.13	0.00	0.44	0.20	0.00				0.80	0.00	0.00
Avail Cap(c_a), veh/h	0	889	756	748	889	0				1522	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.1	0.0	14.7	12.3	0.0				7.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.6	0.2	0.0				1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.0	2.1	0.9	0.0				7.3	0.0	0.0
LnGrp Delay(d),s/veh	0.0	12.2	0.0	15.3	12.5	0.0				9.2	0.0	0.0
LnGrp LOS		B		B	B					A		
Approach Vol, veh/h		61			295						795	
Approach Delay, s/veh		12.2			14.4						9.2	
Approach LOS		B			B						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				13.9		26.1		13.9
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				18.0		33.0		18.0
Max Q Clear Time (g_c+I1), s				3.0		15.9		8.6
Green Ext Time (p_c), s				1.3		5.7		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	SBT
Lane Group Flow (vph)	61	5	201	94	817
v/c Ratio	0.13	0.01	0.66	0.19	5.96
Control Delay	16.6	0.0	30.1	17.2	2250.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.6	0.0	30.1	17.2	2250.0
Queue Length 50th (ft)	16	0	59	25	~508
Queue Length 95th (ft)	39	1	116	54	#757
Internal Link Dist (ft)	391			442	499
Turn Bay Length (ft)		50	135		
Base Capacity (vph)	628	553	414	667	137
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.10	0.01	0.49	0.14	5.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	48.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	83	30	127	58	0	0	0	0	1095	1	11
Future Vol, veh/h	0	83	30	127	58	0	0	0	0	1095	1	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	50	135	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	0	0	0	0	0	2	0	0
Mvmt Flow	0	87	32	134	61	0	0	0	0	1153	1	12

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	2313	7	2351	2307	-			0	0	0
Stage 1	-	2313	-	0	0	-			-	-	-
Stage 2	-	0	-	2351	2307	-			-	-	-
Critical Hdwy	-	6.5	6.2	7.12	6.5	-			4.12	-	-
Critical Hdwy Stg 1	-	5.5	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.5	-			-	-	-
Follow-up Hdwy	-	4	3.3	3.518	4	-			2.218	-	-
Pot Cap-1 Maneuver	0	~ 38	1081	~ 25	~ 39	0			-	-	-
Stage 1	0	~ 73	-	-	-	0			-	-	-
Stage 2	0	-	-	~ 48	74	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	~ 38	1081	-	~ 39	-			-	-	-
Mov Cap-2 Maneuver	-	~ 38	-	-	~ 39	-			-	-	-
Stage 1	-	~ 73	-	-	-	-			-	-	-
Stage 2	-	-	-	-	74	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	$ 604.8		
HCM LOS	F	-	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	38	1081	-	39	-	-	-
HCM Lane V/C Ratio	2.299	0.029	-	1.565	-	-	-
HCM Control Delay (s)	$ 820.4	8.4	-	$ 509.5	-	-	-
HCM Lane LOS	F	A	-	F	-	-	-
HCM 95th %tile Q(veh)	9.6	0.1	-	6.4	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	48.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	83	30	127	58	0	0	0	0	1095	1	11
Future Vol, veh/h	0	83	30	127	58	0	0	0	0	1095	1	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	50	135	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	0	0	0	0	0	2	0	0
Mvmt Flow	0	87	32	134	61	0	0	0	0	1153	1	12

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	2313	7	2351	2307	-			0	0	0
Stage 1	-	2313	-	0	0	-			-	-	-
Stage 2	-	0	-	2351	2307	-			-	-	-
Critical Hdwy	-	6.5	6.2	7.12	6.5	-			4.12	-	-
Critical Hdwy Stg 1	-	5.5	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.5	-			-	-	-
Follow-up Hdwy	-	4	3.3	3.518	4	-			2.218	-	-
Pot Cap-1 Maneuver	0	~ 38	1081	~ 25	~ 39	0			-	-	-
Stage 1	0	~ 73	-	-	-	0			-	-	-
Stage 2	0	-	-	~ 48	74	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	~ 38	1081	-	~ 39	-			-	-	-
Mov Cap-2 Maneuver	-	~ 38	-	-	~ 39	-			-	-	-
Stage 1	-	~ 73	-	-	-	-			-	-	-
Stage 2	-	-	-	-	74	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	$ 604.8		
HCM LOS	F	-	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	38	1081	-	39	-	-	-
HCM Lane V/C Ratio	2.299	0.029	-	1.565	-	-	-
HCM Control Delay (s)	$ 820.4	8.4	-	$ 509.5	-	-	-
HCM Lane LOS	F	A	-	F	-	-	-
HCM 95th %tile Q(veh)	9.6	0.1	-	6.4	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	83	30	127	58	0	0	0	0	1095	1	11
Future Volume (veh/h)	0	83	30	127	58	0	0	0	0	1095	1	11
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1976	1976	1863	1976	0				1900	1938	1976
Adj Flow Rate, veh/h	0	87	0	134	61	0				1153	1	0
Adj No. of Lanes	0	1	1	1	1	0				0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	2	0	0				0	0	0
Cap, veh/h	0	342	291	277	342	0				1293	1	0
Arrive On Green	0.00	0.17	0.00	0.17	0.17	0.00				0.70	0.70	0.00
Sat Flow, veh/h	0	1976	1680	1305	1976	0				1844	2	0
Grp Volume(v), veh/h	0	87	0	134	61	0				1154	0	0
Grp Sat Flow(s),veh/h/ln	0	1976	1680	1305	1976	0				1845	0	0
Q Serve(g_s), s	0.0	2.7	0.0	7.1	1.9	0.0				35.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.7	0.0	9.8	1.9	0.0				35.7	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.00
Lane Grp Cap(c), veh/h	0	342	291	277	342	0				1294	0	0
V/C Ratio(X)	0.00	0.25	0.00	0.48	0.18	0.00				0.89	0.00	0.00
Avail Cap(c_a), veh/h	0	497	423	379	497	0				1626	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	25.6	0.0	29.8	25.2	0.0				8.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	1.3	0.2	0.0				5.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.5	0.0	2.6	1.1	0.0				19.6	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.0	0.0	31.1	25.5	0.0				14.1	0.0	0.0
LnGrp LOS		C		C	C					B		
Approach Vol, veh/h		87			195						1154	
Approach Delay, s/veh		26.0			29.4						14.1	
Approach LOS		C			C						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				16.9		54.6		16.9
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				18.0		63.0		18.0
Max Q Clear Time (g_c+I1), s				4.7		37.7		11.8
Green Ext Time (p_c), s				1.0		12.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.9
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	SBT
Lane Group Flow (vph)	87	32	134	61	1166
v/c Ratio	0.28	0.11	0.67	0.18	7.47
Control Delay	33.9	11.8	50.7	32.0	2929.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.9	11.8	50.7	32.0	2929.6
Queue Length 50th (ft)	42	0	68	29	~1182
Queue Length 95th (ft)	83	24	127	62	#1495
Internal Link Dist (ft)	391			442	499
Turn Bay Length (ft)		50	135		
Base Capacity (vph)	410	374	264	435	156
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.09	0.51	0.14	7.47

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	55	0	3	81	23	1	0	4	3	1	1
Future Vol, veh/h	7	55	0	3	81	23	1	0	4	3	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	59	0	3	87	25	1	0	4	3	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	112	0	0	59	0	0	182	193	59	183	181	100
Stage 1	-	-	-	-	-	-	75	75	-	106	106	-
Stage 2	-	-	-	-	-	-	107	118	-	77	75	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1490	-	-	1558	-	-	784	706	1012	783	717	961
Stage 1	-	-	-	-	-	-	939	836	-	905	811	-
Stage 2	-	-	-	-	-	-	903	802	-	937	836	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1558	-	-	778	700	1012	775	711	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	778	700	-	775	711	-
Stage 1	-	-	-	-	-	-	933	831	-	900	809	-
Stage 2	-	-	-	-	-	-	899	800	-	927	831	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.2	8.8	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	955	1490	-	-	1558	-	-	791
HCM Lane V/C Ratio	0.006	0.005	-	-	0.002	-	-	0.007
HCM Control Delay (s)	8.8	7.4	0	-	7.3	0	-	9.6
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	57	0	9	53	7	0	0	6	50	0	11
Future Vol, veh/h	0	57	0	9	53	7	0	0	6	50	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	60	0	9	56	7	0	0	6	53	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	60	0	0	144	141	60	141	138	60
Stage 1	-	-	-	-	-	-	60	60	-	78	78	-
Stage 2	-	-	-	-	-	-	84	81	-	63	60	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1553	-	-	1556	-	-	830	754	1011	833	757	1011
Stage 1	-	-	-	-	-	-	957	849	-	936	834	-
Stage 2	-	-	-	-	-	-	929	832	-	953	849	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1553	-	-	1556	-	-	817	749	1011	824	752	1011
Mov Cap-2 Maneuver	-	-	-	-	-	-	817	749	-	824	752	-
Stage 1	-	-	-	-	-	-	957	849	-	936	829	-
Stage 2	-	-	-	-	-	-	913	827	-	947	849	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1	8.6	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1011	1553	-	-	1556	-	-	852
HCM Lane V/C Ratio	0.006	-	-	-	0.006	-	-	0.075
HCM Control Delay (s)	8.6	0	-	-	7.3	0	-	9.6
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	323	573	31	687	112	602	259	19	26	145	15
Future Volume (veh/h)	62	323	573	31	687	112	602	259	19	26	145	15
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1937	1900	1863	1976	1863	1900	1976	1900	1900	1976
Adj Flow Rate, veh/h	67	347	0	33	739	0	647	278	0	28	156	0
Adj No. of Lanes	1	1	1	1	2	1	2	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0	2	0	0	0	0	0
Cap, veh/h	94	652	554	61	1126	535	896	495	437	205	215	190
Arrive On Green	0.05	0.34	0.00	0.03	0.32	0.00	0.26	0.26	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1810	1937	1647	1810	3539	1680	3442	1900	1680	1810	1900	1680
Grp Volume(v), veh/h	67	347	0	33	739	0	647	278	0	28	156	0
Grp Sat Flow(s),veh/h/ln	1810	1937	1647	1810	1770	1680	1721	1900	1680	1810	1900	1680
Q Serve(g_s), s	2.6	10.2	0.0	1.3	12.6	0.0	12.0	8.9	0.0	1.0	5.6	0.0
Cycle Q Clear(g_c), s	2.6	10.2	0.0	1.3	12.6	0.0	12.0	8.9	0.0	1.0	5.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	652	554	61	1126	535	896	495	437	205	215	190
V/C Ratio(X)	0.71	0.53	0.00	0.54	0.66	0.00	0.72	0.56	0.00	0.14	0.72	0.00
Avail Cap(c_a), veh/h	270	1117	949	167	1839	873	1788	987	873	477	500	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.8	18.8	0.0	33.4	20.6	0.0	23.7	22.5	0.0	28.1	30.1	0.0
Incr Delay (d2), s/veh	9.6	0.7	0.0	7.2	0.7	0.0	1.1	1.0	0.0	0.3	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.5	0.0	0.8	6.3	0.0	5.8	4.8	0.0	0.5	3.2	0.0
LnGrp Delay(d),s/veh	42.4	19.5	0.0	40.6	21.3	0.0	24.8	23.5	0.0	28.4	34.7	0.0
LnGrp LOS	D	B		D	C		C	C		C	C	
Approach Vol, veh/h		414			772			925			184	
Approach Delay, s/veh		23.2			22.1			24.4			33.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.5	6.9	28.1		22.8	8.1	26.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.5	6.5	40.5		36.5	10.5	36.5
Max Q Clear Time (g_c+I1), s		7.6	3.3	12.2		14.0	4.6	14.6
Green Ext Time (p_c), s		0.6	0.0	8.5		4.3	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	515	781	43	439	46	437	160	52	73	256	33
Future Volume (veh/h)	31	515	781	43	439	46	437	160	52	73	256	33
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1937	1900	1863	1976	1863	1900	1976	1900	1900	1976
Adj Flow Rate, veh/h	33	542	0	45	462	0	460	168	0	77	269	0
Adj No. of Lanes	1	1	1	1	2	1	2	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	0	2	0	0	0	0	0
Cap, veh/h	59	717	609	72	1335	633	629	347	307	327	343	304
Arrive On Green	0.03	0.37	0.00	0.04	0.38	0.00	0.18	0.18	0.00	0.18	0.18	0.00
Sat Flow, veh/h	1810	1937	1647	1810	3539	1680	3442	1900	1680	1810	1900	1680
Grp Volume(v), veh/h	33	542	0	45	462	0	460	168	0	77	269	0
Grp Sat Flow(s),veh/h/ln	1810	1937	1647	1810	1770	1680	1721	1900	1680	1810	1900	1680
Q Serve(g_s), s	1.4	19.4	0.0	1.9	7.4	0.0	10.0	6.3	0.0	2.9	10.7	0.0
Cycle Q Clear(g_c), s	1.4	19.4	0.0	1.9	7.4	0.0	10.0	6.3	0.0	2.9	10.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	717	609	72	1335	633	629	347	307	327	343	304
V/C Ratio(X)	0.56	0.76	0.00	0.63	0.35	0.00	0.73	0.48	0.00	0.24	0.78	0.00
Avail Cap(c_a), veh/h	157	1306	1110	205	2480	1177	1258	694	614	696	730	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	21.9	0.0	37.5	17.7	0.0	30.6	29.1	0.0	27.8	31.0	0.0
Incr Delay (d2), s/veh	8.1	1.7	0.0	8.7	0.2	0.0	1.7	1.0	0.0	0.4	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	10.7	0.0	1.1	3.6	0.0	4.9	3.4	0.0	1.5	6.0	0.0
LnGrp Delay(d),s/veh	45.9	23.5	0.0	46.2	17.9	0.0	32.3	30.1	0.0	28.2	34.9	0.0
LnGrp LOS	D	C		D	B		C	C		C	C	
Approach Vol, veh/h		575			507			628			346	
Approach Delay, s/veh		24.8			20.4			31.7			33.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		18.8	7.6	33.9		19.0	7.1	34.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		30.5	9.0	53.5		29.0	6.9	55.6
Max Q Clear Time (g_c+I1), s		12.7	3.9	21.4		12.0	3.4	9.4
Green Ext Time (p_c), s		1.6	0.0	7.9		2.5	0.0	8.4

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	783	0	0	242	1062	11	0	175	0	0	0
Future Vol, veh/h	9	783	0	0	242	1062	11	0	175	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	Yield	-	-	None
Storage Length	145	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	2	0	0	2	2	0	0	2	0	0	0
Mvmt Flow	10	842	0	0	260	1142	12	0	188	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	260	0	-	-	-	0	1122	1122	842
Stage 1	-	-	-	-	-	-	862	862	-
Stage 2	-	-	-	-	-	-	260	260	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.318
Pot Cap-1 Maneuver	1316	-	0	0	-	0	230	208	364
Stage 1	-	-	0	0	-	0	417	375	-
Stage 2	-	-	0	0	-	0	788	697	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	1316	-	-	-	-	-	228	0	364
Mov Cap-2 Maneuver	-	-	-	-	-	-	228	0	-
Stage 1	-	-	-	-	-	-	414	0	-
Stage 2	-	-	-	-	-	-	788	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	23.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	387	1316	-	-
HCM Lane V/C Ratio	0.517	0.007	-	-
HCM Control Delay (s)	23.8	7.8	-	-
HCM Lane LOS	C	A	-	-
HCM 95th %tile Q(veh)	2.9	0	-	-

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1139	0	0	172	737	6	3	188	0	0	0
Future Vol, veh/h	17	1139	0	0	172	737	6	3	188	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	Yield	-	-	None
Storage Length	145	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	2	2	0	0	2	0	0	0
Mvmt Flow	18	1199	0	0	181	776	6	3	198	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	181	0	-	-	-	0	1416	1416	1199
Stage 1	-	-	-	-	-	-	1235	1235	-
Stage 2	-	-	-	-	-	-	181	181	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.318
Pot Cap-1 Maneuver	1407	-	0	0	-	0	153	139	226
Stage 1	-	-	0	0	-	0	277	251	-
Stage 2	-	-	0	0	-	0	855	754	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	1407	-	-	-	-	-	151	0	226
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	0	-
Stage 1	-	-	-	-	-	-	273	0	-
Stage 2	-	-	-	-	-	-	855	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	77.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	234	1407	-	-
HCM Lane V/C Ratio	0.886	0.013	-	-
HCM Control Delay (s)	77.2	7.6	-	-
HCM Lane LOS	F	A	-	-
HCM 95th %tile Q(veh)	7.3	0	-	-

Intersection	
Int Delay, s/veh	293.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	53	4	187	66	0	0	0	0	739	0	8
Future Vol, veh/h	0	53	4	187	66	0	0	0	0	739	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	50	135	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	2	0	0	0	0	0	2	0	0
Mvmt Flow	0	57	4	201	71	0	0	0	0	795	0	9

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1595	5	1619	1590	-			0	0	0
Stage 1	-	1595	-	0	0	-			-	-	-
Stage 2	-	0	-	1619	1590	-			-	-	-
Critical Hdwy	-	6.5	6.2	7.12	6.5	-			4.12	-	-
Critical Hdwy Stg 1	-	5.5	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.5	-			-	-	-
Follow-up Hdwy	-	4	3.3	3.518	4	-			2.218	-	-
Pot Cap-1 Maneuver	0	108	1084	~ 83	109	0			-	-	-
Stage 1	0	168	-	-	-	0			-	-	-
Stage 2	0	-	-	~ 130	169	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	108	1084	~ 48	109	-			-	-	-
Mov Cap-2 Maneuver	-	108	-	~ 48	109	-			-	-	-
Stage 1	-	168	-	-	-	-			-	-	-
Stage 2	-	-	-	~ 86	169	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	66.3	$ 1210.5	
HCM LOS	F	F	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	108	1084	48	109	-	-	-
HCM Lane V/C Ratio	0.528	0.004	4.189	0.651	-	-	-
HCM Control Delay (s)	70.7	8.3	$ 1607.6	85.4	-	-	-
HCM Lane LOS	F	A	F	F	-	-	-
HCM 95th %tile Q(veh)	2.4	0	22.5	3.3	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	24.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	61	26	127	51	0	0	0	0	1095	1	8
Future Vol, veh/h	0	61	26	127	51	0	0	0	0	1095	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	50	135	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	0	0	0	0	0	2	0	0
Mvmt Flow	0	64	27	134	54	0	0	0	0	1153	1	8

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	2311	5	2339	2307	-			0	0	0
Stage 1	-	2311	-	0	0	-			-	-	-
Stage 2	-	0	-	2339	2307	-			-	-	-
Critical Hdwy	-	6.5	6.2	7.12	6.5	-			4.12	-	-
Critical Hdwy Stg 1	-	5.5	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.5	-			-	-	-
Follow-up Hdwy	-	4	3.3	3.518	4	-			2.218	-	-
Pot Cap-1 Maneuver	0	~ 39	1084	~ 26	~ 39	0			-	-	-
Stage 1	0	73	-	-	-	0			-	-	-
Stage 2	0	-	-	~ 49	74	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	~ 39	1084	-	~ 39	-			-	-	-
Mov Cap-2 Maneuver	-	~ 39	-	-	~ 39	-			-	-	-
Stage 1	-	73	-	-	-	-			-	-	-
Stage 2	-	-	-	~ 6	74	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s$	382.5		
HCM LOS	F	-	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	39	1084	-	39	-	-	-
HCM Lane V/C Ratio	1.646	0.025	-	1.377	-	-	-
HCM Control Delay (s)	$ 542	8.4	-	$ 435.7	-	-	-
HCM Lane LOS	F	A	-	F	-	-	-
HCM 95th %tile Q(veh)	6.7	0.1	-	5.5	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	55	0	3	81	4	1	0	4	1	1	0
Future Vol, veh/h	1	55	0	3	81	4	1	0	4	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	59	0	3	87	4	1	0	4	1	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	91	0	0	59	0	0	157	158	59	158	156	89
Stage 1	-	-	-	-	-	-	61	61	-	95	95	-
Stage 2	-	-	-	-	-	-	96	97	-	63	61	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1517	-	-	1558	-	-	814	738	1012	813	740	975
Stage 1	-	-	-	-	-	-	955	848	-	917	820	-
Stage 2	-	-	-	-	-	-	916	819	-	953	848	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1517	-	-	1558	-	-	812	736	1012	807	738	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	812	736	-	807	738	-
Stage 1	-	-	-	-	-	-	954	847	-	916	818	-
Stage 2	-	-	-	-	-	-	913	817	-	948	847	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	8.8	9.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	964	1517	-	-	1558	-	-	771
HCM Lane V/C Ratio	0.006	0.001	-	-	0.002	-	-	0.003
HCM Control Delay (s)	8.8	7.4	0	-	7.3	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	57	0	9	53	2	0	0	6	24	0	7
Future Vol, veh/h	0	57	0	9	53	2	0	0	6	24	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	60	0	9	56	2	0	0	6	25	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	58	0	0	60	0	0	139	136	60	138	135	57
Stage 1	-	-	-	-	-	-	60	60	-	75	75	-
Stage 2	-	-	-	-	-	-	79	76	-	63	60	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1559	-	-	1556	-	-	836	759	1011	837	760	1015
Stage 1	-	-	-	-	-	-	957	849	-	939	836	-
Stage 2	-	-	-	-	-	-	935	836	-	953	849	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1559	-	-	1556	-	-	826	754	1011	828	755	1015
Mov Cap-2 Maneuver	-	-	-	-	-	-	826	754	-	828	755	-
Stage 1	-	-	-	-	-	-	957	849	-	939	831	-
Stage 2	-	-	-	-	-	-	923	831	-	947	849	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1	8.6	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1011	1559	-	-	1556	-	-	864
HCM Lane V/C Ratio	0.006	-	-	-	0.006	-	-	0.038
HCM Control Delay (s)	8.6	0	-	-	7.3	0	-	9.3
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	324	575	31	695	112	612	259	19	26	145	18
Future Volume (veh/h)	63	324	575	31	695	112	612	259	19	26	145	18
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1937	1900	1863	1976	1863	1900	1976	1900	1900	1976
Adj Flow Rate, veh/h	68	348	0	33	747	0	658	278	0	28	156	0
Adj No. of Lanes	1	1	1	1	2	1	2	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	0	2	0	0	0	0	0
Cap, veh/h	94	654	556	61	1130	536	904	499	441	204	215	190
Arrive On Green	0.05	0.34	0.00	0.03	0.32	0.00	0.26	0.26	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1810	1937	1647	1810	3539	1680	3442	1900	1680	1810	1900	1680
Grp Volume(v), veh/h	68	348	0	33	747	0	658	278	0	28	156	0
Grp Sat Flow(s),veh/h/ln	1810	1937	1647	1810	1770	1680	1721	1900	1680	1810	1900	1680
Q Serve(g_s), s	2.6	10.3	0.0	1.3	13.0	0.0	12.4	9.0	0.0	1.0	5.6	0.0
Cycle Q Clear(g_c), s	2.6	10.3	0.0	1.3	13.0	0.0	12.4	9.0	0.0	1.0	5.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	654	556	61	1130	536	904	499	441	204	215	190
V/C Ratio(X)	0.72	0.53	0.00	0.54	0.66	0.00	0.73	0.56	0.00	0.14	0.73	0.00
Avail Cap(c_a), veh/h	267	1103	938	165	1816	862	1766	975	862	471	494	437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.2	19.0	0.0	33.8	20.9	0.0	23.9	22.6	0.0	28.4	30.5	0.0
Incr Delay (d2), s/veh	10.0	0.7	0.0	7.3	0.7	0.0	1.1	1.0	0.0	0.3	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	5.6	0.0	0.8	6.4	0.0	6.0	4.8	0.0	0.5	3.2	0.0
LnGrp Delay(d),s/veh	43.2	19.7	0.0	41.1	21.6	0.0	25.0	23.6	0.0	28.7	35.1	0.0
LnGrp LOS	D	B		D	C		C	C		C	D	
Approach Vol, veh/h		416			780			936			184	
Approach Delay, s/veh		23.5			22.4			24.6			34.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.5	6.9	28.5		23.2	8.2	27.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.5	6.5	40.5		36.5	10.5	36.5
Max Q Clear Time (g_c+I1), s		7.6	3.3	12.3		14.4	4.6	15.0
Green Ext Time (p_c), s		0.6	0.0	8.6		4.3	0.1	7.8

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	523	789	43	442	46	440	160	52	73	256	34
Future Volume (veh/h)	33	523	789	43	442	46	440	160	52	73	256	34
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1937	1937	1900	1863	1976	1863	1900	1976	1900	1900	1976
Adj Flow Rate, veh/h	35	551	0	45	465	0	463	168	0	77	269	0
Adj No. of Lanes	1	1	1	1	2	1	2	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	0	2	0	0	0	0	0
Cap, veh/h	61	724	615	71	1343	637	629	347	307	326	342	303
Arrive On Green	0.03	0.37	0.00	0.04	0.38	0.00	0.18	0.18	0.00	0.18	0.18	0.00
Sat Flow, veh/h	1810	1937	1647	1810	3539	1680	3442	1900	1680	1810	1900	1680
Grp Volume(v), veh/h	35	551	0	45	465	0	463	168	0	77	269	0
Grp Sat Flow(s),veh/h/ln	1810	1937	1647	1810	1770	1680	1721	1900	1680	1810	1900	1680
Q Serve(g_s), s	1.5	20.0	0.0	2.0	7.5	0.0	10.2	6.4	0.0	2.9	10.9	0.0
Cycle Q Clear(g_c), s	1.5	20.0	0.0	2.0	7.5	0.0	10.2	6.4	0.0	2.9	10.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	61	724	615	71	1343	637	629	347	307	326	342	303
V/C Ratio(X)	0.57	0.76	0.00	0.63	0.35	0.00	0.74	0.48	0.00	0.24	0.79	0.00
Avail Cap(c_a), veh/h	155	1289	1095	202	2447	1161	1241	685	606	686	721	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.3	22.0	0.0	38.1	17.8	0.0	31.0	29.5	0.0	28.2	31.5	0.0
Incr Delay (d2), s/veh	8.2	1.7	0.0	8.8	0.2	0.0	1.7	1.0	0.0	0.4	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	11.1	0.0	1.2	3.7	0.0	5.0	3.5	0.0	1.5	6.1	0.0
LnGrp Delay(d),s/veh	46.5	23.7	0.0	46.9	18.0	0.0	32.7	30.5	0.0	28.6	35.5	0.0
LnGrp LOS	D	C		D	B		C	C		C	D	
Approach Vol, veh/h		586			510			631			346	
Approach Delay, s/veh		25.1			20.5			32.1			33.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		19.0	7.7	34.6		19.2	7.2	35.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		30.5	9.0	53.5		29.0	6.9	55.6
Max Q Clear Time (g_c+I1), s		12.9	4.0	22.0		12.2	3.5	9.5
Green Ext Time (p_c), s		1.6	0.0	8.0		2.5	0.0	8.6

Intersection Summary	
HCM 2010 Ctrl Delay	27.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	787	0	0	263	1062	20	0	175	0	0	0
Future Vol, veh/h	11	787	0	0	263	1062	20	0	175	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	Yield	-	-	None
Storage Length	145	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	2	0	0	2	2	0	0	2	0	0	0
Mvmt Flow	12	846	0	0	283	1142	22	0	188	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	283	0	-	-	-	0	1153	1153	846
Stage 1	-	-	-	-	-	-	870	870	-
Stage 2	-	-	-	-	-	-	283	283	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.318
Pot Cap-1 Maneuver	1291	-	0	0	-	0	220	199	362
Stage 1	-	-	0	0	-	0	413	372	-
Stage 2	-	-	0	0	-	0	770	681	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	1291	-	-	-	-	-	218	0	362
Mov Cap-2 Maneuver	-	-	-	-	-	-	218	0	-
Stage 1	-	-	-	-	-	-	409	0	-
Stage 2	-	-	-	-	-	-	770	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	23.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	403	1291	-	-
HCM Lane V/C Ratio	0.52	0.009	-	-
HCM Control Delay (s)	23.2	7.8	-	-
HCM Lane LOS	C	A	-	-
HCM 95th %tile Q(veh)	2.9	0	-	-

Intersection	
Int Delay, s/veh	11.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	1157	0	0	179	737	9	3	188	0	0	0
Future Vol, veh/h	30	1157	0	0	179	737	9	3	188	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	Yield	-	-	None
Storage Length	145	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	2	2	0	0	2	0	0	0
Mvmt Flow	32	1218	0	0	188	776	9	3	198	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	188	0	-	-	-	0	1470	1470	1218
Stage 1	-	-	-	-	-	-	1282	1282	-
Stage 2	-	-	-	-	-	-	188	188	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.318
Pot Cap-1 Maneuver	1398	-	0	0	-	0	142	129	220
Stage 1	-	-	0	0	-	0	263	238	-
Stage 2	-	-	0	0	-	0	849	748	-
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	1398	-	-	-	-	-	139	0	220
Mov Cap-2 Maneuver	-	-	-	-	-	-	139	0	-
Stage 1	-	-	-	-	-	-	257	0	-
Stage 2	-	-	-	-	-	-	849	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	87.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	227	1398	-	-
HCM Lane V/C Ratio	0.927	0.023	-	-
HCM Control Delay (s)	87.5	7.6	-	-
HCM Lane LOS	F	A	-	-
HCM 95th %tile Q(veh)	7.9	0.1	-	-

Intersection	
Int Delay, s/veh	327.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	59	5	187	96	0	0	0	0	739	0	25
Future Vol, veh/h	0	59	5	187	96	0	0	0	0	739	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	50	135	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	2	0	0	0	0	0	2	0	0
Mvmt Flow	0	63	5	201	103	0	0	0	0	795	0	27

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1604	14	1622	1590	-			0	0	0
Stage 1	-	1604	-	0	0	-			-	-	-
Stage 2	-	0	-	1622	1590	-			-	-	-
Critical Hdwy	-	6.5	6.2	7.12	6.5	-			4.12	-	-
Critical Hdwy Stg 1	-	5.5	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.5	-			-	-	-
Follow-up Hdwy	-	4	3.3	3.518	4	-			2.218	-	-
Pot Cap-1 Maneuver	0	107	1072	~ 82	109	0			-	-	-
Stage 1	0	166	-	-	-	0			-	-	-
Stage 2	0	-	-	~ 129	169	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	107	1072	~ 43	109	-			-	-	-
Mov Cap-2 Maneuver	-	107	-	~ 43	109	-			-	-	-
Stage 1	-	166	-	-	-	-			-	-	-
Stage 2	-	-	-	~ 79	169	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	73.3	$ 1267.4	
HCM LOS	F	F	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	107	1072	43	109	-	-	-
HCM Lane V/C Ratio	0.593	0.005	4.676	0.947	-	-	-
HCM Control Delay (s)	78.8	8.4	$ 1843.4	145.3	-	-	-
HCM Lane LOS	F	A	F	F	-	-	-
HCM 95th %tile Q(veh)	2.9	0	23	5.9	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	60.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	92	32	127	61	0	0	0	0	1095	1	13
Future Vol, veh/h	0	92	32	127	61	0	0	0	0	1095	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	50	135	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	0	0	0	0	0	2	0	0
Mvmt Flow	0	97	34	134	64	0	0	0	0	1153	1	14

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	2314	8	2356	2307	-			0	0	0
Stage 1	-	2314	-	0	0	-			-	-	-
Stage 2	-	0	-	2356	2307	-			-	-	-
Critical Hdwy	-	6.5	6.2	7.12	6.5	-			4.12	-	-
Critical Hdwy Stg 1	-	5.5	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.12	5.5	-			-	-	-
Follow-up Hdwy	-	4	3.3	3.518	4	-			2.218	-	-
Pot Cap-1 Maneuver	0	~ 38	1080	~ 25	~ 39	0			-	-	-
Stage 1	0	~ 73	-	-	-	0			-	-	-
Stage 2	0	-	-	~ 48	74	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	~ 38	1080	-	~ 39	-			-	-	-
Mov Cap-2 Maneuver	-	~ 38	-	-	~ 39	-			-	-	-
Stage 1	-	~ 73	-	-	-	-			-	-	-
Stage 2	-	-	-	-	74	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s$	690.5		
HCM LOS	F	-	

Minor Lane/Major Mvmt	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	38	1080	-	39	-	-	-
HCM Lane V/C Ratio	2.548	0.031	-	1.646	-	-	-
HCM Control Delay (s)	$ 927.8	8.4	-	$ 542	-	-	-
HCM Lane LOS	F	A	-	F	-	-	-
HCM 95th %tile Q(veh)	10.7	0.1	-	6.7	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	55	0	3	81	37	1	0	4	5	1	2
Future Vol, veh/h	10	55	0	3	81	37	1	0	4	5	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	59	0	3	87	40	1	0	4	5	1	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	127	0	0	59	0	0	196	214	59	196	194	107
Stage 1	-	-	-	-	-	-	81	81	-	113	113	-
Stage 2	-	-	-	-	-	-	115	133	-	83	81	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1472	-	-	1558	-	-	767	687	1012	767	705	953
Stage 1	-	-	-	-	-	-	932	832	-	897	806	-
Stage 2	-	-	-	-	-	-	895	790	-	930	832	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1472	-	-	1558	-	-	759	680	1012	758	698	953
Mov Cap-2 Maneuver	-	-	-	-	-	-	759	680	-	758	698	-
Stage 1	-	-	-	-	-	-	925	825	-	890	804	-
Stage 2	-	-	-	-	-	-	890	788	-	919	825	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	0.2	8.8	9.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	949	1472	-	-	1558	-	-	790
HCM Lane V/C Ratio	0.006	0.007	-	-	0.002	-	-	0.011
HCM Control Delay (s)	8.8	7.5	0	-	7.3	0	-	9.6
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	57	0	9	53	12	0	0	6	61	0	13
Future Vol, veh/h	1	57	0	9	53	12	0	0	6	61	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	60	0	9	56	13	0	0	6	64	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	69	0	0	60	0	0	150	149	60	146	143	63
Stage 1	-	-	-	-	-	-	62	62	-	81	81	-
Stage 2	-	-	-	-	-	-	88	87	-	65	62	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1545	-	-	1556	-	-	822	746	1011	827	752	1007
Stage 1	-	-	-	-	-	-	954	847	-	932	832	-
Stage 2	-	-	-	-	-	-	925	827	-	951	847	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1545	-	-	1556	-	-	806	741	1011	817	747	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	806	741	-	817	747	-
Stage 1	-	-	-	-	-	-	953	846	-	931	827	-
Stage 2	-	-	-	-	-	-	907	822	-	944	846	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	8.6	9.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1011	1545	-	-	1556	-	-	845
HCM Lane V/C Ratio	0.006	0.001	-	-	0.006	-	-	0.092
HCM Control Delay (s)	8.6	7.3	0	-	7.3	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

PINNACLE TRAFFIC ENGINEERING

831 C Street • Hollister, CA 95023 • (831) 638-9260

PinnacleTE.com

Best RV Center Project; Stanislaus County, CA

- Project Weekday Trip Generation Analysis (May 20, 2018) -

- Taylor Court Traffic Count Data (S/O Southerly Driveway) -

		Tue. May 1st	Wed. May 2nd	Thur. 3-May	3-Day Average
AM Peak Hour:		**63**	**53**	**56**	**57**
	NB -	52	38	42	44
	SB -	11	15	14	13
PM Peak Hour:		**56**	**54**	**56**	**55**
	NB -	13	13	14	13
	SB -	43	41	42	42

- Taylor Court Traffic Count Data (N/O Northerly Driveway) -

AM Peak Hour:		**17**	**15**	**17**	**16**
	NB -	11	6	9	9
	SB -	6	9	8	8
PM Peak Hour:		**17**	**12**	**18**	**16**
	NB -	2	1	2	2
	SB -	15	11	16	14

- Best RV Center (Volumes S/O Southerly Dwy. - N/O Northerly Dwy) -

AM Peak Hour:		**46**	**38**	**39**	**41**
	NB -	41	32	33	35
	SB -	5	6	6	6
PM Peak Hour:		**39**	**42**	**38**	**40**
	NB -	11	12	12	12
	SB -	28	30	26	28
No. of Employees:		**53**	**53**	**54**	

- Best RV Center Trip Generation Rates (No. of Trips per Employee) -

AM Peak Hour:	IN -	0.774	0.604	0.611	**0.663**	- IN
	OUT -	0.094	0.113	0.111	**0.106**	- OUT
PM Peak Hour:	IN -	0.208	0.226	0.222	**0.219**	- IN
	OUT -	0.528	0.566	0.481	**0.525**	- OUT

	AM Peak Hour		**PM Peak Hour**	
	Inbound	**Outbound**	**Inbound**	**Outbound**
Org. Permit (8 Employees)	5	1	2	4
Existing (65 Employees):	43	7	14	34
Prop. (90 Employees):	60	10	20	47
Increase (Prop. - Org.):	**+55**	**+9**	**+18**	**+43**
Increase (Prop. - Ex.):	+17	+3	+6	+13

PINNACLE TRAFFIC ENGINEERING

831 C Street • Hollister, CA 95023 • (831) 638-9260

PinnacleTE.com

Best RV Center Project; Stanislaus County, CA

- Project Weekend Day Data Analysis (Sept. 22 & 23, 2018) -

- Taylor Court Traffic Count Data (S/O Southerly Driveway) -

Saturday

Sept. 22, 2018

Mid-Day Peak Hour:		**48**
	NB -	25
	SB -	23

- Taylor Court Traffic Count Data (N/O Northerly Driveway) -

Mid-Day Peak Hour:		**1**
	NB -	0
	SB -	1

- Best RV Center Vol. (between Southerly Dwy. & N/O Northerly Dwy) -

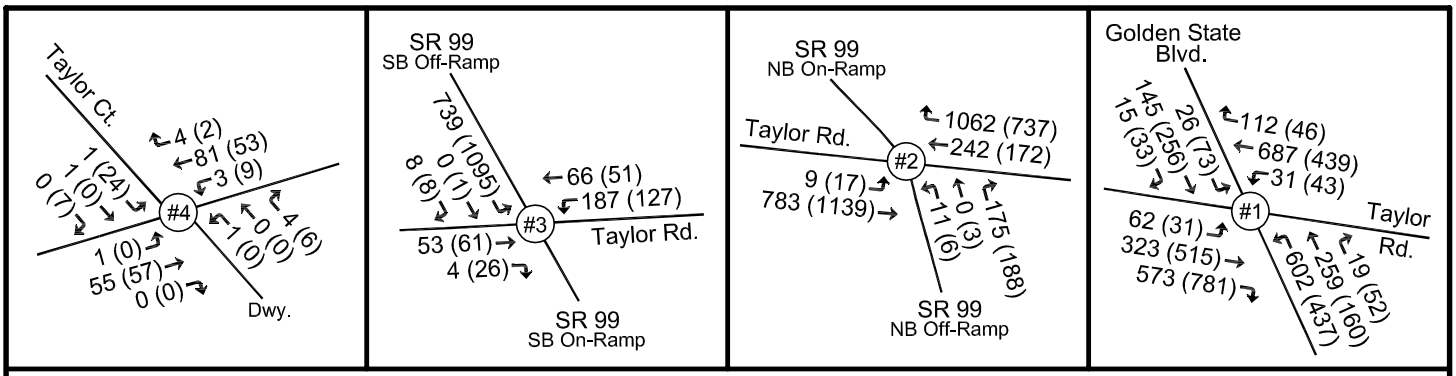
Mid-Day Peak Hour:		**47**
	NB -	25
	SB -	22

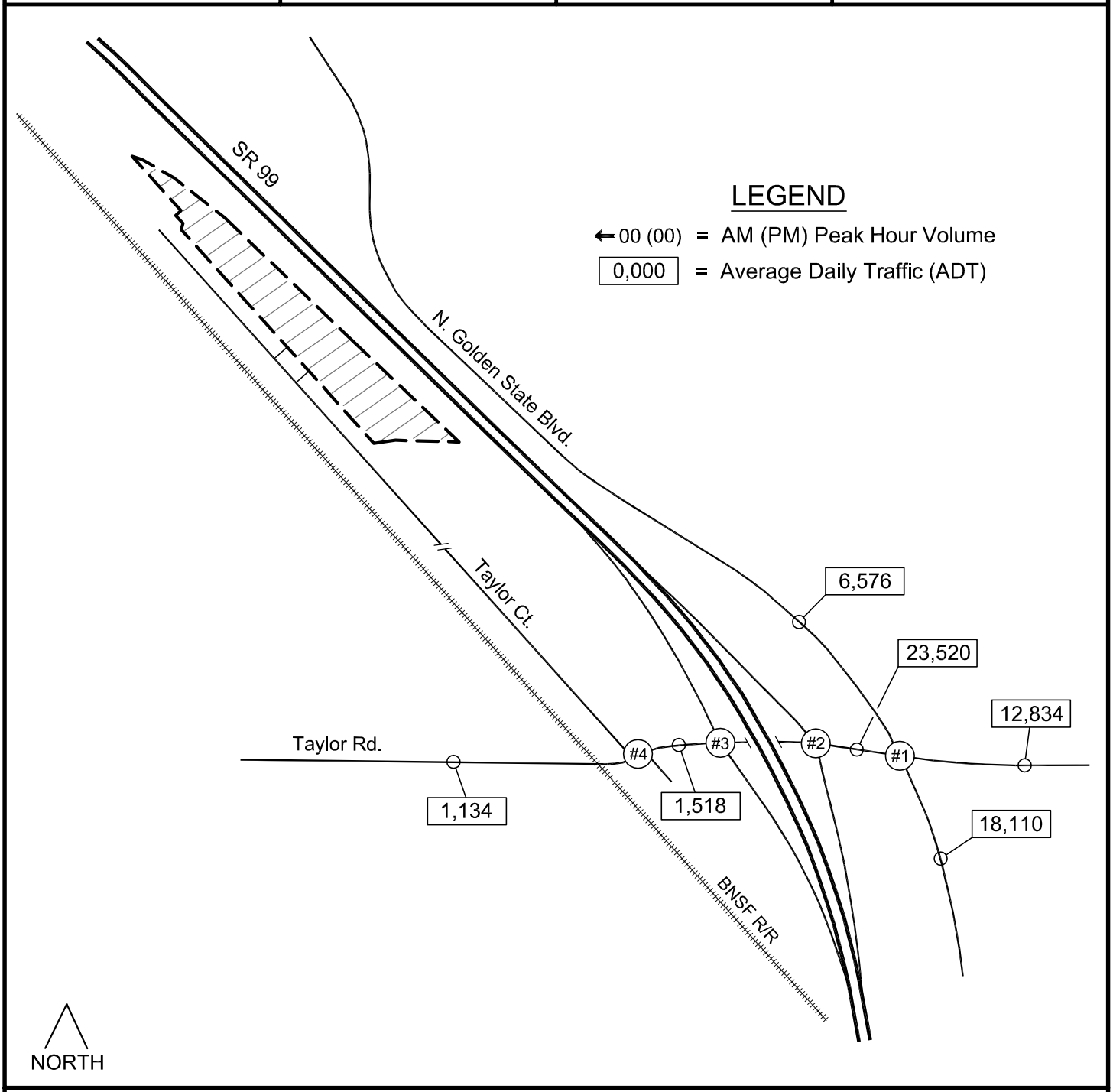
No. of Employees:	**36**

- Best RV Center Trip Generation Rates (No. of Trips per Employee) -

Mid-Day Peak Hour:	IN -	0.694
	OUT -	0.611

	ADT		
May 2018 (Fig. 2B):	585		Weekday ADT
Saturday (9/22/18):	494	84%	(16% Lower Than Weekday)
Sunday (9/26/18):	382	65%	(35% Lower Than Weekday)

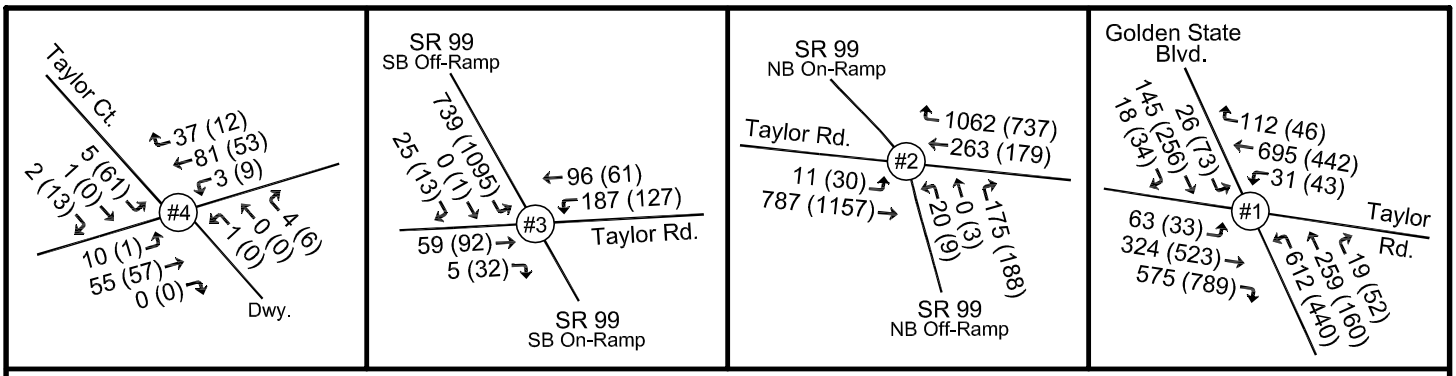


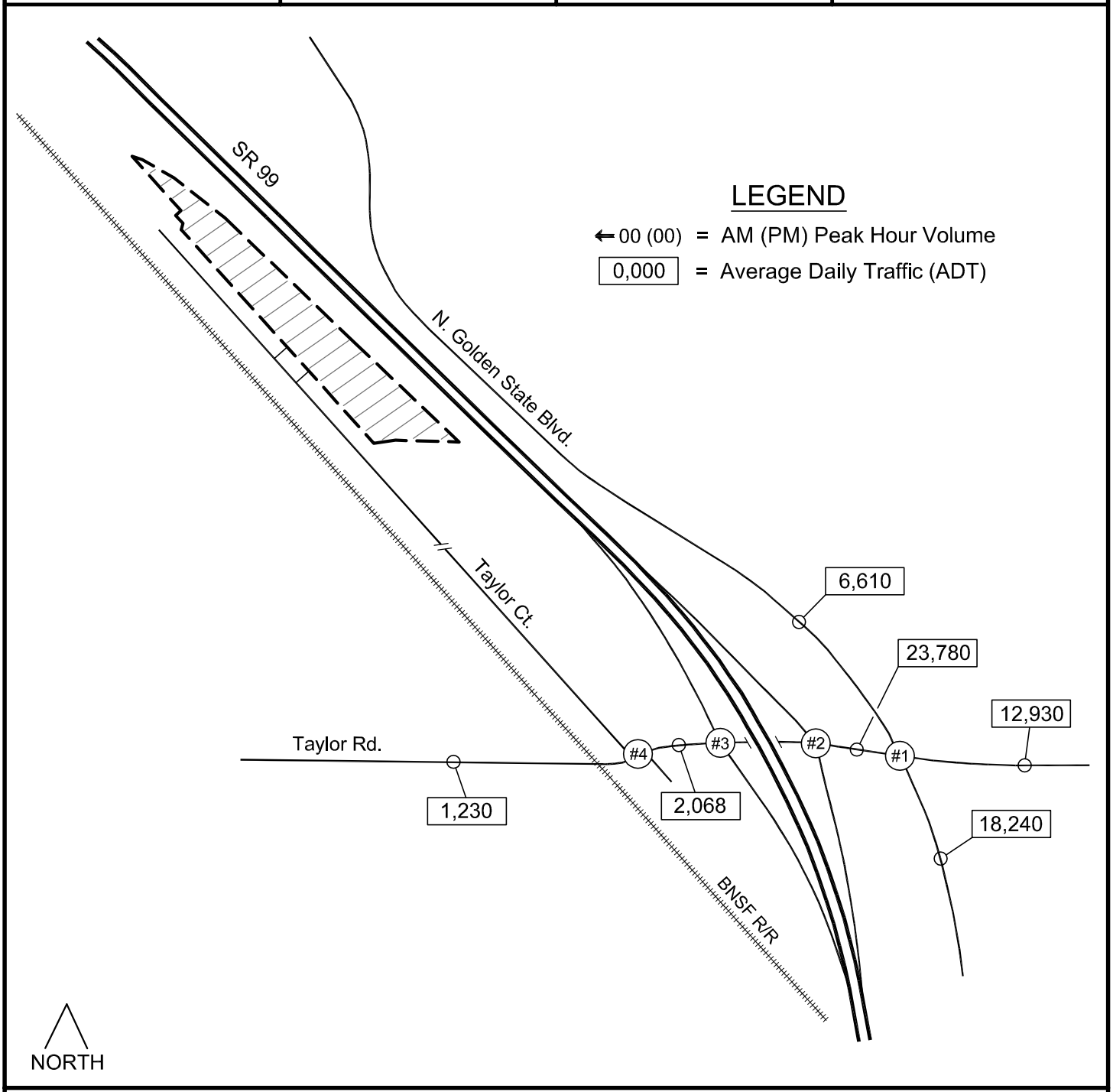


PINNACLE
TRAFFIC
ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

EXISTING WITH
2006 OPERATIONS
TRAFFIC VOLUMES





PINNACLE
TRAFFIC
ENGINEERING

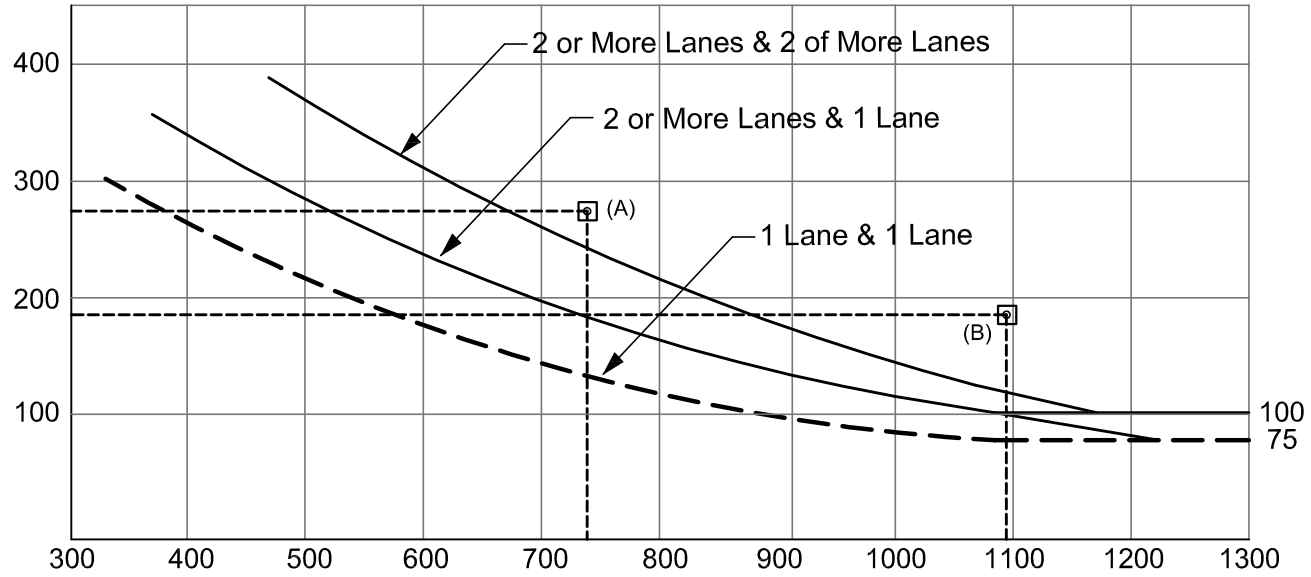
Best RV Center Project
- Traffic Impact Analysis -

EXISTING PLUS
PHASE 2 OPERATIONS
TRAFFIC VOLUMES

SR 99 SB Ramps and Taylor Road

Warrant #3 - Peak Hour Volume (70%)

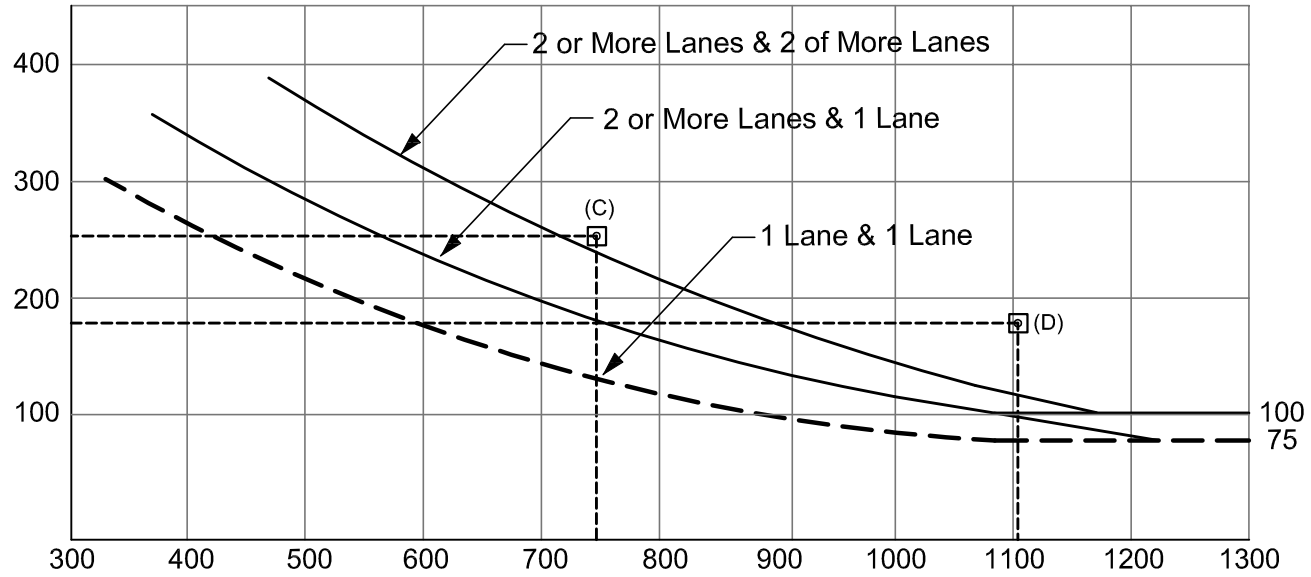
(Community Less Than 10,000 Population or Above 40 MPH on Major Road)



	SR 99 SB Off Ramp	Taylor Road	Met
(A) Existing AM Peak Hour:	739	274 (WB) - One Lane	YES
(B) Existing PM Peak Hour:	1096	185 (WB) - One Lane	YES

Warrant #3 - Peak Hour Volume (70%)

(Community Less Than 10,000 Population or Above 40 MPH on Major Road)



	SR 99 SB Off Ramp	Taylor Road	Met
(C) Existing with 2006 Op. AM Peak Hour:	747	253 (WB) - One Lane	YES
(D) Existing W/ 2006 Op. PM Peak Hour:	1104	178 (WB) - One Lane	YES

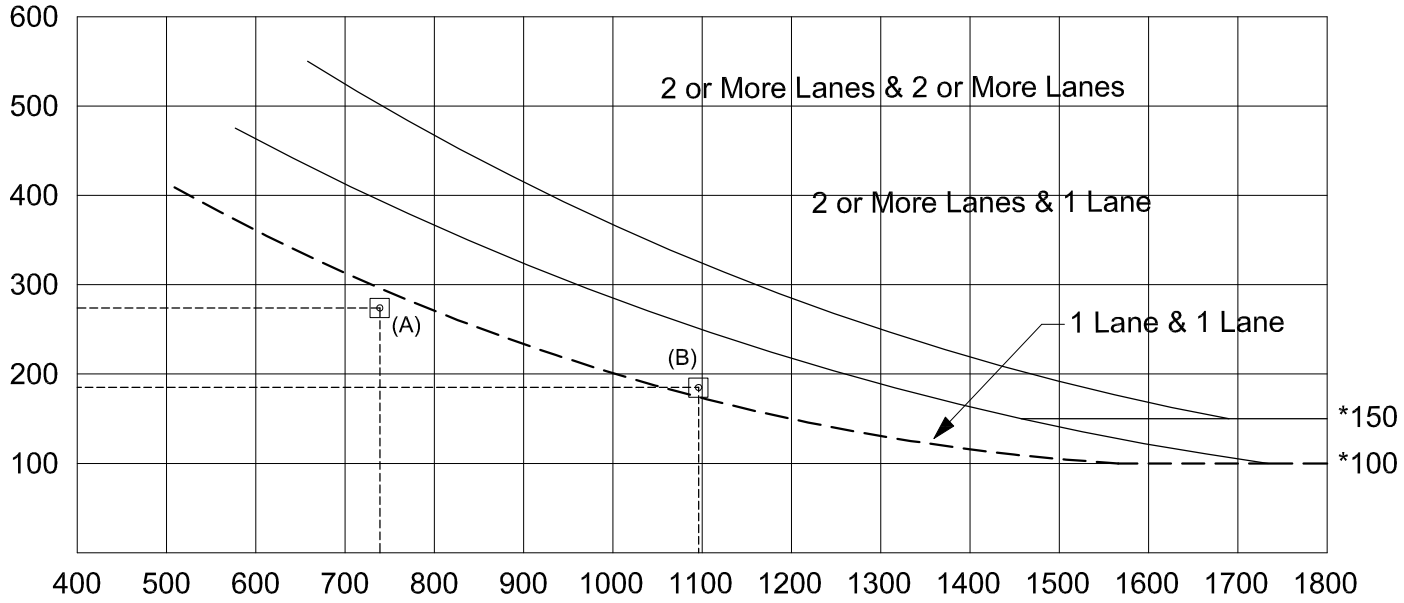
PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

PEAK HOUR TRAFFIC SIGNAL WARRANTS

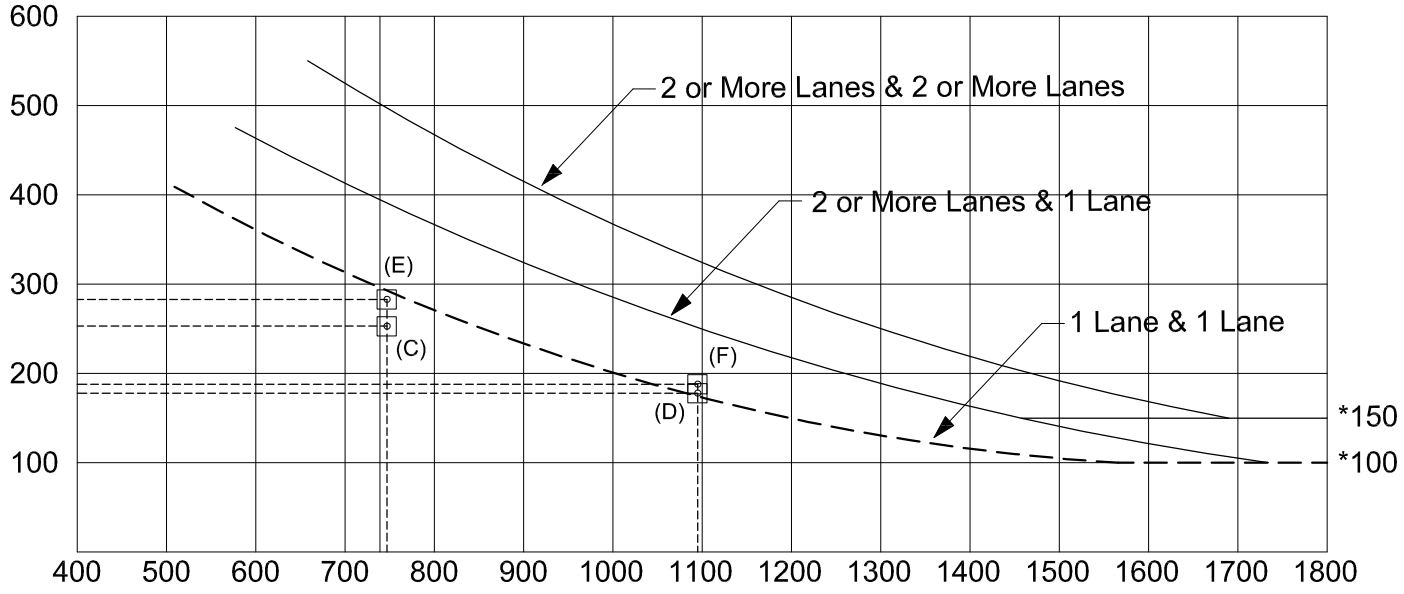
SR 99 Southbound Ramps and Tayor Road

Warrant #3 - Peak Hour Volume (100%)



	SR 99 SB Off Ramp	Taylor Road	Met
(A) Existing AM Peak Hour:	739	274 (WB) - One Lane	NO
(B) Existing PM Peak Hour:	1096	185 (WB) - One Lane	YES

Warrant #3 - Peak Hour Volume (100%)



	SR 99 SB Off Ramp	Taylor Road	Met
(C) Existing with 2006 Op. AM Peak Hour:	739	253 (WB) - One Lane	NO
(D) Existing W/ 2006 Op. PM Peak Hour:	1095	178 (WB) - One Lane	YES
(E) Existing + Phase 2 AM Peak Hour:	739	283 (WB) - One Lane	NO
(F) Existing + Phase 2 PM Peak Hour:	1095	188 (WB) - One Lane	YES

PINNACLE TRAFFIC ENGINEERING

Best RV Center Project
- Traffic Impact Analysis -

PEAK HOUR TRAFFIC SIGNAL WARRANTS

PINNACLE TRAFFIC ENGINEERING

831 C Street • Hollister, CA 95023 • (831) 638-9260

Best RV Center Project; Stanislaus County, CA

Traffic Impact Analysis (TIA) - PTE #314-A

Speed Data - Taylor Road @ Taylor Court (LDH; 9 AM - 4 PM - 9/25/18)

Data #	Eastbound (EB) - MPH		
1.	27		
2.	30		
3.	30		
4.	28		
5.	30		
6.	24		
7.	37		
8.	21		
9.	32		
10.	33		
11.	39		
12.	33		
13.	30		
14.	30		
15.	26		
16.	27		
17.	31		
18.			
19.			
20.			
Totals:	**508**	**-**	
Total:		**508**	

Data #	Westbound (WB) - MPH		
1.	26		
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
Totals:	**26**	**-**	
Total:		**26**	

Dry & Clear

Dry & Clear

EB Average Travel Speed :

Eastbound (EB) : 508 / 17 = **29.9 MPH**

85th Percentile Speed (EB): **33 MPH**

WB Average Travel Speed :

Westbound (WB) : 26 / 1 = **26.0 MPH**

PINNACLE TRAFFIC ENGINEERING
831 C Street
Hollister, California 95023
(831) 638-9260
PinnacleTE.com

May 21, 2018

Mr. Jim P. Freitas
Associated Engineering Group, Inc.
4206 Technology Drive, Suite 4
Modesto, CA 95356

RE: Best RV Center Project (PLN2017-0098); Stanislaus County, CA
PRELIMINARY Trip Generation Analysis

Dear Mr. Freitas,

Pinnacle Traffic Engineering (PTE) is pleased to submit the trip generation analysis for the Best RV Center project. The Best RV Center is currently located at 5340 Taylor Court in the unincorporated area north of Turlock. The project includes an expansion in two (2) phases. Phase 1 will provide additional area for RV sales inventory located on the adjacent parcels to the northwest. Phase 2 will relocate the existing facilities service center and parts sales office to the adjacent parcels to the southeast (formally Peterbilt Truck Sales & Service Center). The project will remodel the existing facility and include various infrastructure improvements to facilitate the expansion (e.g. paving, storm drain basins, landscaping & fencing, etc). The existing operations have approximately 65 employees, which is anticipated to increase to 90 employees with the completion Phase 2. Access to the existing site and adjacent parcels is currently provided via three (3) driveways on the east side of Taylor Court. Access to the expanded facility will continue to be provided via multiple driveways.

Stanislaus County has requested that a traffic study be prepared to evaluate the project trip generation (existing and proposed), levels of service, vehicle miles traveled, and impacts to local intersection operations (e.g. SR 99 / Taylor interchange). The initial phase of the traffic study provides a trip generation analysis to quantify the "net" increase vehicle trips associated with the proposed project. The City of Turlock is currently designing improvements at the SR 99 / Taylor Road interchange. The County is participating in the project fund and would like to determine the project's fair-share percentage towards the future interchange improvements. Data provided in the trip generation analysis will be used to estimate the project's fair-share funding.

Project Trip Generation Estimates

The project site trip generation associated with the existing operations was documented using new traffic count data (May 1, 2, and 3). Traffic count data was collected on Taylor Court just south of the southerly project site driveway and north of the existing driveways for the Woods Furniture Gallery. The new count data was reviewed to identify the morning (highest 60-minute period from 7:00 and 9:00 AM) and afternoon (highest 60-minute period from 4:00 and 6:00 PM) peak hour volumes. The existing Thermo King business is located at the northerly terminus of Taylor Court (6400 Taylor Court). New traffic count data was also collected at the Thermo King driveway to quantify the existing trip generation during the AM and PM peak hours on Taylor Court.

The trip generation associated with the existing Best RV Center operations was derived by subtracting the peak hour trips for the Thermo King business from the total peak hour volumes on Taylor Court (south of project site). The trip generation characteristics associated with the Best RV Center include a variety of trip types (employees, sales, service, RV deliveries, etc). Based on the unique operational characteristics, it was deemed reasonable to use the number of employees as the independent variable for trip generation purposes. The number of employees during the data collection period was provided by the Best RV Center. The "average" weekday peak hour trip generation rates per employee for the existing operations are presented in Table 1. The project site trip generation estimates associated with the number employees covered in 2006 Use Permit (8), average number of current daily employees (65), and number of employees associated with the Phase 2 (90) are also provided in Table 1. Copies of the project site trip generation rate calculation and new traffic count data are attached.

Table 1 - Project Site Trip Generation Rates and Estimates

Project Component	Number of Vehicle Trips			
	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
Trip Generation Rate per Employee: - Best RV Center Existing Operations	0.663	0.106	0.219	0.525
2006 Use Permit (8 Employees) -	5	1	2	4
2018 Current Operations (65 Employees) -	43	7	14	34
Phase 2 Completion (90 Employees) -	60	10	20	47
"Net" Change (2018 - 2006):	+38	+6	+12	+30
"Net" Change (Phase 2 - 2006):	+55	+9	+18	+43

The data in Table 1 indicates that the existing Best RV Center operations generate approximately 0.77 trips per employee during the AM peak hour and 0.74 trips per employee during the PM peak hour. The existing trip generation rates are considered reasonable since the average rates in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition) are relative close (Land Use

Code #842, Recreational Vehicle Sales). The Best RV Center project (Phase 2) will generate a "net" increase (Phase 2 - 2006 Use Permit) of 64 vehicle trips during the AM peak hour (55 inbound & 9 outbound) and 61 vehicle trips during the PM peak hour (18 inbound & 43 outbound).

The project's fair-share funding towards the SR 99 / Taylor Road interchange improvements will be determined upon receipt of the future traffic projection data from the City of Turlock. Additional requirements for a formal traffic study will be defined by County staff.

Please contact my office with any questions regarding the Preliminary trip generation analysis.

Pinnacle Traffic Engineering

Larry D. Hail, CE, TE, PTOE
President

REGISTERED PROFESSIONAL ENGINEER
LARRY D. HAIL
No. C 53,279
Exp. 6-30-19
CIVIL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LARRY D. HAIL
No. TR 2,372
Exp. 6-30-18
TRAFFIC
STATE OF CALIFORNIA

ldh:msw

attachments: Project Site Trip Generation Rate Calculation
New Taylor Court Traffic Count Data (May 1, 2 and 3; 2018)

PINNACLE TRAFFIC ENGINEERING

831 C Street • Hollister, CA 95023 • (831) 638-9260

PinnacleTE.com

Best RV Center Project; Stanislaus County, CA

- Project Trip Generation Analysis (May 20, 2018) -

- Taylor Court Traffic Count Data (S/O Southerly Driveway) -

		Tue. May 1st	Wed. May 2nd	Thur. 3-May	3-Day Average
AM Peak Hour:		**63**	**53**	**56**	**57**
	NB -	52	38	42	44
	SB -	11	15	14	13
PM Peak Hour:		**56**	**54**	**56**	**55**
	NB -	13	13	14	13
	SB -	43	41	42	42

- Taylor Court Traffic Count Data (N/O Northerly Driveway) -

AM Peak Hour:		**17**	**15**	**17**	**16**
	NB -	11	6	9	9
	SB -	6	9	8	8
PM Peak Hour:		**17**	**12**	**18**	**16**
	NB -	2	1	2	2
	SB -	15	11	16	14

- Best RV Center (Volumes S/O Southerly Dwy. - N/O Northerly Dwy) -

AM Peak Hour:		**46**	**38**	**39**	**41**
	NB -	41	32	33	35
	SB -	5	6	6	6
PM Peak Hour:		**39**	**42**	**38**	**40**
	NB -	11	12	12	12
	SB -	28	30	26	28
No. of Employees:		**53**	**53**	**54**	

- Best RV Center Trip Generation Rates (No. of Trips per Employee) -

AM Peak Hour:	IN -	0.774	0.604	0.611	**0.663**	- IN
	OUT -	0.094	0.113	0.111	**0.106**	- OUT
PM Peak Hour:	IN -	0.208	0.226	0.222	**0.219**	- IN
	OUT -	0.528	0.566	0.481	**0.525**	- OUT

	AM Peak Hour		**PM Peak Hour**	
	Inbound	**Outbound**	**Inbound**	**Outbound**
Org. Permit (8 Employees)	5	1	2	4
Existing (65 Employees):	43	7	14	34
Prop. (90 Employees):	60	10	20	47
Increase (Prop. - Org.):	**+55**	**+9**	**+18**	**+43**
Increase (Prop. - Ex.):	+17	+3	+6	+13

Prepared by NDS/ATD

VOLUME

Taylor Ct S/O Dwy 1 & N/O Wood Furniture Gallery

Day: Tuesday
Date: 5/1/2018

City: Turlock
Project #: CA18_7156_001

DAILY TOTALS	NB	SB	EB	WB	Total
	303	307	0	0	610

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	9		8						17	
00:15	0		0						0		12:15	8		8						16	
00:30	0		0						0		12:30	9		8						17	
00:45	0		0						0		12:45	10	36	9	33					19	69
01:00	1		0						1		13:00	12		13						25	
01:15	0		0						0		13:15	10		8						18	
01:30	1		1						2		13:30	7		8						15	
01:45	0	2	0	1					0	3	13:45	6	35	6	35					12	70
02:00	0		0						0		14:00	7		6						13	
02:15	1		1						2		14:15	2		2						4	
02:30	0		0						0		14:30	3		9						12	
02:45	1	2	1	2					2	4	14:45	1	13	6	23					7	36
03:00	0		0						0		15:00	3		5						8	
03:15	1		1						2		15:15	8		2						10	
03:30	0		0						0		15:30	10		8						18	
03:45	1	2	1	2					2	4	15:45	6	27	7	22					13	49
04:00	0		1						1		16:00	3		3						6	
04:15	0		1						1		16:15	1		1						2	
04:30	0		1						1		16:30	5		3						8	
04:45	0		0	3					0	3	16:45	3	12	3	10					6	22
05:00	1		1						2		17:00	1		16						17	
05:15	0		0						0		17:15	3		14						17	
05:30	0		0						0		17:30	6		10						16	
05:45	1	2	1	2					2	4	17:45	1	11	3	43					4	54
06:00	0		0						0		18:00	1		13						14	
06:15	0		0						0		18:15	2		22						24	
06:30	0		0						0		18:30	1		5						6	
06:45	1	1	0						1	1	18:45	5	9	5	45					10	54
07:00	0		0						0		19:00	0		2						2	
07:15	2		0						2		19:15	0		0						0	
07:30	9		0						9		19:30	0		0						0	
07:45	12	23	2	2					14	25	19:45	0		0	2					0	2
08:00	8		2						10		20:00	0		0						0	
08:15	9		3						12		20:15	2		2						4	
08:30	15		4						19		20:30	0		0						0	
08:45	20	52	2	11					22	63	20:45	1	3	0	2					1	5
09:00	7		6						13		21:00	0		0						0	
09:15	9		4						13		21:15	0		1						1	
09:30	5		5						10		21:30	0		0						0	
09:45	4	25	7	22					11	47	21:45	0		0	1					0	1
10:00	5		3						8		22:00	0		0						0	
10:15	4		7						11		22:15	0		0						0	
10:30	5		5						10		22:30	1		1						2	
10:45	8	22	3	18					11	40	22:45	0	1	0	1					0	2
11:00	2		6						8		23:00	0		0						0	
11:15	7		5						12		23:15	0		0						0	
11:30	8		9						17		23:30	1		1						2	
11:45	7	24	6	26					13	50	23:45	0	1	0	1					0	2
TOTALS		155		89						244	TOTALS		148		218						366
SPLIT %		63.5%		36.5%						40.0%	SPLIT %		40.4%		59.6%						60.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	303	307	0	0	610

AM Peak Hour	08:00	11:30			08:30	PM Peak Hour	12:30	17:30			12:30
AM Pk Volume	52	31			67	PM Pk Volume	41	48			79
Pk Hr Factor	0.650	0.861			0.761	Pk Hr Factor	0.854	0.545			0.790
7 - 9 Volume	75	13	0	0	88	4 - 6 Volume	23	53	0	0	76
7 - 9 Peak Hour	08:00	07:45			08:00	4 - 6 Peak Hour	16:45	16:45			16:45
7 - 9 Pk Volume	52	11	0	0	63	4 - 6 Pk Volume	13	43	0	0	56
Pk Hr Factor	0.650	0.688	0.000	0.000	0.716	Pk Hr Factor	0.542	0.672	0.000	0.000	0.824

Prepared by NDS/ATD

VOLUME

Taylor Ct S/O Dwy 1 & N/O Wood Furniture Gallery

Day: Wednesday
Date: 5/2/2018

City: Turlock
Project #: CA18_7156_001

DAILY TOTALS	NB	SB	EB	WB	Total
	294	296	0	0	590

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	7		13						20	
00:15	0		0						0		12:15	5		8						13	
00:30	0		0						0		12:30	5		9						14	
00:45	0		0						0		12:45	6	23	4	34					10	57
01:00	0		0						0		13:00	8		6						14	
01:15	1		1						2		13:15	9		5						14	
01:30	0		0						0		13:30	6		7						13	
01:45	0	1	0	1					0	2	13:45	10	33	5	23					15	56
02:00	0		1						1		14:00	10		9						19	
02:15	1		0						1		14:15	8		9						17	
02:30	0		0						0		14:30	7		6						13	
02:45	1	2	1	2					2	4	14:45	5	30	2	26					7	56
03:00	0		0						0		15:00	6		8						14	
03:15	1		1						2		15:15	4		5						9	
03:30	0		0						0		15:30	6		5						11	
03:45	1	2	1	2					2	4	15:45	5	21	5	23					10	44
04:00	0		2						2		16:00	4		9						13	
04:15	1		1						2		16:15	3		2						5	
04:30	0		0						0		16:30	5		3						8	
04:45	1	2	1	4					2	6	16:45	0	12	4	18					4	30
05:00	0		0						0		17:00	1		19						20	
05:15	0		0						0		17:15	7		14						21	
05:30	1		1						2		17:30	0		4						4	
05:45	0	1	0	1					0	2	17:45	1	9	3	40					4	49
06:00	1		0						1		18:00	2		25						27	
06:15	2		1						3		18:15	1		2						3	
06:30	0		0						0		18:30	0		0						0	
06:45	0	3	0	1					0	4	18:45	3	6	4	31					7	37
07:00	1		0						1		19:00	0		1						1	
07:15	4		0						4		19:15	1		0						1	
07:30	10		0						10		19:30	0		0						0	
07:45	13	28	0						13	28	19:45	0	1	1	2					1	3
08:00	7		5						12		20:00	0		0						0	
08:15	8		4						12		20:15	0		0						0	
08:30	10		3						13		20:30	0		0						0	
08:45	13	38	3	15					16	53	20:45	1	1	2	2					3	3
09:00	8		8						16		21:00	2		2						4	
09:15	3		3						6		21:15	1		1						2	
09:30	10		3						13		21:30	1		0						1	
09:45	5	26	3	17					8	43	21:45	0	4	1	4					1	8
10:00	3		4						7		22:00	0		0						0	
10:15	14		5						19		22:15	0		0						0	
10:30	7		10						17		22:30	0		0						0	
10:45	5	29	6	25					11	54	22:45	0		0						0	
11:00	7		7						14		23:00	1		1						2	
11:15	5		9						14		23:15	0		0						0	
11:30	3		4						7		23:30	0		0						0	
11:45	6	21	4	24					10	45	23:45	0	1	0	1					0	2
TOTALS		153		92						245	TOTALS		141		204						345
SPLIT %		62.4%		37.6%						41.5%	SPLIT %		40.9%		59.1%						58.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	294	296	0	0	590

AM Peak Hour	08:15	11:45			10:15	PM Peak Hour	13:15	17:15			13:30
AM Pk Volume	39	34			61	PM Pk Volume	35	46			64
Pk Hr Factor	0.750	0.654			0.803	Pk Hr Factor	0.875	0.460			0.842
7 - 9 Volume	66	15	0	0	81	4 - 6 Volume	21	58	0	0	79
7 - 9 Peak Hour	07:30	08:00			08:00	4 - 6 Peak Hour	16:30	16:45			16:30
7 - 9 Pk Volume	38	15	0	0	53	4 - 6 Pk Volume	13	41	0	0	53
Pk Hr Factor	0.731	0.750	0.000	0.000	0.828	Pk Hr Factor	0.464	0.539	0.000	0.000	0.631

Prepared by NDS/ATD

VOLUME

Taylor Ct S/O Dwy 1 & N/O Wood Furniture Gallery

Day: Thursday
Date: 5/3/2018

City: Turlock
Project #: CA18_7156_001

DAILY TOTALS	NB	SB	EB	WB	Total
	276	279	0	0	555

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	2		7						9	
00:15	0		0						0		12:15	8		9						17	
00:30	0		0						0		12:30	6		9						15	
00:45	0		0						0		12:45	10	26	7	32					17	58
01:00	0		0						0		13:00	9		5						14	
01:15	0		0						0		13:15	5		6						11	
01:30	1		1						2		13:30	4		6						10	
01:45	0	1	0	1					0	2	13:45	5	23	4	21					9	44
02:00	0		0						0		14:00	12		8						20	
02:15	1		1						2		14:15	9		8						17	
02:30	0		0						0		14:30	6		7						13	
02:45	1	2	1	2					2	4	14:45	3	30	6	29					9	59
03:00	0		0						0		15:00	1		3						4	
03:15	1		1						2		15:15	5		5						10	
03:30	0		0						0		15:30	4		4						8	
03:45	1	2	1	2					2	4	15:45	4	14	8	20					12	34
04:00	0		1						1		16:00	5		5						10	
04:15	0		0						0		16:15	5		3						8	
04:30	1		1						2		16:30	1		10						11	
04:45	0	1	0	2					0	3	16:45	3	14	1	19					4	33
05:00	0		1						1		17:00	4		21						25	
05:15	1		1						2		17:15	1		20						21	
05:30	0		0						0		17:30	3		4						7	
05:45	0	1	0	2					0	3	17:45	0	8	5	50					5	58
06:00	0		0						0		18:00	0		10						10	
06:15	1		1						2		18:15	1		5						6	
06:30	2		0						2		18:30	1		3						4	
06:45	1	4	1	2					2	6	18:45	2	4	2	20					4	24
07:00	2		0						2		19:00	2		0						2	
07:15	5		2						7		19:15	1		0						1	
07:30	9		1						10		19:30	0		2						2	
07:45	14	30	1	4					15	34	19:45	0	3	0	2					0	5
08:00	6		3						9		20:00	0		1						1	
08:15	7		4						11		20:15	2		3						5	
08:30	15		5						20		20:30	0		0						0	
08:45	10	38	2	14					12	52	20:45	0	2	0	4					0	6
09:00	12		5						17		21:00	0		2						2	
09:15	7		4						11		21:15	0		0						0	
09:30	10		9						19		21:30	0		0						0	
09:45	7	36	4	22					11	58	21:45	0		0	2					0	2
10:00	4		1						5		22:00	0		0						0	
10:15	2		1						3		22:15	0		0						0	
10:30	8		4						12		22:30	0		0						0	
10:45	6	20	6	12					12	32	22:45	0		0						0	
11:00	4		8						12		23:00	0		0						0	
11:15	1		2						3		23:15	0		0						0	
11:30	5		1						6		23:30	1		1						2	
11:45	6	16	5	16					11	32	23:45	0	1	0	1					0	2
TOTALS		151		79						230	TOTALS		125		200						325
SPLIT %		65.7%		34.3%						41.4%	SPLIT %		38.5%		61.5%						58.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	276	279	0	0	555

AM Peak Hour	08:15	11:45			08:15	PM Peak Hour	12:15	16:30			12:15
AM Pk Volume	44	30			60	PM Pk Volume	33	52			63
Pk Hr Factor	0.733	0.833			0.750	Pk Hr Factor	0.825	0.619			0.926
7 - 9 Volume	68	18	0	0	86	4 - 6 Volume	22	69	0	0	91
7 - 9 Peak Hour	07:45	08:00			07:45	4 - 6 Peak Hour	16:00	16:30			16:30
7 - 9 Pk Volume	42	14	0	0	55	4 - 6 Pk Volume	14	52	0	0	61
Pk Hr Factor	0.700	0.700	0.000	0.000	0.688	Pk Hr Factor	0.700	0.619	0.000	0.000	0.610

Prepared by National Data & Surveying Services

In & Out

Thermo King Business

Location: Dwy 4 N/O End of Taylor Ct
City: Turlock

Date: 05/01/2018
Day: Tuesday

TIME	In	Out	TOTAL
7:00 AM	0	0	***0***
7:15 AM	0	0	***0***
7:30 AM	5	0	***5***
7:45 AM	6	1	***7***
8:00 AM	6	1	***7***
8:15 AM	1	3	***4***
8:30 AM	1	1	***2***
8:45 AM	3	1	***4***
Totals	***22***	***7***	***29***
4:00 PM	1	0	***1***
4:15 PM	2	1	***3***
4:30 PM	0	4	***4***
4:45 PM	1	1	***2***
5:00 PM	1	9	***10***
5:15 PM	0	3	***3***
5:30 PM	0	2	***2***
5:45 PM	0	0	***0***
Totals	***5***	***20***	***25***

	Northbound	Southbound
8:00-9:00 AM	11	6
4:45-5:45 PM	2	15

Prepared by National Data & Surveying Services

In & Out

Thermo King Business

Location: Dwy 4 N/O End of Taylor Ct
City: Turlock

Date: 05/02/2018
Day: Wednesday

TIME	In	Out	TOTAL
7:00 AM	0	0	***0***
7:15 AM	2	0	***2***
7:30 AM	5	0	***5***
7:45 AM	8	0	***8***
8:00 AM	3	2	***5***
8:15 AM	1	4	***5***
8:30 AM	0	2	***2***
8:45 AM	2	1	***3***
Totals	***21***	***9***	***30***
4:00 PM	1	1	***2***
4:15 PM	2	0	***2***
4:30 PM	1	2	***3***
4:45 PM	0	1	***1***
5:00 PM	0	6	***6***
5:15 PM	0	2	***2***
5:30 PM	0	0	***0***
5:45 PM	0	2	***2***
Totals	***4***	***14***	***18***

	Northbound	Southbound
8:00-9:00 AM	6	9
4:30-5:30 PM	1	11

Prepared by National Data & Surveying Services

In & Out

Thermo King Business

Location: Dwy 4 N/O End of Taylor Ct **Date:** 05/03/2018
City: Turlock **Day:** Thursday

TIME	In	Out	TOTAL
7:00 AM	1	0	***1***
7:15 AM	3	1	***4***
7:30 AM	6	0	***6***
7:45 AM	4	0	***4***
8:00 AM	4	3	***7***
8:15 AM	1	2	***3***
8:30 AM	0	3	***3***
8:45 AM	1	1	***2***
Totals	***20***	***10***	***30***
4:00 PM	2	0	***2***
4:15 PM	4	1	***5***
4:30 PM	0	6	***6***
4:45 PM	1	1	***2***
5:00 PM	1	7	***8***
5:15 PM	0	2	***2***
5:30 PM	0	0	***0***
5:45 PM	0	2	***2***
Totals	***8***	***19***	***27***

	Northbound	Southbound
7:45-8:45 AM	9	8
4:30-5:30 PM	2	16

PINNACLE TRAFFIC ENGINEERING
831 C Street
Hollister, California 95023
(805) 644-9260

May 9, 2023

Mr. Jim P. Freitas
Associated Engineering Group, Inc.
4206 Technology Drive, Suite 4
Modesto, CA 95356

RE: Best RV Center Expansion Project (Phase 2); Stanislaus County, CA
Supplemental Traffic Impact Analysis

Dear Mr. Freitas,

Pinnacle Traffic Engineering is pleased to submit the Supplemental Traffic Impact Analysis (STIA) to address the proposed revisions to Phase 2 of the Best RV Center Expansion project. County staff has requested an evaluation of the potential impacts associated with the current proposed Phase 2 and a review of the Traffic Impact Analysis (TIA) prepared for the approved project (Dec. 31, 2018). The approved Phase 2 included relocating the existing service department and parts counter, remodeling the existing facility, and constructing various improvements (RV service and staging area, drive-thru waste disposal, propane station, storm drain basins, landscaping, fencing, etc). The approved Phase 2 included an increase in the total number of staff up to 90 employees. Phase 1 was evaluated and approved for increase in the number of staff up to 65 employees, which is the current level of operation. The 2018 TIA concluded the additional 25 employees would generate an increase of 198 daily trips, and 20 AM peak hour trips and 19 PM peak hour trips.

The Best RV Center customer operations continue to expand necessitating revisions to the previously approved Phase 2. The proposed Phase 2 now includes the development of a new facility with a total building area of 131,107 SF. The new facility will accommodate RV sales and services (showroom, reception area, office spaces, part sales, 40 service bays, RV wash tunnel, RV walk-thru, and RV delivery area). The proposed Phase 2 will provide 326 standard parking stalls (employee & customer), 119 RV parking stalls (customers, in-service and new RV delivery), and 2 new above-ground fuel storage tanks. The proposed Phase 2 also proposes an increase in the total number of staff up to 90 employees (same as the approved Phase 2 evaluated in the 2018 TIA).

<u>Proposed Phase 2 Trip Generation Estimates</u>
A Preliminary Trip Generation Analysis was prepared to quantify the "net" increase in vehicle trips associated with the previously approved Best RV Center Expansion Project (May 21, 2018). To document the trip generation associated with the existing 2018 operations new traffic count data was

collected at the project site driveways and on two (2) locations on Taylor Court. The count data was used to quantify the morning (highest 60-minute period between 7:00 & 9:00 AM) and afternoon (highest 60-minute period between 4:00 & 6:00 PM) peak hour volumes associated with the existing operations. The peak hour traffic volumes were then used to derive the actual peak hour trip generation rates (number of vehicle trips per employee). The trip generation characteristics associated with the existing 2018 operations included all vehicle trip types (employees, sales, service, RV deliveries, etc).

The Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) includes trip rates for Recreational Vehicle Sales (Land Use: 842). The ITE land use description states the category includes free-standing facilities that specializes in the sales of new and used RVs, and may also include RV services, and parts and accessory sales. The ITE Trip Generation Manual includes rate data for both independent variables, the number of vehicle trips per employee and number of vehicle trips per 1,000 SF. The actual trip generation rates based on the existing operations at the Best RV Center and ITE trip generation rates are presented in Table 1.

Table 1 - RV Vehicle Trip Generation Rates

Trip Rate Source	Number of Vehicle Trips				
	AM Peak Hour		PM Peak Hour		Daily
	In	Out	In	Out	
Actual Trip Generation Rates (a): - Best RV Center Existing Operations	0.663	0.106	0.219	0.525	NA
ITE Trip Generation Rates (b): - Recreational Vehicle Sales	0.612	0.108	0.264	0.646	7.88
ITE Trip Generation Rates (c): - Recreational Vehicle Sales	0.391	0.069	0.239	0.531	5.00

NA - Not Available
(a) Number of vehicle trips per employee (based on actual data)
(b) Number of vehicle trips per employee (ITE Trip Generation Manual, 11th Ed.)
(c) Number of vehicle trips per 1,000 SF (ITE Trip Generation Manual, 11th Ed.)

The data in Table 1 indicates the actual trip rates per employee are slightly higher than the ITE rates during the AM peak hour, but lower during the PM peak hour. It's noted that the 2018 Preliminary Trip Generation Analysis did not include documenting the number of daily trips associated with the existing operations or quantifying the actual daily trip generation rate. The trip generation associated with the previously approved Phase 2 was estimated using the actual peak hour trip rates documented in the 2018 Preliminary Trip Generation Analysis (analyzed in the 2018 TIA) and the ITE daily per employee trip rate. The proposed Phase 2 trip generation estimates using the various trip rates are presented in Table 2.

Table 2 - Project Site Trip Generation Estimate Comparison

Project Component	Number of Vehicle Trips				
	AM Peak Hour		PM Peak Hour		Daily
	In	Out	In	Out	
Based on Actual Trip Generation Rates (a): - Best RV Center Phase 2 (90 Employees)	60	10	20	47	710 (b)
Based on ITE Trip Generation Rates (b): - Best RV Center Phase 2 (90 Employees)	55	10	24	58	710
Based on ITE Trip Generation Rates (c): - Best RV Center Phase 1 (131,107 SF)	51	9	31	70	656

(a) Estimates analyzed in the 2018 TIA
(b) Estimates based on trip rates per employee
(c) Estimates based on ITE Trip Rate per 1,000 SF

Similar to the trip rate discussion, the AM peak hour estimates derived using the actual trip rates per employee are slightly higher than the estimates using the ITE trip rates (per employee or per 1,000 SF). However, the PM peak hour estimates derived using the ITE rates are higher than the estimates based on the actual rates. The PM peak hour estimates using the ITE per 1,000 SF trip rate generate approximately 50% more trips than using the actual trip rates per employee (analyzed in 2018 TIA). The daily trip estimate calculated using the ITE rate per 1,000 SF is lower than the estimate using the ITE rate per employee.

Evaluation of Proposed Phase 2 Impacts

The evaluation of Phase 2 impacts presented in the 2018 TIA were based on the "net" increase in trips (total of up to 90 employees). The roadway segment level of service (LOS) analysis was performed using the estimated Phase 2 daily trips based on the ITE daily trip rate per employee. The data in Table 2 demonstrates that the number of daily trips analyzed in 2018 TIA are higher than the daily trips derived using the ITE trip per 1,000 SF rate. Therefore, the proposed Phase 2 revisions will not change the "existing plus project" or "General Plan plus project" roadway segment analyses in the 2018 TIA. The General Plan scenario analyzed in the 2018 TIA was based on daily traffic projections provided in the City of Turlock's General Plan.

The analysis of future intersection operations focused on the "existing plus project" scenario since the City's General Plan did not include peak hour projections for the study intersections. As previously stated, the PM peak hour estimates derived using the ITE per 1,000 SF rate are approximately 50% higher than the Phase 2 trips analyzed in 2018 TIA (+11 trips inbound and +23 trips outbound). The 2018 TIA concluded the Best RV Center Expansion Project (Phases 1 & 2) would have a potentially significant impact on peak hour operations at the SR 99 / Taylor Road interchange (northbound and southbound ramps). However, the LOS analysis also demonstrated that the peak hour trips associated

with the approved Phase 2 would not impact either the N. Golden State Boulevard / Taylor Road or Taylor Road / Taylor Court intersections. The Synchro 10 intersection analysis software was used to evaluate the potential impacts associated with the additional PM peak hour trips generated by the proposed Phase 2 (+34 trips). The analysis concluded that the N. Golden State Boulevard / Taylor Road or Taylor Road / Taylor Court intersections will continue to operate within acceptable limits (LOS C or better). Therefore, the additional PM peak hour trips associated with the proposed Phase 2 will not change the intersection analysis presented in the 2018 TIA.

The City of Turlock's CFF Nexus Study has identified a need for improvements at the SR 99 / Taylor Road interchange. Stanislaus County participates in the funding of future interchange improvements and requires projects to pay their fair-share towards the future improvements. The 2018 TIA included an estimate of the Best RV Center's fair-share percentage towards the future SR 99 / Taylor Road interchange improvements (1.13%). A previously stated, the General Plan scenario analyzed in the 2018 TIA was based on daily traffic projections in the City's General Plan. Therefore, the proposed Phase 2 estimated fair-share contribution towards the future improvements at the SR 99 / Taylor Road interchange TIA will not change. The payment of the County's Public Facilities Fee and fair-share contribution towards the future SR 99 / Taylor Road interchange improvements served as mitigation for the identified potentially significant project impacts.

<u>Summary</u>

The Best RV Center operations continue to expand necessitating revisions to the previously approved Phase 2. The proposed Phase 2 now includes the development of a new facility with a total building area of 131,107 SF. The 2018 TIA prepared for the previously approved project provided an analysis of the Phase 2 impacts. The STIA provides an evaluation of the potential impacts associated with the current proposed Phase 2. The proposed revisions to Phase 2 will not change the roadway segment or intersection analysis, or conclusions presented in the 2018 TIA.

Please contact my office with any questions regarding the Preliminary trip generation analysis.

Pinnacle Traffic Engineering

Larry D. Hail, P.E.
President

ldh:msw

attachments: Synchro 10 LOS Worksheets - N. Golden State Boulevard / Taylor Road Intersection
Synchro 10 LOS Worksheets - Taylor Road / Taylor Court intersections

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	523	789	43	442	46	440	160	52	73	256	34
Future Volume (veh/h)	33	523	789	43	442	46	440	160	52	73	256	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1945	1945	1900	1870	1976	1870	1900	1976	1900	1900	1976
Adj Flow Rate, veh/h	35	551	0	45	465	0	463	168	0	77	269	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	0	2	0	0	0	0	0
Cap, veh/h	63	666		74	1238		648	356		333	350	
Arrive On Green	0.03	0.34	0.00	0.04	0.35	0.00	0.19	0.19	0.00	0.18	0.18	0.00
Sat Flow, veh/h	1810	1945	1648	1810	3554	1675	3456	1900	1675	1810	1900	1675
Grp Volume(v), veh/h	35	551	0	45	465	0	463	168	0	77	269	0
Grp Sat Flow(s),veh/h/ln	1810	1945	1648	1810	1777	1675	1728	1900	1675	1810	1900	1675
Q Serve(g_s), s	1.4	19.1	0.0	1.8	7.2	0.0	9.2	5.8	0.0	2.7	9.9	0.0
Cycle Q Clear(g_c), s	1.4	19.1	0.0	1.8	7.2	0.0	9.2	5.8	0.0	2.7	9.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	63	666		74	1238		648	356		333	350	
V/C Ratio(X)	0.56	0.83		0.61	0.38		0.71	0.47		0.23	0.77	
Avail Cap(c_a), veh/h	170	1418		222	2692		1365	751		752	790	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.9	22.2	0.0	34.6	17.9	0.0	28.0	26.6	0.0	25.5	28.4	0.0
Incr Delay (d2), s/veh	7.5	2.7	0.0	7.8	0.2	0.0	1.5	1.0	0.0	0.4	3.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	8.6	0.0	0.9	2.8	0.0	3.8	2.6	0.0	1.1	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	24.9	0.0	42.4	18.1	0.0	29.5	27.6	0.0	25.9	32.0	0.0
LnGrp LOS	D	C		D	B		C	C		C	C	
Approach Vol, veh/h		586	A		510	A		631	A		346	A
Approach Delay, s/veh		25.9			20.3			29.0			30.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		18.0	7.5	29.6		18.3	7.1	30.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		30.5	9.0	53.5		29.0	6.9	55.6				
Max Q Clear Time (g_c+I1), s		11.9	3.8	21.1		11.2	3.4	9.2				
Green Ext Time (p_c), s		1.7	0.0	4.0		2.5	0.0	3.5				

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	526	794	43	444	46	442	160	52	73	256	35
Future Volume (veh/h)	34	526	794	43	444	46	442	160	52	73	256	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1945	1945	1900	1870	1976	1870	1900	1976	1900	1900	1976
Adj Flow Rate, veh/h	36	554	0	45	467	0	465	168	0	77	269	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	0	2	0	0	0	0	0
Cap, veh/h	64	668		74	1240		649	357		333	350	
Arrive On Green	0.04	0.34	0.00	0.04	0.35	0.00	0.19	0.19	0.00	0.18	0.18	0.00
Sat Flow, veh/h	1810	1945	1648	1810	3554	1675	3456	1900	1675	1810	1900	1675
Grp Volume(v), veh/h	36	554	0	45	467	0	465	168	0	77	269	0
Grp Sat Flow(s),veh/h/ln	1810	1945	1648	1810	1777	1675	1728	1900	1675	1810	1900	1675
Q Serve(g_s), s	1.4	19.3	0.0	1.8	7.3	0.0	9.3	5.8	0.0	2.7	9.9	0.0
Cycle Q Clear(g_c), s	1.4	19.3	0.0	1.8	7.3	0.0	9.3	5.8	0.0	2.7	9.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	64	668		74	1240		649	357		333	350	
V/C Ratio(X)	0.56	0.83		0.61	0.38		0.72	0.47		0.23	0.77	
Avail Cap(c_a), veh/h	169	1410		221	2678		1358	747		748	785	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.0	22.2	0.0	34.8	18.0	0.0	28.1	26.7	0.0	25.7	28.6	0.0
Incr Delay (d2), s/veh	7.5	2.7	0.0	7.9	0.2	0.0	1.5	1.0	0.0	0.4	3.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	8.7	0.0	0.9	2.8	0.0	3.8	2.6	0.0	1.1	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.6	25.0	0.0	42.7	18.2	0.0	29.6	27.7	0.0	26.0	32.2	0.0
LnGrp LOS	D	C		D	B		C	C		C	C	
Approach Vol, veh/h		590	A		512	A		633	A		346	A
Approach Delay, s/veh		26.0			20.3			29.1			30.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		18.1	7.5	29.8		18.4	7.1	30.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		30.5	9.0	53.5		29.0	6.9	55.6				
Max Q Clear Time (g_c+I1), s		11.9	3.8	21.3		11.3	3.4	9.3				
Green Ext Time (p_c), s		1.7	0.0	4.1		2.5	0.0	3.5				

Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	57	0	9	53	12	0	0	6	61	0	13
Future Vol, veh/h	1	57	0	9	53	12	0	0	6	61	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	60	0	9	56	13	0	0	6	64	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	69	0	0	60	0	0	150	149	60	146	143	63
Stage 1	-	-	-	-	-	-	62	62	-	81	81	-
Stage 2	-	-	-	-	-	-	88	87	-	65	62	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1545	-	-	1556	-	-	822	746	1011	827	752	1007
Stage 1	-	-	-	-	-	-	954	847	-	932	832	-
Stage 2	-	-	-	-	-	-	925	827	-	951	847	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1545	-	-	1556	-	-	806	741	1011	817	747	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	806	741	-	817	747	-
Stage 1	-	-	-	-	-	-	953	846	-	931	827	-
Stage 2	-	-	-	-	-	-	907	822	-	944	846	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	8.6	9.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1011	1545	-	-	1556	-	-	845
HCM Lane V/C Ratio	0.006	0.001	-	-	0.006	-	-	0.092
HCM Control Delay (s)	8.6	7.3	0	-	7.3	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	57	0	9	53	21	0	0	6	80	0	13
Future Vol, veh/h	3	57	0	9	53	21	0	0	6	80	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	60	0	9	56	22	0	0	6	84	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	78	0	0	60	0	0	158	162	60	154	151	67
Stage 1	-	-	-	-	-	-	66	66	-	85	85	-
Stage 2	-	-	-	-	-	-	92	96	-	69	66	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1533	-	-	1556	-	-	813	734	1011	817	744	1002
Stage 1	-	-	-	-	-	-	950	844	-	928	828	-
Stage 2	-	-	-	-	-	-	920	819	-	946	844	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1533	-	-	1556	-	-	797	728	1011	807	738	1002
Mov Cap-2 Maneuver	-	-	-	-	-	-	797	728	-	807	738	-
Stage 1	-	-	-	-	-	-	948	842	-	926	823	-
Stage 2	-	-	-	-	-	-	902	814	-	938	842	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.8	8.6	9.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1011	1533	-	-	1556	-	-	830
HCM Lane V/C Ratio	0.006	0.002	-	-	0.006	-	-	0.118
HCM Control Delay (s)	8.6	7.4	0	-	7.3	0	-	9.9
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4