NEVADA COUNTY, CALIFORNIA
ADDENDUM TO THE ENVIRONMENTAL IMPACT REPORT
FOR THE HIGGINS MARKET PLACE AND FUEL STATION PROJECT

TO:

Department of Public Works – Surveyor
Department of Public Works – Engineering
Department of Public Works – Sanitation
Department of Public Works – Transit
Environmental Health Department
Building Department
County Counsel*
Nevada County Transportation Commission
Northern Sierra Air Quality Management Dist.
Ag Commissioner / Weights & Measures
Housing/Community Services
CEO – Alison Lehman
LAFCo
PG&E
Higgins Fire District
Pleasant Ridge Union School District
Placer County Planning
US Army Corp of Engineers
US Fish & Wildlife
Nevada County Economic Resource Council
General Plan Defense Fund
Lake of the Pines HOA
Shingle Springs Band of Miwok Indians
CALFire, Nevada Yuba Placer Unit – Brian Estes
Commissioner Duncan, District II
Brian Foss, Planning Director
Mali LaGoe – Acting CDA Director
Property Owners w/in 300-Feet
Caltrans Highways
Fire Protection Planner
CA Fish & Wildlife
Central Valley Water Quality Control
Department of Water Resources
Native American Heritage Commission
Nevada Irrigation District
CA State Fire Marshal
Air Resources Control Board
Resource Conservation District
CA Native Plant Society - Redbud
Nevada County Association of Realtors
Lake of the Pine HOA – Tom Wright
Kevin Johnston
Sierra Nevada Group/Sierra Club
Federation of Neighborhoods
Tsi Akim Maidu
United Auburn Indian Community
Bear Yuba Land Trust
Friends of Nevada City
Keep Nevada County Rural
Nevada City Rancheria Nisenan Tribe
Nevada County Contractor's Association
California State Clearinghouse
Supervisor Scofield, District II
Tyler Barrington, Principal Planner
COB – Jeff Thorsby

**receives full report, others receive NOA/NOI only with report available online.*

Date: May 18, 2021

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File Number(s): PLN20-0087; AAP20-0005; DVP20-1; EIS20-0003

Assessor's Parcel Numbers: 057-260-024

Applicant / Property Owner:
North State Grocery, Inc.
KKP Lake of the Pines, LLC.
P.O. Box 439
Cottonwood, CA 96602

Representative:	Russell King King Engineering 200 Auburn Folsom Road, Suite 201 Auburn, CA 95603
Zoning Districts:	Community Commercial (C2) – Scenic Corridor Combining District (SC) – Site Performance Combining District (SP)
General Plan Designation:	Community Commercial (CC)

Introduction:

As Lead Agency, Nevada County prepared an Environmental Impact Report (EIR) for the Higgins Marketplace Project (referred to herein as the "approved project"). The Nevada County Board of Supervisors certified the Higgins Marketplace Project Final Environmental Impact Report (referred to herein as the "EIR") (EIR04-001, State Clearinghouse No. 2005022022) and approved the Higgins Marketplace project on August 18, 2009, which included the following:

1. Certification of a Final Environmental Impact Report (EIR04-001, State Clearinghouse No. 2005022022) **2.** General Plan Amendment (GP-005) as modified, to re-designate the site from the Business Park land use designation to Community Commercial (12.03-acres), Business Park (3.03 acres), Office Professional (0.77 acres), and Open Space (4.23-acres). **3.** Rezone (Z04-012), as modified to rezone the site from BP-SC-SP (Business Park – Scenic Corridor – Site Performance) to 12.03 acres of C2-SC-SP (Community Commercial – Scenic Corridor – Site Performance), 3.03 acres of BP-SC-SP (Business Park – Scenic Corridor – Site Performance), 0.78 acres of OP-SC-SP (Office Professional – Scenic Corridor – Site Performance), and 4.23 acres of Open Space including Site Performance standards; **4.** A Tentative Parcel Map (PM04-020) to subdivide the project site from one parcel into 7 parcels; **5.** A Management Plan to allow the reduction of the 100-foot setback from the onsite wetlands to 50 feet (plus an additional 20-foot buffer); and **6.** A Use Permit (U04-019) to allow the construction of a 75,710-square-foot shopping center consisting of four buildings and associated parking.

The proposed changes to the approved project are referred to herein as the "proposed modified project." This Addendum has been prepared to determine whether the proposed modified project would result in new or substantially more severe significant environmental impacts compared with the impacts disclosed in the certified EIR.

Basis for an EIR Addendum:

An agency may prepare an Addendum to a prior EIR pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15164 that states, in pertinent part, that "The lead agency […] shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred." Section 15162 states that a subsequent EIR would be required if any of the following conditions exist: (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) The availability of new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative

declaration was adopted, shows that the project will have one or more significant effects not discussed in the previous EIR, significant effects previously examined will be substantially more severe than shown in the previous EIR, or mitigation measures or alternatives that were previously found not to be feasible or that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measure or alternative. Based on the evaluation provided in this Addendum, no new significant impacts would occur as a result of the proposed modified project, nor would there be any substantial increases in the severity of any previously-identified adverse environmental impacts. In addition, no new information of substantial importance shows that mitigation measures or alternatives that were previously found not to be feasible or that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment alternative. Therefore, none of the conditions described in Section 15162 of the CEQA Guidelines has occurred. For this reason, an Addendum is the appropriate document to comply with CEQA requirements.

Evaluation of Alternatives:

CEQA requires a comparative evaluation of a proposed project and alternatives to the project, including the "No Project" alternative. The EIR addressed a reasonable range of alternatives for the project. There is no new information indicating that an alternative that was previously rejected as infeasible is in fact feasible, or that a considerably different alternative than those previously studied would substantially reduce one or more significant effects on the environment.

Project Location and Surrounding Land Uses:

The subject project site is currently developed and is located within the existing Higgins Marketplace, and contains an existing approximately 30,000-square-foot Holiday Market grocery store, located on Assessor Parcel Number 057-260-024, known as Parcel 1 of Parcel Map 04-020 (Higgins Market Place, 21 of Parcel Maps, Page 62). The overall Higgins Marketplace is comprised of seven (7) parcels which total approximately 20.07 acres and contains Assessor Parcel Numbers: 057-260-019 (0.96 acres), 057-260-0020 (1.95 acres) , 057-260-022 (4.23 acres), 057-260-024 (5.52 acres), 057-260-023 (1.23 acres), 057-260-021 (.79 acres). In addition, the Higgins Marketplace contains a rights-of-way parcel comprising Woodridge Drive and Higgins Road, consisting of Assessor Parcel Number 057-260-025 and which is approximately 2.3 acres in size. The Higgins Marketplace is located on the east side of Highway 49, in unincorporated southern Nevada County, near the Lake of the Pines community. The project site is also located within the Lake of the Pines Village Center and is also located within the boundaries of the Higgins Area Plan.

To the immediate north, the project site is bordered two parcels which are developed with existing single-family residences. Further to the north, beyond the single-family residences is the Higgins Center, which is an approximately 33,050-square-foot commercial shopping center complex immediately south of Combie Road. South of the project site, is undeveloped and contains topography and vegetation similar to that of the project site. An existing paved driveway, providing access to the two single-family residences to the north, borders the project site's western boundary. Located to the east of the project site is Sierra Storage, a mini-storage facility which contains multiple buildings and undeveloped areas with dense oak trees.

Project Background:

The Higgins Marketplace Project as originally analyzed in the certified EIR consisted of the subdivision of a 20.07-acre site into 10 parcels for commercial, light industrial, and office uses. On five of the parcels (approximately 10.58 acres), the originally proposed project called for a 59,800 square- foot retail store

(expected to be a Bel-Air Market),[1] two retail buildings (one 13,200 square feet and one 6,500 square feet), two 3,500 square-foot fast-food restaurant buildings, and 482 parking stalls. No development was proposed on four other parcels (approximately 5.07 acres). It was anticipated, however, that these parcels could accommodate 42,000 square feet of light industrial and office space. The last parcel (approximately 3.26 acres in size) was designated to retain the existing wetlands and to provide an approximately 25-foot setback between the developed parcels and the onsite wetlands. As originally proposed, some tenants would require drive-through's, outside storage, outdoor display, outdoor vendor sales and/or outside seasonal sales. These uses and structures were to be permitted and controlled through a set of design guidelines subject to County approval and would be applicable to the entire shopping center. Signage would be governed by County sign criteria. A free standing pylon sign was anticipated to be located on the eastern property boundary, visible from State Route 49.

Subsequent to the release of the FEIR and after the Planning Commission hearing on the project held on January 8, 2009, the applicant advised the County that it would work with County Staff to refine the Project design concept described in the EIR in a manner that addressed the significant traffic impacts of the Project. To that end, County Planning Staff met with the applicant to review and refine the Project design concept. Following the January 8, 2009 Planning Commission hearing, the applicant submitted detailed plans for what it referred to as the "Revised Project." Prior to the May 28, 2009 Planning Commission hearing, the applicant informed County staff that it was no longer seeking approval for the project as initially proposed and described in the EIR, but rather is seeking approval of the Revised Project instead. The Planning Commission considered the merits of the Revised Project at a public hearing held on May 28, 2009. On August 18, 2009, the Board of Supervisors determined that the Revised Project was more desirable and was environmentally superior to both the project initially proposed and the alternatives described in the EIR (except for the "No Project" alternative which is not feasible). Therefore, the Board of Supervisors approved the General Plan Amendment (GP-005) as modified, to re-designate the site from the Business Park land use designation to Community Commercial (12.03-acres), Business Park (3.03 acres), Office Professional (0.77 acres), and Open Space (4.23-acres). The Board of Supervisors also approved the Rezone (Z04-012), as modified to rezone the site from BP-SC-SP (Business Park – Scenic Corridor – Site Performance) to 12.03 acres of C2-SC-SP (Community Commercial – Scenic Corridor – Site Performance), 3.03 acres of BP-SC-SP (Business Park – Scenic Corridor – Site Performance), 0.78 acres of OP-SC-SP (Office Professional – Scenic Corridor – Site Performance), and 4.23 acres of Open Space including Site Performance standards.

Between September 24, 2009 and November 12, 2009, the Nevada County Planning Commission considered and ultimately approved a Use Permit, a Management Plan and a Tentative Parcel map for the Higgins Marketplace project. That action resulted in two separate appeals to the Board of Supervisors, who began considering the appeals at their regular meeting on January 26, 2010 and ultimately approving the project as it was revised on April 13, 2010, which established the final project approval date. A legal challenge was then filed, which challenged the adequacy of the Final EIR, which was resolved when the Third Appellate District issued a Remittitur in the case on January 7, 2014.

The revised project as it was previously approved was similar to the originally proposed project except that modifications had been made to further decrease potential environmental impacts associated with the Project. The Revised Project achieved the goal of decreasing the Project's potential environmental impacts

[1] The FEIR amended the Project description to reduce the anticipated Bel-Air Market from 59,800 square feet to 57,022 square feet. (FEIR, p. 4.0-1.)

by increasing the wetland buffer parcel, reducing the overall size of the area to be developed, reducing the total number of buildings proposed to be constructed from five to four, reducing the combined building footprint of the Project, and prohibiting the development of drive-through restaurants. Specifically, the Revised Project consisted of the subdivision of the 20.07-acre site into 7 parcels for commercial, light industrial, and office uses. On four of the parcels (approximately 9.68 acres), the Revised Project called for a 50,060 square-foot retail store (expected at the time to be a Bel-Air Market), two retail buildings (one 11,400 square feet and one 8,250 square feet), one 6,000 square-foot sit-down restaurant, and 411 parking stalls. In total, the previously revised project included the development of 75,710 total square feet of commercial building area; in comparison, the originally proposed project included 86,500 square feet and the Redesign/Reduced Density Alternative included 80,000 square feet.

No development was proposed on two other parcels (approximately 3.80 acres). Under the previously approved revised project, however, it was still anticipated that these parcels could accommodate 26,000 square feet of light industrial and office space. The last parcel (approximately 4.23 acres in size) was designated to retain the existing wetlands and to provide an approximately 70-foot setback between the developed parcels and the onsite wetlands as contained within the Management Plan component approved for the project. No drive-through restaurants were included in the previously approved revised project, and the Use Permit would prohibit the future development of drive-through restaurants within the Higgins Marketplace. As with the originally proposed project, some tenants required outside storage, outdoor signage display, outdoor vendor sales along with outdoor seasonal sales. These uses and structures were permitted and controlled through the Use Permit process subject to County approval and are applicable to the entire shopping center. Signage is governed through the Use Permit process and approval of a Master Sign Criteria for the shopping center. A free standing pylon sign is still anticipated to be located on the eastern property boundary, visible from State Route 49 and will be included in the Master Sign Criteria.

Modified Project Description:
The project as proposed is a combined application for a Development Permit (DVP20-1) to construct a proposed Fuel Station with four (4) self-service pump islands with eight (8) fueling positions adjacent the existing Holiday Market Grocery Store. Development would consist of the construction of a proposed approximately 4,524-square-foot Fuel Station canopy that would be approximately 22 feet in height for the Fuel Station and the installation of two (2) underground fuel storage tanks, consisting of one (1) 15,000-gallon tank for regular unleaded fuel and one (1) 12,000-gallon tank (split between 6,000 gallons for premium unleaded and 6,000 gallons for diesel). The proposed Fuel Station would be constructed within an existing approximately 20,000-square-foot area of the project that has been graded, compacted with gravel and landscaped that is located south of the existing Holiday Market Grocery Store, which is contained within an existing approximately 50,000-square-foot building area that was approved for development as part of the Higgins Marketplace. Additional development of the Fuel Station would consist of the construction of a fuel price sign, which would be externally illuminated, a canopy wall sign located on the Fuel Station canopy identifying Holiday Fuel and an addition to the existing Higgins Marketplace Pole Sign, identifying Holiday Fuel. The project as proposed also includes a request to amend the previously approved Use Permit, U04-019 (AAP20-0005), to recognize the reduction in the size of the Holiday Market Grocery Store, from approximately 50,000 square feet to approximately 30,000 square feet.

Relationship to Other Projects:
This Addendum evaluates the potential for the proposed modified project to result in new or substantially more severe significant impacts compared to the impacts disclosed in the Certified EIR. The environmental analysis provided in this Addendum describes the information that was considered in evaluating the questions contained in the Higgins Marketplace California Environmental Quality Act (CEQA) Checklist. The information used in this evaluation includes the certified Higgins Marketplace EIR, proposed modified project description, updated Technical Reports, revised Site Plan, revised project information, and site visits.

The proposed modified project would incorporate and implement all appropriate Mitigation Measures identified in the certified Higgins Marketplace EIR. Specific Mitigation Measures relevant to a particular impact of the proposed modified project are cited in the same manner as in the EIR and the associated Mitigation Monitoring and Reporting Program adopted in conjunction with the Higgins Marketplace project approvals. Furthermore, this Addendum is a review of the previous EIR and identifies impacts that were previously evaluated. As discussed throughout this Addendum, all impacts levels of significance have been incorporated into this Addendum from the certified Higgins Marketplace EIR.

Adoption and Availability of Addendum:
In accordance with CEQA Guidelines Section 15164(c), an addendum to an EIR need not be circulated for public review but can be included in or attached to the certified EIR. The decision-making body shall consider the Addendum with the certified EIR prior to making a decision on the project (CEQA Guidelines Section 15164(d). Although not required, this Addendum is being circulated for a 30-day public review period as outlined in the Notice of Availability/Notice of Intent to Adopt.

Other Permits, Which May Be Necessary: Based on initial comments received, the following permits may be required from the designated agencies:

1. Building and Grading Permits - Nevada County Building Department
2. County Road Encroachment Permit - Nevada County Public Works Department
3. Underground Storage Tank Installation Permit – Nevada County Environmental Health Department
4. Registration with the Nevada County Department of Agriculture, Weights & Measures Program – Nevada County Department of Agriculture
5. Authority to Construct Permit / Permit to Operate – Northern Sierra Air Quality Management District
6. National Pollutant Discharge Elimination System (NPDES) Permit, Storm Water Construction General Permit, Water Quality Certification or Waiver, under Sections 401 and 402 of the Clean Water Act – Central Valley Regional Water Quality Control Board

SUMMARY OF IMPACTS AND RECOMMENDED MITIGATION MEASURES AS CARRIED OVER FROM THE CERTIFIED HIGGINS MARKETPLACE EIR (EIR04-001, STATE CLEARINGHOUSE NO. 2005022022):

3. AIR QUALITY

Mitigation: To offset potentially adverse air quality impacts associated with the project activities, the following mitigation measures shall be required:

Mitigation Measure 4.6.1a: Project proponent and all successors in interest shall include dust control mitigation requirements in all construction contracts. All construction contracts will require the following:

- All construction activities would be subject to the requirements of the Northern Sierra AQMD's Regulation 2, Rule 226 regarding dust control.
- Alternatives to open burning of vegetative material on the project site shall be used unless deemed infeasible by the Northern Sierra Air Quality Management District. Suitable alternatives are chipping, mulching, or conversion to biomass fuel.
- Contractors shall be responsible for ensuring that adequate dust control measures are implemented in a timely manner during all phases of project development and construction.
- All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or violation of an

ambient air standard. Watering should occur at least twice daily, with complete site coverage, preferably in the mid-morning and after work is completed each day.
- All areas (including unpaved roads) with vehicle traffic shall be watered or have a dust palliative applied as necessary for stabilization of dust emissions.
- All on-site vehicle traffic shall be limited to a speed of 15 mph on unpaved roads.
- All land clearing, grading, earth moving or excavation activities shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
- Temporary traffic control will be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans.
- Construction activities should be scheduled to direct traffic flow to off-peak hours as much as possible.
- All inactive portions of the construction site shall be covered, seeded, or watered until a suitable cover is established. Alternatively, apply non-toxic soil stabilizers (according to manufacturer's specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours) in accordance with County standards. Acceptable materials that may be used for chemical soil stabilization include petroleum resins, asphaltic emulsions, acrylics, and adhesives, which do not violate Regional Water Quality Control Board or California Air Resources Board standards.
- Wheel washers will be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment will be washed prior to each trip, as necessary to prevent visible dust emissions from adhering dirt or deposition on roadways.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent public nuisance.
- Re-establish ground cover on the site through seeding and watering in accordance with the local grading ordinance.
- Properly maintain all mobile and stationary equipment.

Timing: *Prior to the issuance of grading permits*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department; Department of Public Works; and the Northern Sierra Air Quality Management District.*

Mitigation Measure 4.6.5a: The project developer and all successors in interest shall incorporate to the extent practical and feasible the following energy-efficiency/area source features into the design of the project:
- Install EPA Energy Star (high reflectance) roofing materials to reduce building heat absorption and summer energy costs.
- Plant shade trees in parking lots at 10 percent or more in excess of that already required by ordinance.
- Landscape with native drought-resistant species (plants, trees and bushes) to reduce the demand for gas powered landscape maintenance equipment.
- Incorporate passive solar space heating designs and solar water heaters into commercial units.
- Install low nitrogen oxide (NOx) energy-efficient heating and other appliances, such as water heaters, cooking equipment, refrigerators, furnaces and boiler units

Timing: *As a condition of project approval.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

Mitigation Measure 4.6.5b: The project developer and all successors in interest shall incorporate the following features into the design of the project to reduce vehicle trip generation:
- Provide direct, safe, attractive pedestrian access from project land uses to the Higgins Center to the north at the corner of SR 49 and Combie Road.
- Provide secure and conveniently located bicycle parking.
- Specialty equipment (utility carts, forklifts, etc.) should be electrically, CNG or propane powered.

Timing: *As a condition of project approval.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

4. BIOLOGICAL RESOURCES

Mitigation: To offset potentially adverse biological impacts associated with the project activities, the following mitigation measures shall be required:

Mitigation Measure 4.9.1a: If proposed grading, site preparation, or construction activities are planned to occur during the nesting seasons for local avian species (typically March 1st through August 31st), the project applicant shall retain a qualified biologist approved by Nevada County to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity of (no less than 100-feet outside project boundaries, where possible) the project area no more than 30 days prior to initial ground disturbance and before construction resumes if a gap of inactivity occurs for a duration of 30 days or more. If an active nest is located during preconstruction surveys, USFWS and/or DFG (as appropriate) shall be notified regarding the status of the nest. Furthermore, construction activities shall be restricted, as necessary, to avoid disturbance of the nest until it is abandoned or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100-feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1st through February 28th).
Timing: *Prior to issuance of permits and during construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

5. CULTURAL RESOURCES

Mitigation: To offset potentially adverse biological impacts associated with the project activities, the following mitigation measures shall be required:

Mitigation Measure 4.10.1a: If any prehistoric or historic artifacts, or other indications of archaeological resources are found during site grading or once project construction is underway, all work in the immediate vicinity must stop and the County shall be immediately notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered cultural resources. The County and the project applicant will consider the recommendations of the qualified archaeologist. The County and the project applicant shall consult and agree upon implementation of a measure or measures that the County and the project applicant deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.
Timing: *As a condition of project approval, and implemented during grading and construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department*

Mitigation Measure 4.10.1b: If human remains are discovered, all work must stop in the immediate vicinity of the find, and the County Coroner must be notified, according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.
Timing: *As a condition of project approval, and implemented during construction activities.*

Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

Mitigation Measure 4.10.2: If any paleontological resources (i.e., fossils) are found once project construction is underway, all work in the immediate vicinity must stop and the County shall be immediately notified. A qualified paleontologist shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered paleontological resources. The County and the project applicant will consider the recommendations of the qualified paleontologist. The County and the project applicant shall consult and agree upon implementation of a measure or measures that the County and the project applicant deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, or other appropriate measures.
Timing: *As a condition of project approval, and implemented during construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

7. GEOLOGY / SOILS

Mitigation: To mitigate potentially adverse soils or erosion impacts from project grading and construction, the following mitigation measures in addition to Mitigation Measure 5A shall be required:

Mitigation Measure 4.8.1a: The project applicant shall submit an erosion control plan to the County for approval pursuant to the Nevada County Land Use and Development Code Zoning Regulations. The County shall review the erosion control plan prior to the issuance of the grading permit. Erosion control measures will include techniques such as physical and vegetative stabilization measures and runoff diversion measures. Additionally the plan will specify measures for reuse or disposal of excavated materials. If excavated material is suitable for the use of the project site, the plan shall minimize the elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan will include specific information regarding the eventual reuse or disposal site, transportation methods, disposal reuse management, and schedule. The erosion control plan will be in conformance with County standards and standards of the Nevada County Resource Conservation District. The County and the Central Valley Regional Water Quality Control Board shall be the monitoring agencies.
Timing: *Prior to issuance of grading permits.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Department of Public Works and Central Valley Regional Water Quality Control Board.*

Mitigation Measure 4.8.1b: The Developer shall submit the Erosion and Sediment Control Plan prepared by a licensed engineer as a part of the permit application information to the Corps of Engineers pursuant to compliance with MM 4.8.1a to ensure that full disclosure of the potential magnitude of impacts to wetlands are considered. The permit application information submitted to the Corps of Engineers shall also be submitted for review of the County Planning Department.
Timing: *Prior to issuance of the Grading Permit.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning and Department of Public Works.*

Mitigation Measure 4.8.1c: No single structure shall be supported partially upon hard rock and partially upon softer natural soils or engineered fill materials. Deepening of the foundation excavations shall be required to expose the recommended bearing materials, as determined by a qualified engineer. The proposed structures shall be supported upon continuous and/or isolated spread foundations extending at least 18 inches below building pad subgrade. Lowest adjacent soil grade shall be measured from the surface

on which the capillary break gravel is placed or exterior compacted soil grade, whichever is lower. A minimum width of 12 inches shall be maintained for continuous foundations and a minimum plan dimension of 24 inches shall be maintained for isolated spread foundations. A continuous, reinforced foundation shall be utilized for the perimeter of the structure to act as a cut-off wall to help minimize infiltration beneath structures.
Timing: *Prior to commencement of construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Department of Public Works.*

Mitigation Measure 4.8.1d: The following measures shall be followed for the clearing and preparation of the project site:

- Construction areas designated to receive fill, remain at-grade or achieved by excavation should be scarified to a depth of at least 12 inches, moisture conditioned to at least the optimum moisture content and uniformly compacted to at least 90 percent of the ASTM D1557 maximum dry density. Scarification operations shall extend at least five feet beyond the perimeter building foundations and pavements, where possible.

- Building pads constructed partially by cut and partially by fill that exceed five feet in thickness, and fill differentials that exceed five feet shall be avoided where possible. If clay soils are encountered during earthwork, they shall be thoroughly mixed with on-site granular soils during fill placement and not used as fill within the upper two feet of building pads or those subgrades supporting exterior flatwork. Clay soils shall not be placed in keyways or in fills constructed on sloping ground.

- Rocky materials shall be thoroughly moisture conditioned to at least the optimum moisture content and uniformly compacted by three complete passes with a heavy, self-propelled sheepsfoot compacter to the satisfaction of an on-site, qualified engineer.

- Compaction of subgrades must be performed in the presence of a qualified engineer.

Timing: *Prior to commencement of construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Building Department.*

Mitigation Measure 4.8.1e: The applicant shall observe the following measures for the placement of fill on the project site:

- Rocky materials shall be placed in horizontal lifts about 12 inches in compacted thickness. The materials shall be uniformly and thoroughly moisture conditioned to the full depth of each lift. Compaction of the rocky fill materials shall be achieved by at least three successive passes with a Caterpillar 825 compactor.

- Engineered fill composed of native soils or imported materials shall be placed in horizontal lifts not exceeding six inches in compacted thickness with each layer uniformly moisture conditioned to at least the optimum moisture content and compacted to at least 90 percent of the maximum dry density.

- Engineered fill to be placed on existing slopes that are steeper than six horizontal to one vertical (6:1) should begin with a level bench constructed at the toe of the fill with benching done progressively up the slope at vertical increments not exceeding two feet. On slopes steeper than four horizontal to one vertical (4:1), a key should be constructed at the toe of the fill with the toe key at least 15 feet wide,

centered along the toe of the fill slope, and excavated to a depth of at least two feet (measured from the down-slope side) into dense materials.

- The upper 12 inches of final building pad subgrades shall be moisture conditioned to at least the optimum moisture content and uniformly compacted to at least 90 percent relative compaction, or at least three complete passes with a heavy, self-propelled, sheepsfoot compaction regardless of whether final grade is achieved by excavation, filling, or left at existing grade.

- The upper six inches of pavement subgrade should be moisture conditioned to at least the optimum moisture content and uniformly compacted to not less than 95 percent relative compaction, or at least five complete passes with a heavy, self-propelled, sheepsfoot compactor, regardless of whether final grade is achieved by excavation, filling or left at existing grade.

- Final pavement subgrade processing and compaction should be performed after completion of underground utilities and just prior to aggregate base placement.

- Permanent excavation and fill slopes should be constructed no steeper than two horizontal to one vertical (2:1) and shall e vegetated as soon as practical following grading to minimize erosion.

- Backfill shall be mechanically compacted in thin lifts to at least 90 percent of the maximum dry density as determined by ASTM D1557. The upper 12 inches of utility trench backfill in pavement areas should be compacted to at least 95% of the maximum dry density. Utility trench backfill materials should consist of on-site granular soils or approved granular import material. NOTE: Rock over six inches in diameter should not be used as trench backfill material AND rock over three inches in diameter should not be used as initial backfill to avoid impact damage to utility lines.

- A County approved engineer shall be present during site preparation and all grading operations.

Timing: *Prior to commencement of construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Building Department.*

Mitigation Measure 4.8.1f: The ground adjacent to all structures must be sloped away from the structure at a gradient no less than two percent (2%) for a distance of at least five (5) feet, where possible. Roof drains shall discharge onto paved surfaces leading away from the structural foundations or connected to non-perforated rigid piping directed to an appropriate drainage point away from the structures. Ponding of surface water shall be avoided near foundations.
Timing: *Prior to commencement of construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Building Department*

Mitigation Measure 4.8.1g: During construction activities, the project applicant shall employ the following mitigation measures:

- Expansive soils can be excavated and replaced with non-expansive materials. The required depth of excavation shall be specified by a registered geotechnical engineer based on actual soil conditions;

- Expansive soils may be treated in place by mixing them with lime. Lime-treatment alters the chemical composition of the expansive clay materials such that the soil becomes non-expansive; or,

- Implement other engineering practices for mitigation of expansive soil conditions considered appropriate by the Nevada County Department of Public Works.

Timing: *Prior to commencing building construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *The Nevada County Department of Public Works.*

Mitigation Measure 4.8.2: All project related utilities and infrastructure facilities shall be designed and constructed consistent with the seismic standards of the Uniform Building Code for Zone 3.
Timing: *Prior to commencing construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Enforcement/Monitoring: *Nevada County Department of Public Works.*

Mitigation Measure 4.8.3: The project applicant shall consult a corrosion engineer to further define the soil corrosion potential at the project site, or to determine the need or design parameters for cathodic protection or grounding systems.
Timing: *Prior to commencing construction activities.*
Reporting: Agency approval of grading or improvement permits.
Responsible Agency: *Nevada County Department of Public Works.*

9. HAZARDS/HAZARDOUS MATERIALS

Mitigation: To mitigate potential impacts related to the release of potentially hazards materials the following mitigation measure shall apply:

Mitigation Measure 4.3.2a: Project grading and construction permits shall designate staging areas where fueling, oil-changing and maintenance activities are permitted. No fueling and oil-changing activities shall be allowed outside the designated staging areas. The staging areas, as much as practicable, shall be located on level terrain. Staging areas shall not be located within 200 feet of any stream channels or wetlands. The proposed staging areas shall be identified in the Storm Water Pollution Prevention Plan (SWPPP), which shall be reviewed and approved by the Regional Water Quality Control Board as part of the NPDES permit process.
Timing: *Prior to issuance of grading permits.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Community Development Agency, Planning Department.*

10. HYDROLOGY / WATER QUALITY

Mitigation: To mitigate potential impacts related to alterations of drainage features and storm water quality from construction and operation activities, the following mitigation measures shall apply:

Mitigation Measure 4.7.1a: Prior to the issuance of grading permits, the project applicant shall prepare a spill prevention and countermeasure plan describing measures to ensure proper collection and disposal of all pollutants handled or produced on the site during construction, including sanitary wastes, cement, and petroleum products. The plan shall be submitted to the County for approval and incorporation into the SWPPP. All construction contractors shall comply with the spill prevention and countermeasure plan.
Timing: *Prior to issuance of grading permits.*
Reporting: *Approval of grading or improvements permits*
Responsible Agency: *Nevada County Department of Public Works and CVRWQCB*

Mitigation Measure 4.7.1c: The project applicant shall develop and submit an erosion control plan, per Higgins Area Plan Policy 6, to manage site erosion during construction of the project. The developer shall be required to incorporate BMPs to provide for the removal and control of sediments and pollutants in site runoff to acceptable levels prior to discharge into downstream facilities.
Timing: *Prior to issuance of grading permits and improvement plans.*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works and CVRWQCB*

Mitigation Measure 4.7.2: Prior to the approval of improvement plans for each commercial center and for future light industrial and office uses, the applicable project applicant shall submit a water quality control program to the County. This program will specify the design of planned water quality facilities in the project's drainage system and will include the following items:

- All storm drain inlets and oil separators will be routinely cleaned and maintained during the dry months of July through September. The program will also establish maintenance responsibility, funding and schedules for servicing the drainage system.
- Storm drain inlets will also be labeled No Dumping – Drains to Streams.
- Energy dissipaters will be incorporated into drainage outlets into Ragsdale Creek.
- Sediment basins will include appropriate vegetation to naturally filter the drainage flows.
  The water quality control program may be incorporated into the final Wetland/Riparian Enhancement Plan and Flood Control Plan for Ragsdale Creek and will require County approval.

Timing: *Prior to the approval of improvement plans*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works and CVRWQCB.*

Mitigation Measure 4.7.4: The project applicant shall prepare a detailed drainage report consistent with County standards for submittal with the improvements plans. The drainage report shall include the following:

- An accurate calculation of the existing runoff coefficient conditions and anticipated flow conditions as a result of buildout of the Ragsdale Creek drainage basin.
- A detailed analysis of the effects that the project will have on peak flow conditions at the State Route 49 culvert and other downstream facilities. No net increase to 100-year storm event peak year discharged may be realized within the State's highway right of way and/or Caltrans drainage facilities as a result of the project. The analysis associated with the State Route 49 culvert shall be submitted to Caltrans for their review and concurrence.
- If increased drainage flows of the project are anticipated to contribute to drainage capacity deficiencies for downstream facilities during peak flow conditions, the project shall include onsite detention facilities adequate to mitigate project increases to peak flow conditions.
- Proof that the drainage report was prepared by a registered Civil Engineer.

Timing: *Prior to the approval of improvement plans*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works*

Mitigation Measure 4.7.5a: Prior to site grading, a detailed set of improvement plans with drainage design will be developed that analyzes the flow of drainage before and after grading.
Timing: *Prior to issuance of grading permit*
Reporting: *Approval of grading or improvement permits*

Responsible Agency: *Nevada County Department of Public Works*

Mitigation Measure 4.7.5b: Detention and conveyance facilities shall be designed to ensure that drainage flows are not discharged from the site in quantities or at velocities above those conditions that exist prior to grading.
Timing: *Prior to approval of improvement plans.*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works and CVRWQCB.*

13. NOISE

Mitigation Measures: To reduce potentially significant impacts associated with construction noise, the following mitigation measure shall be noted on improvement plans:

Mitigation Measures 4.5.1: The project applicant and all successors in interest shall ensure that construction activities adhere to the following measures with respect to hours of operation, muffling of internal combustion engines, and other factors that affect construction noise generation and its effects on noise-sensitive land uses:

- Restrict construction activities to between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday. Restrict construction activities between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays. No construction activities shall occur on Sundays.

- All equipment shall be fitted with factory-equipped mufflers, and shall be in good working order.

- Locate all staging areas for equipment as far as possible from residential areas.
  Timing/Implementation: *The requirements shall be reflected on all grading and improvement plans and shall be placed in all construction contracts for individual contractors throughout the grading and construction process.*
  Enforcement/Monitoring: *The Nevada County Department of Public Works*

17. TRANSPORTATION

Mitigation Measures: To reduce potentially significant impacts associated with traffic, the following mitigation measure shall be required and noted on improvement plans:

Mitigation Measure 4.4.1d: Access to and from northbound SR 49 at Woodridge Drive shall be limited to right-in/right-out turn movements. Left turns from Woodridge Drive to southbound SR 49 shall not be allowed. Left turns onto Woodridge Drive from southbound SR 49 shall be allowed.
Timing: *Prior to issuance of occupancy permit.*
Reporting: *Agency approval of permits or plans.*
Responsible Agency: *Nevada County Department of Public Works.*

18. TRIBAL CULTURAL RESOURCES

Mitigation: See Mitigation Measures 4.10.1a and 4.10.1b within Section 5 above

19. UTILITIES / SERVICE SYSTEMS

Mitigation: To offset potentially adverse impacts related to Utilities / Service Systems, the following mitigation measure is recommended:

Mitigation Measure 4.11.4.2: Prior to approval of improvement plans for each building, the project applicant shall provide the County with an approved set of improvement plans accepted by NID, which shall include:

- Quantification of anticipated water usage by parcel.
- A comprehensive water system design for distribution piping and connection to the existing NID distribution system.
- Appropriate pipe sizing to accommodate minimum fire flow water pressures (as determined by California Department of Forestry and Fire Protection, NID and the Higgins Fire Protection District.)
- Identification of pipe sizing, pipe location, and the location of the tie-in with NID facilities
- Provisions for easement, rights-of-way, and in-fee land to NID for water facilities.

Timing: *Prior to improvement plan approval.*
Reporting: *Agency approval of grading or improvement plans.*
Responsible Agency: *Nevada County Planning Department and NID.*

Mitigation Measure 4.11.6.1: Prior to issuance of occupancy permits the applicant will complete the following mitigation measures:

1) All businesses will subscribe to waste collection and recycling services provided by the County's franchised waste collection company.

2) All businesses will participate in the recycling program offered through the County's franchised waste collection company. Businesses will recycle all items available through the company's program, or an equivalent method, which ensures that the waste is diverted away from landfill disposal.

3) Any green waste material generated at the project area such as lawn trimmings, shrubbery, and tree trimmings shall be diverted away from disposal through the County's franchised waste collection company's green waste collection program, or an equivalent method which ensures that the waste is diverted away from landfill disposal.

4) Adequate space for waste and recycling containers will be constructed at the complex to ensure ease of collection by the County's franchised waste collection company. The units housing the containers shall be constructed to allow sufficient space for the quantity of containers needed to ensure that the waste and recyclables can be collected in an efficient manner. Waste Management will be consulted to ensure that sufficient space is for recycling and trash containers.

Timing: *Prior to the issuance of occupancy permits for commercial and retail establishments.*
Reporting: *Agency approval of grading or improvement plans.*
Responsible Agency: *Nevada County Department of Public Works*

20. WILDFIRE

Mitigation: To offset potentially adverse impacts related to Wildfire, the following mitigation measures are recommended:

Mitigation Measure 4.11.1.2a: During construction of the proposed project and off-site improvements (roadway extension and pipeline infrastructure improvements), the project applicant shall perform the following tasks.

- All on-site flammable vegetation and fuels shall be legally disposed of or removed. Vegetation clearance around structures shall meet the minimum requirements of Public Resources Code 4291. Firebreaks shall be maintained by removing and clearing away all existing brush, flammable vegetation or combustible growth within 100 feet of structures.

- Temporary provisions for emergency access and fuel modification zones shall be provided. The project applicant shall prepare a temporary fire protection plan that will provide temporary emergency access and fuel modification zones for development.

- Any grass or other vegetation planted along cut/fill areas (i.e., roadways for erosion control purposes shall be low growing grasses and shall be on the Nevada County approved plant list. Tall grasses can subject the development to an increase in fire danger.

Timing: *Prior to and during construction activities.*
Reporting: *Agency approval of permits or plans.*
Responsible Agency: *Higgins Fire District and the Nevada County Fire Marshal.*

Mitigation Measure 4.11.1.2b: The project applicant shall submit the improvement plans for the site to the Nevada County Fire Marshal and the Higgins Fire District for review and approval.

- Designation of a fuel modification zone or greenbelt established along the perimeter of the project site. Perimeter fuel breaks will be a minimum of 30 feet (typically ranging between 30 and 100 feet) as required by the Nevada County Fire Marshal. The developer, with the assistance of CFD and HFD, will determine the specific dimensions of each fuel modification zone located along the project perimeter based on the location, topography, access points, vegetation, degree of exposure, local weather conditions, and design and construction of structures.

- Designation of a 10-foot wide fuel modification zone established and maintained along each side of Woodridge Court.

- Project emergency access shall be designed to meet District, County, and State standards. Nevada County requires a 20-foot road right-of-way for local streets, with 18 feet of paving, a 10-foot fuel modification zone on either side of the road.

Timing: *Prior to approval of the improvement plans.*
Reporting: *Agency approval of permits or plans.*
Responsible Agency: *Higgins Fire District and the Nevada County Fire Marshal.*

Mitigation Measure 4.11.1.2c: The project applicant shall submit a Vegetative Fuel Management Plan to the Nevada County Fire Marshal and the Higgins Fire District. The plan shall contain information about fuel modification zones/fuel breaks, canopy spacing, roads, and types of plants to be used in landscaping and erosion control. Fuel management shall occur outside of aquatic and riparian woodland areas and wetland areas as shown in **Figure 3.0-3**. The Plan shall include:

- Requirements that fire resistant landscaping is used in the fuel modification zones for project accesses.

- Provisions and funding for maintenance of fuel modification zones by the project applicant.

- No trees that will grow over 20 feet in height will be planted or allowed to grow within 20 feet of any high voltage power line.

Timing: *Prior to approval of the improvement plans.*
Reporting: *Agency approval of permits or plans.*
Responsible Agency: *Higgins Fire District and Nevada County Fire Marshal.*

ENVIRONMENTAL ANALYSIS

Introduction

This Addendum evaluates the potential for the proposed modified project to result in new or substantially more severe significant impacts compared to the impacts disclosed in the certified EIR. The environmental analysis provided in this section describes the information that was considered in evaluating the questions contained in the Nevada County California Environmental Quality Act (CEQA) Checklist. The information used in this evaluation includes the certified Higgins Marketplace EIR, the proposed modified project description, updated Technical Reports, revised Site Plan, revised Tentative Final Map, revised Comprehensive Master Plan, revised project information, and site visits.

The proposed modified project would incorporate and implement all mitigation measures identified in the certified Higgins Marketplace EIR. Specific mitigation measures relevant to a particular impact of the proposed modified project are cited in the same manner as in the EIR and the associated Mitigation Measure Monitoring Program adopted in conjunction with the Higgins Marketplace project approvals.

1. AESTHETICS

Existing Setting: Aesthetic values in Nevada County include the extraordinary scenic quality of its natural resources as well as the aggregate appearance of structures in the built environment. Protection of scenic values relies on land use strategies that include the establishment of open space, forest lands, conservation areas and agriculture zoning. General Plan Policy calls for promoting and providing for aesthetic design in new development, which reflects existing character.

The visual setting of the proposed modified project and its surrounding area is the same subject project site as evaluated in the certified EIR with the existing Higgins Marketplace, and contains an existing approximately, 30,000-square-foot Holiday Market grocery store, located on Assessor Parcel Number 057-260-024, known as Parcel 1 of Parcel Map 04-020 (Higgins Market Place, 21 of Parcel Maps, Page 62). The project site is also currently developed with an existing approximately 8,250-square-foot commercial retail building, located on Assessor Parcel Number 057-260-023, known as Parcel 4 of Parcel Map 04-020 (Higgins Market Place, 21 of Parcel Maps, Page 62); that is comprised of tenant lease spaces and is developed with a savings bank and is being developed with an ice cream shop.

Project Impacts:

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in a new or substantially more adverse significant impacts to Aesthetics in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the project:

1a: Have a substantial adverse effect on a scenic vista?

The EIR established that views of the project site would be altered in association with the introduction of structures, parking lots, signage and landscaping proposed as part of the previously approved project. However, as the project had designed to retain five existing Oak Trees which are currently located on the project site and structures had been sited to avoid these tress and to incorporate them into the previously approved projects overall layout and design.

In regards to the proposed project and the alteration of scenic vistas, the Fuel Station as proposed would be located south of the existing Holiday Market Grocery Store within an approximately 20,000-square-foot area which has been graded as part of the construction of the grocery store. Building heights of the proposed Fuel Station canopy would be limited to approximately 22 feet with the existing Holiday Market Grocery Store ranging in size from approximately 22 feet to 40 feet.

As further evaluated in the EIR, and similar to the proposed modified project, the existing hills which are located east of the project site would remain undeveloped as the backdrop for the project site. Views, of these areas would be partially obstructed from drivers passing along on Highway 49, due to the location of the existing development located on the project site. As proposed, the modified project would contain the proposed Fuel Station, which would be located south of the existing Holiday Market Grocery Store, and would be designed with a similar architectural style to match that of the existing development. Furthermore, due to the reduction in size of the existing grocery store from approximately 50,000 square feet as approved, to approximately 30,000 square feet as existing, views would remain similar to that of the existing development and on the surround neighborhood. Thus, for these reasons, the proposed modifications to the project would not result in a change to the finding in the certified EIR of less than significant relative to impacts to scenic vistas. Based on the foregoing, no new or revised mitigation measures are required.

1b: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

1c: 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?

As analyzed by the EIR and as discussed within Section 4.12 of the Aesthetics Section in the certified EIR, the existing project site is located along Highway 49, which is Nevada County designated scenic highway. As a result the subject project site contains the Scenic Corridor (SC) Combining District, as outlined in Nevada County Land Use and Development Code, Section L-II 2.7.7. This designation is used to protect and preserve the scenic resources of areas which are adjacent to highways and roads which have been identified as having high scenic quality and require protection for the benefit of residents and visitors.

The EIR established that the approved project would have a less than significant impact on the degradation of scenic resources with the implementation of mitigation measures MM4.12.2a – MM4.12.2d. These mitigation measures would reduce impacts by requiring the submission of a final landscaping plan, the screening of building mechanical equipment and facilities, the preservation of existing oak trees on the project site, and a final sign plan for the Higgins Marketplace. Implementation of these Mitigation Measures would also be obligatory for the proposed modified project. Therefore, for these reasons the proposed modifications to the project would not result in a change to finding in the certified EIR that the impacts of less than significant with implementation of the adopted mitigation measures. Thus, based on the foregoing, no new or revised mitigation measures would be required for the proposed modified project.

1d: Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Implementation of the proposed project would introduce a variety of building materials to the site. Glass, roofing materials and car windshields, have the potential to reflect light and create glare visible for some distance from the site. However, as discussed under Impact 3.1.2 in the EIR, the proposed modified project would be required to be consistent with the Western Nevada County Design Guidelines. The guidelines require that new projects avoid bare metal, highly reflective surfaces (glass, metallic paint, etc.), illuminated roofing, and high contrast or brightly colored glazed tile. Compliance with the design guidelines would substantially reduce the potential for glare from the proposed project. While it is always possible that glare from reflected car windshields could occur, these impacts are considered transitory and based on environmental conditions (e.g., time of day, angle of observer) rather than as part of the design of the project.

As analyzed by the EIR, these additional light sources may affect adjacent areas with light trespass and could contribute to skyglow conditions in the project area. As discussed under Impact 4.12.4 of the EIR and above, existing single-family residences both north of the project site would have views of various components of the project.

As proposed, the modified project would use low-intensity lighting within the Fuel Station Canopy along with the strategic placement of landscaping and all lighting is required to be downcast and shielded to reduce nighttime lighting levels. Pursuant to Nevada County Land Use and Development Code, Section L-II 4.2.8 – Lighting, all lighting is required to be efficient, safe, and attractive outdoor lighting while minimizing nighttime light pollution and energy waste. In addition, Nevada County Land Use and Development code requires all outdoor light fixtures to be fully shielded to prevent the light source or lens from being visible from adjacent properties and roadways. A photometric lighting plan has been prepared for the proposed modified project which shows the proposed light fixtures would be meet the requirements of the International Dark-Sky Association, meaning that they would minimize glare, reduce light trespass, and would not pollute the night sky. In addition, perimeter landscaping and natural vegetation would also screen adjacent areas from light intrusion.

The EIR established that the approved project would have a less than significant impact on the degradation of scenic resources with the implementation of mitigation measure MM 4.12.4 which required that all outdoor light fixtures for parking areas and roadways shall be low-intensity shielded and/or directed away from residential areas and the night sky. Implementation of these Mitigation Measures would also be obligatory for the proposed modified project. Therefore, for these reasons the proposed modifications to the project would not result in a change to finding in the certified EIR that the impacts of less than significant with implementation of the adopted mitigation measures. Thus, based on the foregoing, no new or revised mitigation measures would be required for the proposed modified project

Cumulative Impacts

The EIR concluded that the impacts of the approved project would not combine with impacts of past, present and reasonably foreseeable projects to create a substantial adverse effect on Aesthetics of the project site and its surroundings. As described in Impact 3.1.2 in the EIR and above in this Addendum, development of the project site with the proposed modified project would have less than significant impacts associated with degrading the visual character and views of the project site as well as introducing new sources of light. Furthermore, the County's General Plan, Chapter 18, Aesthetics, includes policies to protect aesthetic resources, as do the Land Use and Development Code and the Western Nevada County Design Guidelines. Any future projects in the cumulative setting would be designed consistent with these policies, and project-specific mitigation would reduce visual impacts on a project-by-project basis. Therefore, based on this

discussion, the proposed modified project would not create new or substantially more adverse cumulative impacts to Aesthetics and visual resources than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

2. AGRICULTURAL/FORESTRY RESOURCES

Existing Setting: The environmental setting for Agricultural / Forestry Resources is the same as described in the certified EIR. The project site is not used for commercial agricultural purposes and is developed with the existing Higgins Marketplace

The project site, is designated as "Grazing Land" and "Urban and Built Up Land" by the Farmland Mapping and Monitoring Program of the California Department of Conservation as was updated by Ordinance No 2427 approved by the Board of Supervisors on January 24, 2017.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in a new or substantially more adverse significant impacts to Agricultural / Forestry Resources in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the project:

2a: 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 Department of Conservation's Division of Land Resource Protection, to non-agricultural use?

2b: Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

2c: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g)), timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

2d: Result in the loss of forest land or conversion of forest land to non-forest use?

2e: Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

The subject parcel does not contain any Important Farmlands as identified by the Farmland Mapping and Monitoring Program, nor are surrounding properties zoned for agricultural use. The project site and adjacent lands are not zoned or designated Farmland, nor are they within any lands with Williamson Act Contracts or within a Timberland Production Zone. Therefore, for these reasons the proposed modifications to the project would not result in a change to finding in the certified EIR that the impacts of less than significant with implementation of the adopted mitigation measures. Thus, based on the foregoing, no new or revised mitigation measures would be required for the proposed modified project

Cumulative Impacts

The EIR concluded that the impacts of the approved project will combine with impacts of past, present, and reasonably foreseeable projects would not create a substantial adverse effect on Agriculture and Forestry Resources and would not, therefore, result in significant and unavoidable cumulative impacts. As proposed, the modified project would be constructed within an already developed footprint as the approved project, and would be limited to approximately 20,000-sqaure-foot project site.

Therefore, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Agricultural / Forestry Resources than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

3. AIR QUALITY

Existing Setting: The environmental setting for Air Quality is the same as described in the certified EIR. As such, the proposed modified project would be located on the same project site as the approved project which is located in the Mountain Counties Air Basin, which is within the jurisdiction of the Northern Sierra Air Quality Management District and is also regulated by the U.S. Environmental Protection Agency (USEPA), California Air Resources Board (CARB), and the County of Nevada.

The overall air quality in Nevada County has improved over the past decade, largely due to vehicles becoming cleaner. State and Federal air quality standards have been established for specific "criteria" air pollutants including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and particulate matter. In addition, there are State standards for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. State standards are called California Ambient Air Quality Standards (CAAQS) and federal standards are called National Ambient Air Quality Standards (NAAQS). NAAQS are composed of health-based primary standards and welfare-based secondary standards.

Western Nevada County is classified as a Serious Nonattainment Area for the 2008 ozone NAAQS and Moderate Nonattainment for the 2015 ozone NAAQS. It is also Nonattainment for the ozone CAAQS. The area is also Marginal Nonattainment for the 2008 ozone NAAQS and is Nonattainment for the ozone CAAQS. Most of western Nevada County's ozone is transported to the area by wind from the Sacramento area and, to a lesser extent, the San Francisco Bay Area. Ozone is created by the interaction of Nitrogen Oxides and Reactive Organic Gases (also known as Volatile Organic Compounds) in the presence of sunlight, especially when the temperature is high. Ozone is mainly a summertime problem, with the highest concentrations generally observed in July and August, especially in the late afternoon and evening hours.

Nevada County is also Nonattainment for the PM10 CAAQS, but Unclassified for the PM10 NAAQS due to lack of available recent data. The number after "PM" refers to maximum particle size in microns. PM10 is a mixture of dust, combustion particles (smoke) and aerosols, whereas PM2.5 is mostly smoke and aerosol particles. PM2.5 sources include woodstoves and fireplaces, vehicle engines, wildfires and open burning. PM10 sources include the PM2.5 plus dust, such as from surface disturbances, road sand, vehicle tires, and leaf blowers. Some pollen and mold spores are also included in PM10, but most are larger than 10 microns. All of Nevada County is Unclassifiable/Attainment for the PM2.5 NAAQS and Unclassified for the PM2.5 CAAQS (US Environmental Protection Agency, 2015).

Ultramafic rock and its altered form, serpentine rock (or serpentine), both typically contain asbestos, a cancer-causing agent. Ultramafic rock and serpentine are likely to exist in several areas of western Nevada

County; however, the area of the project site is not mapped as an area that is likely to contain natural occurrences of asbestos (California Department of Conservation, 2000).

Please see Section 8 of this Addendum for a discussion of project impacts related to Greenhouse Gas Emissions.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in a new or substantially more adverse significant impacts to Air Quality in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the project:

3a: Conflict with or obstruct implementation of the applicable air quality plan?

3b: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

3e: Generate substantial smoke ash or dust?

Nevada County's General Plan, Chapter 14 Air Quality Element, contains numerous policies to protect air quality in Nevada County. With the exception of General Plan Air Quality Element Policy 14.7A, which requires compliance with Northern Sierra Air Quality Management District Rule 226, the Nevada County General Plan Air Quality Element policies are intended to apply to development that generates new residents or new employees. By assessing air pollution and emissions associated with the proposed project and recommending mitigation measures based on Thresholds of Significance established by the Northern Sierra Air Quality Management District (NSAQMD), the project as proposed would comply with Northern Sierra Air Quality Management District regulations.

Nevada County is designated Nonattainment status for ozone and PM10. As a Nonattainment area, the NSAQMD is required to prepare a federally enforceable State Implementation Plan (SIP) for western Nevada County in accordance with the Clean Air Act. The SIP is an air quality attainment plan designed to reduce emissions of ozone precursors enough to re-attain the federal ozone standard by the earliest practicable date. The air quality attainment plan titled Reasonably Available Control Technology State Implementation Plan Revision for Western Nevada County 8-Hour Ozone Non-Attainment Area includes various pollution control strategies. Overall emissions of ozone precursors must be reduced in western Nevada County (consistent with Reasonable Further Progress requirements specified in the Clean Air Act) until attainment is reached.

The previously approved project consisted of the construction of an approximately 50,060-square-foot grocery story with 396 off-street parking spaces. The proposed modified project would include the construction of an approximately 4,524-square-foot Fuel Station canopy which would be constructed within an existing approximately 20,000-square-foot area, which has been graded and landscaped that is located south of the existing Holiday Market Grocery Store. The project as proposed also includes an amendment to the previously approved Use Permit, to recognize the reduction in the size of the Holiday Market Grocery Store, from approximately 50,000 square feet to approximately 30,000 square feet.

As part of the proposed, modified project the applicant submitted an Air Quality Emissions Analysis and Fuel Station Health Risk Assessment. Air quality emissions were estimated with the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, which is a statewide land use emissions model for quantifying air quality and GHG emissions from land use projects in California. Long-term operational emissions produced by area sources, energy and motor vehicles were quantified. Estimated daily operational emissions from the previously approved project are displayed below in Table 1 (summer) and Table 2 (winter) below

Table 1: Approved Project Summer Daily Operations (pounds per day)

Source	ROG	NOx	PM10
Area	1.45	0.00	0.00
Energy	0.04	0.35	0.03
Mobile	21.49	105.60	21.96
Total	22.98	105.95	21.98

Table 2: Approved Project Winter Daily Operational Emissions (pounds per day)

Source	ROG	NOx	PM10
Area	1.45	0.00	0.00
Energy	0.03	0.25	0.05
Mobile	18.00	108.42	21.97
Total	19.48	108.67	21.99

Table 3: Proposed Modified Project Summer Daily Operations (pounds per day)

Source	ROG	NOx	PM10
Area	6.25	0.00	0.00
Energy	0.02	0.21	0.02
Mobile	16.19	78.50	15.19
Total	**22.46**	**78.71**	**15.21**

Table 4: Proposed Modified Project Winter Daily Operational Emissions (pounds per day)

Source	ROG	NOx	PM10
Area	6.25	0.00	0.00
Energy	0.02	0.21	0.02
Mobile	13.52	80.36	15.20
Total	**19.79**	**80.57**	**15.21**

Comparison of Previously Approved Project and Proposed Modified Project

The Proposed Project would reduce summer daily emissions of ROG by 0.51 pounds per day, NOx by 27.23 pounds per day and PM10 by 6.78 pounds per day compared to the Approved Project. The Proposed Project would increase winter daily emissions of ROG by 0.31 pounds per day and would decrease winter daily emissions of NOx by 28.10 pounds per day and PM10 by 6.77 pounds per day.

Estimated net daily operational emissions (Proposed Project minus Approved Project) are displayed in Table 5 (summer) and Table 6 (winter) bellow. As shown, daily emissions would be below the NSAQMD's Level A Thresholds of Significance.

Table 5: Net Summer Daily Operational Emissions (Proposed Modified Project – Previously Approved Project) (Pounds per day)

Source	ROG	NOx	PM10
Area	4.80	0.00	0.00
Energy	-0.01	-0.13	-0.01
Mobile	-5.30	-27.10	-6.77
Total	**-0.51**	**-27.23**	**-6.78**
NSAQMD Level A Thresholds	**24**	**24**	**79**

Table 6: Net Winter Daily Operational Emissions (Proposed Modified – Previously Approved) (Pounds per day)

Source	ROG	NOx	PM10
Area	4.80	0.00	0.00
Energy	0.00	-0.03	0.00
Mobile	-4.48	-28.06	-6.77
Total	**0.31**	**-28.10**	**-6.77**
NSAQMD Level A Thresholds	**24**	**24**	**79**

As outlined in the analysis above, and as discussed in the EIR implementation of the proposed modified project would result in operational emissions which are below the NSAQMD Level A Thresholds of Significant and as proposed, would result in significant reductions in NOx and PM10 emissions when compared with the previously approved project. Therefore, as proposed the modified project would not conflict with or obstruct implementation NSAQMD air quality plans.

As discussed in the EIR and as proposed by the modified project predicted short-term construction-generated emissions of ROG NOx and PM10 would not exceed NSAQMD's Level C significance thresholds, however, particulate emissions from construction, if uncontrolled, can lead to adverse health effects as well as nuisance complaints and would be mitigated to a less than significant level with the implementation of Mitigation Measures MM 4.6.1a. With implementation of these mitigation measure, project-generated short-term construction-generated emissions would be reduced to a less than significant level. Adherence to these mitigation measures would ensure the project, by itself, does not surpass NSAQMD significance thresholds and therefore does not conflict with the goals of the SIP. Implementation of these mitigation measures would also be obligatory for the proposed modified project.

3c: Expose sensitive receptors to substantial pollutant concentrations?

A Health Risk Assessment was prepared for the proposed modified project to evaluate the potential health impacts associated with the proposed Fuel Station on nearby sensitive receptors using the thresholds of significance identified in the NSAQMD's Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects. The Heath Risk Assessment was prepared in accordance with the California Office of Environmental Health Hazard Assessment (OEHHA's) Air Toxic Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. The Heath Risk Assessment is included in Appendix B of this Addendum to the EIR.

The Heath Risk Assessment found that the maximum cancer risk from the proposed modified project including the Fuel Station operational emissions, primarily due to benzene and 1,3-butasine, would be 0.5 parts per million for a residential-adult receptor and 1.8 per million for a residential-child receptor, which is well below the NSAQMD significance threshold of 10 parts per million. The Health Risk Assessment

also found that non-cancer health hazards risks (acute and chronic) would be well below the NSAQMD thresholds of significance. As a result, exposure of sensitive receptors to substantial pollutant concentrations would be considered less than significant. For these reasons, the proposed modifications to the project do not result in a change to the conclusion in the certified EIR of less than significant impacts relative to the exposure of sensitive receptors to substantial pollutant concentrations. Based on the foregoing, no new or revised mitigation measures are required.

3d: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source, wind speed and direction, and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact. Land uses commonly considered to be potential sources of odorous emissions include wastewater treatment plants, sanitary landfills, food processing facilities, chemical manufacturing plants, rendering plants, paint/coating operations, and agricultural feedlots and dairies.

As discussed in the EIR, no major sources of odors were identified in the vicinity of the project site that could potentially affect proposed on-site residential land uses. In addition, while implementation of the proposed project could generate some minor odors which are typical of a Fuel Station, it is unlikely that the odors from the proposed Fuel Station would be detected offsite. Furthermore, the NSAQMD (Rule 214 and 215) requires that all gasoline dispensing facilities to be equipped with a Phase I and Phase II vapor recovery system and would be conditioned to require an Authority to Construct Permit / Permit to Operate (for vapor recovery equipment). In addition, the project would also be conditioned to require that the proposed project comply with the NSAQMD Rule 219 which regulates the storage and distribution of gasoline.

As a result, exposure of sensitive receptors to odorous emissions would be considered less than significant. For these reasons, the proposed modifications to the project do not result in a change to the conclusion in the certified EIR of less than significant impacts relative to the exposure of sensitive receptors to odorous emissions. Based on the foregoing, no new or revised mitigation measures are required.

Cumulative Impacts

The EIR concluded that the impacts of the approved project will combine with impacts of past, present, and reasonably foreseeable projects to create a substantial adverse effect on air quality during the construction period and would, therefore, result in significant and unavoidable cumulative impacts. The proposed modified project would allow the construction of a proposed Fuel Station within an existing approximately 20,000-sqaure-foot area which has been graded as part of the development of the existing Holiday Market Grocery Store. Therefore, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Air Quality than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

The EIR concluded that impacts of the approved project will combine with past, present, and reasonably foreseeable projects to create a cumulatively considerable impact due to project contributions to cumulative impacts on regional air quality. The Northern Sierra Air Quality Management District Level A thresholds represent a significant project impact and Level B thresholds (24 pounds per day for NOx, ROG, 79 pounds per day for PM10) represent a cumulatively considerable emission affecting air regional air quality. As proposed, emissions of NOx would exceed the Northern Sierra Air Quality Management District Level B

Significance Threshold during operational phases of the proposed project, thus project contributions to cumulative impacts on regional air quality would be cumulatively considerable. However, with the implementation of Mitigation Measures MM 4.6.5a and MM 4.6.5b, which would require the project developer to incorporate energy efficient design features such as EPA Energy Star roofing materials, planting of drought tolerant native trees and landscaping and the use of direct safe pedestrian access to the project site and the use of specialty electric or propane powered specialty equipment would reduce the proposed modified project's overall contribution to cumulative air quality impacts resulting from completion of the project. Thus, given that the above Mitigation Measures, implementation of these mitigation measures would be obligatory on the proposed modified project. Therefore, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to air quality than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation: To offset potentially adverse air quality impacts associated with the project activities, the following mitigation measures shall be required:

Mitigation Measure 4.6.1a: Project proponent and all successors in interest shall include dust control mitigation requirements in all construction contracts. All construction contracts will require the following:

- All construction activities would be subject to the requirements of the Northern Sierra AQMD's Regulation 2, Rule 226 regarding dust control.
- Alternatives to open burning of vegetative material on the project site shall be used unless deemed infeasible by the Northern Sierra Air Quality Management District. Suitable alternatives are chipping, mulching, or conversion to biomass fuel.
- Contractors shall be responsible for ensuring that adequate dust control measures are implemented in a timely manner during all phases of project development and construction.
- All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or violation of an ambient air standard. Watering should occur at least twice daily, with complete site coverage, preferably in the mid-morning and after work is completed each day.
- All areas (including unpaved roads) with vehicle traffic shall be watered or have a dust palliative applied as necessary for stabilization of dust emissions.
- All on-site vehicle traffic shall be limited to a speed of 15 mph on unpaved roads.
- All land clearing, grading, earth moving or excavation activities shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
- Temporary traffic control will be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans.
- Construction activities should be scheduled to direct traffic flow to off-peak hours as much as possible.
- All inactive portions of the construction site shall be covered, seeded, or watered until a suitable cover is established. Alternatively, apply non-toxic soil stabilizers (according to manufacturer's specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours) in accordance with County standards. Acceptable materials that may be used for chemical soil stabilization include petroleum resins, asphaltic emulsions, acrylics, and adhesives, which do not violate Regional Water Quality Control Board or California Air Resources Board standards.
- Wheel washers will be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment will be washed prior to each trip, as necessary to prevent visible dust emissions from adhering dirt or deposition on roadways.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent public nuisance.
- Re-establish ground cover on the site through seeding and watering in accordance with the local grading ordinance.

- Properly maintain all mobile and stationary equipment.

Timing: *Prior to the issuance of grading permits*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department; Department of Public Works; and the Northern Sierra Air Quality Management District.*

Mitigation Measure 4.6.5a: The project developer and all successors in interest shall incorporate to the extent practical and feasible the following energy-efficiency/area source features into the design of the project:

- Install EPA Energy Star (high reflectance) roofing materials to reduce building heat absorption and summer energy costs.
- Plant shade trees in parking lots at 10 percent or more in excess of that already required by ordinance.
- Landscape with native drought-resistant species (plants, trees and bushes) to reduce the demand for gas powered landscape maintenance equipment.
- Incorporate passive solar space heating designs and solar water heaters into commercial units.
- Install low nitrogen oxide (NOx) energy-efficient heating and other appliances, such as water heaters, cooking equipment, refrigerators, furnaces and boiler units

Timing: *As a condition of project approval.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

Mitigation Measure 4.6.5b: The project developer and all successors in interest shall incorporate the following features into the design of the project to reduce vehicle trip generation:

- Provide direct, safe, attractive pedestrian access from project land uses to the Higgins Center to the north at the corner of SR 49 and Combie Road.
- Provide secure and conveniently located bicycle parking.
- Specialty equipment (utility carts, forklifts, etc.) should be electrically, CNG or propane powered.

Timing: *As a condition of project approval.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

4. BIOLOGICAL RESOURCES

Existing Setting: The certified EIR included a comprehensive analysis of special-status and sensitive species, local sensitive habitats including protected Landmark Oak Groves and Trees, vegetation communities, aquatic communities including wetlands and jurisdictional waters over the approved project site. A reconnaissance level survey of the project site was conducted on the project site on May 4, 2005, to evaluate the existing habitat at the project location including special status wildlife species, sensitive plants, and critical habitat expected or known to occur within the project site and general project area.

The proposed modified project and its surrounding area is the same subject project site as evaluated in the certified EIR with the existing Higgins Marketplace, which has been developed within an existing approximately, 30,000-square-foot Holiday Market grocery store. The project site is also currently developed with an existing approximately 8,250-square-foot commercial retail building, which was constructed as part of the Higgins Marketplace and is comprised of tenant lease spaces consisting of a savings bank and future ice cream shop which is under construction.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in a new or substantially more adverse significant impacts to Biological Resources in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the project:

4a: 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?

As disclosed in the certified EIR, a reconnaissance level survey of the project site was conducted on May 4, 2005, by a PMC biologist to assess habitat and current site conditions. As discussed within Section 4.9 of the certified EIR as part of the approved project, the project site had been previously surveyed by qualified Biologist Susan Sanders Biological Consulting and North Fork Associates in 2004 and 2005.

The entire project site including the location of the proposed Fuel Station and location of the existing approximately 30,000-square-foot Holiday Market Grocery Store was analyzed for special-status species by qualified biologists which included reconnaissance level and pedestrian surveys on foot. All district plant communities and wildlife habitats present within the project site were surveyed and any unique habitat features, including wetlands and landmark oak trees were further investigated and mapped.

As proposed the modified project the construct a proposed Fuel Station with four (4) self-service pump islands with eight (8) fueling positions adjacent the existing Holiday Market Grocery Store. Development would consist of the construction of a proposed approximately 4,524-square-foot station canopy that is approximately 22 feet in height for the Fuel Station and the installation of two (2) underground fuel storage tanks, consisting of one (1) 15,000-gallon tank for regular unleaded fuel and one (1) 12,000-gallon tank (split between 6,000 gallons for premium unleaded and 6,000 gallons for diesel). The proposed Fuel Station would be constructed within an existing approximately 20,000-square-foot area which has been graded, compacted with gravel and landscaped that is located south of the existing Holiday Market Grocery Store, which is contained within an existing approximately 50,000-square-foot building area that was approved for development as part of the Higgins Marketplace. The project as proposed also includes a request to amend the previously approved Use Permit, to recognize the reduction in the size of the Holiday Market Grocery Store, from approximately 50,000 square feet to approximately 30,000 square feet.

The following discussion of special-status plants and wildlife summaries the results of the updated biological resources inventory prepared for the proposed modified project.

Special-Status Plants

Analysis of special-status plants in the EIR included Biological Resource Assessments and reconnaissance level surveys across the approved project site. Pursuant to the EIR, Special status species were considered based on a current review of the California Natural Diversity Data Base, United States Fish and Wildlife Service and the California Native Plant Society Electronic Inventory for special-status species with the potential to occur in the vicinity of the project area.

The EIR concluded that Brandegee's clarkia, a special-status plant species, occurs within the one mile of the project area. However, based on literature review, soil survey analysis and onsite survey observations,

it is unlikely this special status plant species would occur with the project site, including the location of the proposed modified project area for the Fuel Station.

Special-Status Wildlife

Analysis of special-status wildlife in the EIR included Biological Resource Assessments and reconnaissance level surveys across the approved project site. Analysis of special-status animal species in the EIR included Biological Resource Assessments and reconnaissance level surveys across the approved project site.

The EIR concluded that based on based on a review of the California Natural Diversity Data Base (CNDDB, United States Fish and Wildlife Service (USFWS that several special status animals have the potential for occurrence within project site, however, habitat at the project location provided low suitability for many of these species; therefore they are not expected to be adversely affected by the proposed modified project.

Migratory Birds and Raptors

As discussed in the EIR, the modified project could result in loss of habitat that may be used as foraging or nesting habitat for migratory birds and raptors. Project construction activities may result in the loss of young or eggs of migratory birds or raptors

All native breeding birds (except game birds during the hunting season), regardless of their listing status, are protected under the Migratory Bird Treaty Act. Construction activities could cause direct impacts to nesting raptors and migratory birds, if birds are actively nesting during construction activities. Nests may be located in trees, shrubs, or emergent vegetation, on the ground, in burrows, or on existing buildings or structures. Excessive noise, disturbance, and vibrations can cause nesting birds to abandon their nests. Construction could also result in noise, dust, increased human activity, and other indirect impacts to nesting raptor or migratory bird species in the project vicinity. Potential nest abandonment and mortality to eggs and chicks, as well as stress from loss of foraging areas, would also be considered potentially significant impacts. If nesting migratory birds or raptors are present during project construction, the proposed project may cause direct mortality to raptors or migratory birds through removal of vegetation that contains active nests. If construction occurs during the non-nesting season, no impacts are expected; however, if construction activities were scheduled to occur during the nesting season, mitigation would be necessary to avoid potential impacts to migratory birds and their nests. The loss or disturbance of active nests or direct mortality is prohibited by the Migratory Bird Treaty Act and California Fish and Game Code Section 3503.5. The appropriate measures for Migratory Birds and Raptors were included in the EIR as Mitigation Measure MM 4.9.1a; implementation of this mitigation measure would be obligatory on the proposed modified project. Therefore, while the proposed modified project would have potentially significant impacts to *Migratory Birds and Raptors* as identified in the EIR if they are present on the project site, through the implementation of Mitigation Measure MM 4.9.1a, these impacts would be reduced to less than significant, as concluded by the EIR. Thus, based on the foregoing, no new or revised mitigation measures are required and no new impacts are anticipated as a result of the proposed project modifications.

Conclusion for Impact Discussion 4a:

As discussed in the EIR, various special-status wildlife species have the potential to occur on the subject project, as part of the approved project and established that the applicable mitigation measures (MM 4.9.1a) would reduce all impacts to below a level of significance with mitigation. These mitigation measures involve construction worker education, preconstruction surveys, avoidance, buffering, and other steps which would minimize harm to such species. Implementation of these mitigation measures would also be obligatory for the proposed modified project. As proposed, the modified project would implement the

mitigation measures previously determined in the EIR to be adequate to reduce impacts to below a level of significance, the proposed modifications to the project do not result in a change to the finding in the certified EIR of less-than-significant impacts on special-status species. Based on the foregoing, no new or revised mitigation measures are required.

4c: 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?

As discussed in the EIR, and as shown on the site plan, the location of the proposed Fuel Station does not contain a state or federally protected wetland as the project site has been previously disturbed as part of the construction of the existing approximately 30,000-square-foot Holiday Market Grocery Store. However, as part of the previously approved project, and as evaluated in the EIR, the overall Higgins Marketplace project was redesigned in order to avoid impacts to wetlands and waters of the US which are located on the project site within the front portion of the Higgins Marketplace along Highway 49. By increasing the open space parcel to 4.23 acres and decreasing the project footprint, the previously approved project increased the wetland setback buffer from approximately 25 feet under the originally proposed project to approximately 70 feet. The 70-foot setback includes a 50-foot setback from onsite wetlands and a 20-foot vegetated barrier (an area planted with native shrubs and grasses and including a pedestrian path on the eastern edge) between the open space parcel and the onsite commercial development.

As proposed, the modified project would allow for the construction of a proposed Fuel Station within an existing approximately 20,000-square-foot area which has been graded and developed with gravel and further landscaped as part of the construction of the existing Holiday Market Grocery Store. Given that as shown on the submitted site plan, the proposed Fuel Station would not be constructed within an area which contains a state or federally protected wetland, the proposed modifications to the project would not create a new or substantially more adverse impact to these biological resources than those that were previously identified in the EIR. Based on the foregoing, no new or revised mitigation measures are required.

4d: 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?

4g: Introduce any factors (light, fencing, noise, human presence and/or domesticated animals) which could hinder the normal activities of wildlife?

As proposed and as was evaluated in the EIR, the construction and operation of the proposed Fuel Station would not result in the obstruction of movement of migratory birds or other wildlife species. The majority of the project site has been developed with the existing Higgins Marketplace consisting of an approximately 30,000-square-foot Holiday Market grocery store and an existing approximately 8,250-square-foot commercial retail building, comprised of tenant lease spaces. The area of the proposed modified project would be an existing approximately 20,000-square-foot building pad which has been previously disturbed and graded for the construction of the existing Holiday Market Grocery Store. Development of the proposed Fuel Station would be limited to this location on the project site and would not result in a change to the finding in the certified EIR of less than significant impacts relative to interference with wildlife corridors or nursery sites or introduce factors that could hinder the normal activities of wildlife. Based on the foregoing, no new or revised mitigation measures for the proposed modified project are required.

4e: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed in the EIR, and as shown on the site plan, the location of the proposed Fuel Station does not contain any Landmark Oak Trees or Landmark Oak Groves as outlined in Nevada County Land Use and Development Code, Section L-II 4.3.15 – Trees, as project site has been previously disturbed as part of the construction of the existing approximately 30,000-square-foot Holiday Market Grocery Store. However, as part of the previously approved project, and as evaluated in the EIR, the overall Higgins Marketplace project was surveyed as part of the biological inventory prepared by Susan Sanders (Sanders, 2005) which included a tree inventory which identified seven oak trees located throughout the Higgins Marketplace project site. The inventory identified two oak trees which were dead and that would be removed during site preparation. The remaining five oaks that would be preserved included a Valley Oak and four Blue Oaks. As was required by the EIR, Mitigation Measures 4.9.4a and 4.9.4b, were required to ensure that adequate protection of the oaks was implemented as part of the site preparation. These protection measures which included the implementation of the requirements of the Oak Woodland Mitigation Plan for the Higgins Marketplace were implemented and established long-term maintenance of the preserved oaks.

As proposed, the modified project would allow for the construction of a proposed Fuel Station within an existing approximately 20,000-square-foot area which has been graded and developed with gravel and further landscaped as part of the construction of the existing Holiday Market Grocery Store. Given that as shown on the submitted site plan, the proposed Fuel Station would not be constructed within an area which contains a state or federally protected wetland, the proposed modifications to the project would not create a new or substantially more adverse impact to these biological resources than those that were previously identified in the EIR. Based on the foregoing, no new or revised mitigation measures for the proposed modified project are required.

4f: Conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is not part of a Habitat Conservation Plan or any other adopted conservation plans; therefore, there project would have no impacts or conflicts with adopted conservation plans as disclosed by the EIR.

Cumulative Impacts

The EIR concluded that impacts of the approved project will combine with past, present, and reasonably foreseeable projects to create a cumulatively considerable impact due to construction and maintenance activities of the proposed modified project and could result in the disturbance of special-status species including Migratory Birds and Raptors. Anticipated development of the proposed modified project is expected to further contribute to disturbance to special-status species including Migratory Birds and Raptors and is considered potentially cumulative significant for impacts to biological resources. However with the implementation of Mitigation Measures MM4.9.1a, these impacts would be reduce the approved project's overall contribution to cumulative biological resource impacts to Migratory Birds and Raptors resulting from completion of the project. Thus, given the above Mitigation Measures, implementation of these mitigation measures would be obligatory on the proposed modified project. Therefore, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to biological resources than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation: To offset potentially adverse biological impacts associated with the project activities, the following mitigation measures shall be required:

Mitigation Measure 4.9.1a: If proposed grading, site preparation, or construction activities are planned to occur during the nesting seasons for local avian species (typically March 1st through August 31st), the project

applicant shall retain a qualified biologist approved by Nevada County to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity of (no less than 100-feet outside project boundaries, where possible) the project area no more than 30 days prior to initial ground disturbance and before construction resumes if a gap of inactivity occurs for a duration of 30 days or more. If an active nest is located during preconstruction surveys, USFWS and/or DFG (as appropriate) shall be notified regarding the status of the nest. Furthermore, construction activities shall be restricted, as necessary, to avoid disturbance of the nest until it is abandoned or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100-feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1st through February 28th).
Timing: *Prior to issuance of permits and during construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

5. CULTURAL RESOURCES

Existing Setting: Project setting information for the proposed modified project, including information on the area's natural environment, history, ethnography, and regulatory environment, is the same as that for the approved project site, and is provided in the certified EIR.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in a new or substantially more adverse significant impacts to Cultural Resources relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the Project:

5a: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

As discussed in the EIR, archaeological and historical investigations for the previously approved project were conducted by Jensen & Associates and included a records search at the North Central Information Center at California State University, Sacramento and pedestrian survey of the project site. The survey included survey and records search with the Native American Heritage Commission and Culturally Affiliated Native American Tribes for the project site. These investigations did not identify any cultural resources either within or near the subject project site. Thus, based on the above information and assessment that no known sites within the subject project site are eligible for listing on the California Register of Historical Resources (CRHR), the project does not have the potential to cause a substantial average change on any resource that currently qualifies as a historical resource or that has been recommended eligible for listing on the CRHR. Thus, the EIR concluded that no impact would occur. Thus, based on the foregoing, no new or revised mitigation measures are required.

5b: *Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

While no aboveground CRHR-eligible sites have been identified within the proposed project site, underground excavations during construction activities of the proposed modified project could uncover finds requiring evaluation a qualified archaeologist. To minimize the potential for loss of undiscovered

cultural resources, the EIR applied Mitigation Measures MM 4.10.1a and 4.10.1b to the approved project. These mitigation measures require that any cultural resources inadvertently discovered during project construction activities would be protected consistent with the recommendations of a qualified archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology. The proposed modifications to the project do not result in a change to the finding in the certified EIR of less than significant impact relative to the impacts related to archaeological resources. Implementation of these mitigation measures would be obligatory for the proposed modified project. Based on the foregoing, no new or revised mitigation measures are required.

5c: *Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

The EIR discussed that the pedestrian surface survey of the project site and its vicinity, and other previous research, did not identify any evidence of paleontological resources within the project site. Paleontological resources, however, have been identified in Nevada County. Excavations could occur in association with development of the proposed project that could affect paleontological resources buried at deeper depths. Therefore, it is possible that project-related ground-disturbing activities could uncover previously unknown paleontological resources within project boundaries. Unanticipated and accidental paleontological discoveries during project implementation have the potential to affect significant paleontological resources.

The EIR applied Mitigation Measure MM 4.10.2 to the approved project to ensure that any paleontological resources inadvertently discovered during project construction activities would be protected consistent with the recommendations of a qualified paleontologist. The proposed modifications to the project do not result in a change to the finding in the certified EIR of less than significant impact relative to the impacts related to paleontological resources. Implementation of these mitigation measures would be obligatory for the proposed modified project. Based on the foregoing, no new or revised mitigation measures are required.

5d: *Disturb any human remains, including those interred outside of formal cemeteries?*

As analyzed in the EIR although no human remains have been identified within the project site, implementation of the proposed project would include ground-disturbing construction activities that could result in the inadvertent disturbance of currently undiscovered human remains. Procedures of conduct following the discovery of human remains on non-federal lands are mandated by Health and Safety Code Section 7050.5, PRC Section 5097.98, and by CEQA in the California Code of Regulations (CCR) Section 15064.5(e). According to these provisions, should human remains be encountered, all work in the immediate vicinity of the burial must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The remains are required to be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made. The Nevada County Coroner would be immediately notified and the coroner would then determine whether the remains are Native American. If the coroner determines the remains are Native American, the coroner has 24 hours to notify the NAHC, who will, in turn, notify the person they identify as the Most Likely Descendent (MLD) of any human remains. Further actions would be determined, in part, by the desires of the MLD, who has 24 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 24 hours, the owner is required, with appropriate dignity, to reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC. Any discovery of human remains within the project site would be subject to these procedural requirements, which would reduce impacts associated with the discovery/disturbance of human remains to a less than significant level. Thus, the EIR concluded that no impact would occur and based on the foregoing, no new or revised mitigation measures are required.

Cumulative Impacts

The EIR conclude that impacts of the approved project, along with other cumulative development in Nevada County, could contribute to the cumulative loss and/or disturbance of cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features), and human remains. This contribution could be cumulatively considerable prior to mitigation. However with implementation of Mitigation Measures MM 4.10.1a, 4.10.1b and 4.10.2 and adherence to Health and Safety Code Section 7050.5, PRC Section 5097.98, and CCR Section 15064.5(e), will ensure that any discoveries will be handled in accordance with state law and reduce the proposed project's contribution to these impacts to a less than cumulatively considerable level. Therefore, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Cultural Resources than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation: To offset potentially adverse biological impacts associated with the project activities, the following mitigation measures shall be required:

Mitigation Measure 4.10.1a: If any prehistoric or historic artifacts, or other indications of archaeological resources are found during site grading or once project construction is underway, all work in the immediate vicinity must stop and the County shall be immediately notified. An archaeologist meeting the Secretary of Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered cultural resources. The County and the project applicant will consider the recommendations of the qualified archaeologist. The County and the project applicant shall consult and agree upon implementation of a measure or measures that the County and the project applicant deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures.
Timing: *As a condition of project approval, and implemented during grading and construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department*

Mitigation Measure 4.10.1b: If human remains are discovered, all work must stop in the immediate vicinity of the find, and the County Coroner must be notified, according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.
Timing: *As a condition of project approval, and implemented during construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

Mitigation Measure 4.10.2: If any paleontological resources (i.e., fossils) are found once project construction is underway, all work in the immediate vicinity must stop and the County shall be immediately notified. A qualified paleontologist shall be retained to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered paleontological resources. The County and the project applicant will consider the recommendations of the qualified paleontologist. The County and the project applicant shall consult and agree upon implementation of a measure or measures that the County and the project applicant deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, or other appropriate measures.
Timing: *As a condition of project approval, and implemented during construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning Department.*

6. ENERGY

Existing Setting: Project setting information for the proposed modified project, including information on the project site and surrounding area's energy requirements is the same as that for the approved project site and is provided in the certified EIR. The subject project site would be served by Pacific Gas and Electric Company from existing facilities. It is not anticipated that there would be more than one point of service for the project site. Once construction of the proposed fuel station is completed and the fuel station is operational, petroleum fuels (primarily diesel) would continue to be consumed by customers and service vehicles. Electricity would be consumed for operation of the fuel station components, including; lighting, signage and pumps.

Construction of the proposed fuel station would require consumption of petroleum fuels (primarily diesel) by construction workers travelling to and from the project site, by trucks importing and exporting construction materials and supplies to the site, and by construction equipment used on site.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in a new or substantially more adverse significant impacts to Energy in relation to the following questions as stated in the Nevada County CEQA Checklist:

6a: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?

As shown on the submitted site plans, the proposed Fuel Station's estimated energy use during construction would be minor and in compliance with existing regulations, such as California Air Resources Board vehicle idling limits, would prevent wasteful, inefficient or unnecessary consumption of energy resources. Energy use during operations would require electricity for the Fuel Station components and petroleum fuels (primarily gasoline) for customers and service vehicles visiting the Fuel Station. Gasoline use associated with the fuel station would decrease throughout the life of the project as standards for vehicles and fuel efficiency improve. Furthermore, the fuel station would be a "convenience" oriented gasoline sale use that would primarily serve motorists already on nearby roads or visiting the existing Holiday Market Grocery Store and Higgins Marketplace.

As discussed in the EIR under Impact 4.11.9.3, implementation of the proposed project would increase demand for electrical services and require the extension of existing infrastructure to serve the proposed modified project. As outlined in the EIR and as proposed as part of the modified project, Pacific Gas and Electric Company would serve the project with electrical needs from existing power lines located within the existing project site. As proposed, the modified project would be conditioned to require that all construction would be required to meet all current building standards including but not limited to the 2016 California Building Code, 2016 California Electrical Code, 2016 California Energy Code (Title 24) as well as the Nevada County Land Use and Development Code. In addition, as evaluated within the EIR, the implementation of Mitigation Measure MM 4.6.5a would also ensure that Title 24 standards are exceeded through energy-efficient building measures. As with the previous approved project, the proposed modified project would conditioned to require that all construction would be required to meet all current building standards, as required by the California Building Code. Thus, for these reasons, the proposed modifications to the project do not result in a change to the finding in the certified EIR of less than significant impacts regarding the potential impacts associated with the long-

term operational impacts or during construction of the proposed modified project related to energy resources.

6b: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed modified project would not conflict with any state or local plans for renewable energy or energy efficiency. Building Permits would be required in order to construct the proposed project. As part of the Building Permit review, all equipment and structures would be required to meet energy standards identified in California Building Code. Thus, the proposed modifications to the project would not obstruct or prevent plans for renewable energy or efficiency.

Cumulative Impacts

The EIR concluded that the impacts of the approved project when combined with impacts of past, present, and reasonably foreseeable projects would have a less than cumulatively considerable contribution to impacts on energy resources during construction and operation of the proposed modified project. The proposed modified project would allow the construction of a proposed Fuel Station within an existing approximately 20,000-square-foot area which is has been graded as part of the construction of the existing Holiday Market Grocery Store. Therefore, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Energy than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

7. GEOLOGY / SOILS

Existing Setting: The Natural Resources Conservation Services (NRCS) has mapped two soil complexes within the subject parcel: Argonaut gravelly loam, 2 to 5 percent slopes and Boomer-Rock Outcrop Complex 5 to 30 percent slopes (BrD). The proposed modified project would have the same setting related to Geology / Soils, including the same fault rupture, seismic ground shaking, including the same liquefaction, unstable soils, landslides and expansive soils as the approved project. The setting is fully described in the certified Higgins Marketplace EIR.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in a new or substantially more adverse significant impacts to Geology / Soils in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

7a: Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury or death involving:

7i: 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.

7ii: Strong seismic ground shaking?

As discussed within setting of Impact 4.8.1 of the Higgins Marketplace EIR, and pursuant to the Nevada County General Plan Master Environmental Inventory, the project site is not located with an Alquist-Priolo

Special Earthquake Study Zone. However, as evaluated by the EIR and as required by General Plan Policy GH-10.2.1 and GH-10.2.2, the proposed modified project would be designed in accordance with the most current California Building Code Requirements that address structural seismic safety. The California Building Code includes design criteria for seismic loading and other geologic hazards, including loading that governs seizing of structural members and other required design criteria. As further discussed in the EIR, based on review of the soil conditions, the potential for liquefaction within the project site is considered low. However, it is possible that earthquakes on unmapped faults or very large magnitude events could result in ground shaking at the project site, which could damage infrastructure in the vicinity of the project site.

As part of the previously approved project, Mitigation Measure MM 4.8.2 required that all project related utilities and infrastructure facilities to be designed and constructed consistent with the seismic standards of California Building Code Requirements for Zone 3. Thus, the proposed modifications to the project do not result in a change to the finding in the certified EIR of less than significant impact relative to the impacts related to these above-described unstable earth impacts. Implementation of these mitigation measures would be obligatory for the proposed modified project. Based on the foregoing, no new or revised mitigation measures are required.

7iii: Seismic-related ground failure including liquefaction?

7iv: Landslides?

7c: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The EIR concluded that based on a review of the soil conditions on the project site and the Geotechnical Feasibility Study (Wallace-Kuhul & Associates, 2005) that a final design-level geotechnical report be prepared for each of the proposed structures as required by California Building Code. The EIR concluded that Liquefaction is generally determined by three factors: loose granular soils, groundwater, and strong ground motion. Liquefaction is most likely to occur in deposits of water-saturated alluvium in areas of considerable artificial fill. Based on review of the soil conditions on the project site, the potential for liquefaction in the majority of the proposed development envelope area of the project site is considered low.

The proposed modified project would be constructed within an existing approximately 20,000-square-foot area which is located south of the existing Holiday Market Grocery Store. As part of the construction of the existing approximately 30,000-square-foot grocery store, the building pad area was graded, graveled and landscaped. The Building Department as a standard practice require applicants to prepare a soils and geotechnical report to mitigate possible adverse impacts from excavation and construction activities. Therefore, as was previously conditioned, the proposed modified project would be conditioned to require the submission of a final soils and geotechnical report prior to the issuance of Building Permits or Improvement Plans. As part of the previously approved project, Mitigation Measures MM 4.8.1a through MM 4.8.1g and MM 4.8.3 were required in order to fully mitigate potential impacts due to soil erosion, expansive and corrosive soil and slope conditions and would be less than significant. These Mitigation Measures required the submission of a final Grading, Drainage and Erosion Control Plan and outlined the requirements for grading and clearing activities on the project site. As proposed, implementation of these Mitigation Measures would be obligatory for the proposed modified project and would therefore, not result in a change to the finding in the certified EIR of less than significant impact relative to the impacts related to these above-described impacts. Implementation of these mitigation measures would be obligatory for the proposed modified project. Based on the foregoing, no new or revised mitigation measures are required.

7d: Be located on expansive soil creating substantial direct or indirect risks to life or property?

Expansive soils are those soils that shrink or swell depending on the level of moisture they absorb. Expansive soils typically contain clay minerals that determine the ability of the soil to absorb and retain moisture. When structures are located on expansive soils, foundations have the tendency to rise during the wet season and sink during the dry season. This movement can create new stresses on various sections of the foundation and connected utilities and can lead to structural failure and damage to infrastructure.

The EIR conclude that the approved project would be required to be compliant with California Building Code Section 1803.2, which would require additional site investigation, laboratory testing, and engineering analysis, including soil expansion potential in the form of a Geotechnical Report. As stated above, the soils of the project site possess low to moderate expansion potential. The native clays are capable of exerting moderate expansion pressures on building foundations, interior floor slabs, and exterior flatwork. Typical methods of addressing the potential for shrink/swell can include over excavating footings, adding lime to the soil, providing clean non-expansive fill, increasing the size and type of footing and providing for additional soil drainage in the vicinity of the structure. The Geotechnical Report required by Section 1803.2 of the California Building Code will be based on the type of construction anticipated and actual soils analysis at the point of construction may result in more refined methods of addressing this impact. As the impact potential is well known and the potential methods of addressing the issue part of standard construction techniques, with implementation Section 1803.2 of the California Building Code, the EIR concluded that impacts associated with expansive soils would be reduced to a level that is considered less than significant. Similarly, as required by Section 1803.2 of the California Building Code, the proposed modified project would also require the submission of a Geotechnical Report to ensure that the proposed project is compliant with the requirements of California Building Code.

Thus, the Nevada County Building Department as a standard practice require applicants to prepare a soils and geotechnical report to mitigate possible adverse impacts from excavation and construction activities. Therefore, as was previously conditioned, the proposed modified project would be conditioned to require the submission of a final soils and geotechnical report prior to the issuance of Building Permits or Improvement Plans. For these reasons, the proposed modifications to the project do not result in a change to the finding in the certified EIR of less than significant impacts regarding the potential for project-site residents and structures, including those in the vicinity of the pond, to experience loss, injury or death resulting from expansive soils. Based on the foregoing, no new or revised mitigation measures are required.

7e: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

As discussed in the EIR and as shown on the submitted site plans, the proposed modified project would connect to the existing sewer system operated by the Nevada County Sanitation District, No. 1, at the Lake of the Pines Wastewater Treatment Plant. Thus, for these reasons, the proposed modifications to the project do not result in a change in the finding in the certified EIR of no impact associated with soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system.

7f: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The EIR discussed that the pedestrian surface survey of the project site and its vicinity conducted by Jensen & Associates, and other previous research did not identify any evidence of paleontological resources within the project site. Paleontological resources, however, have been identified in Nevada County, and the project site in its entirety has not been investigated by a professional paleontologist. Excavations could occur in association with development of the proposed project that could affect paleontological resources buried at

deeper depths. Therefore, it is possible that project-related ground-disturbing activities could uncover previously unknown paleontological resources within project boundaries. Unanticipated and accidental paleontological discoveries during project implementation have the potential to affect significant paleontological resources.

The EIR applied Mitigation Measure MM 4.10.2 as discussed under Impact 4.10.2 of Section 4.10 of the certified EIR and Section 5 – Cultural Resources above in this Addendum to the Certified EIR to ensure that any paleontological resources inadvertently discovered during project construction activities would be protected consistent with the recommendations of a qualified paleontologist. The proposed modifications to the project do not result in a change to the finding in the certified EIR of less than significant impact relative to the impacts related to archaeological resources. Based on the foregoing, no new or revised mitigation measures are required.

7g: Result in substantial grading on slopes over 30 percent?

Nevada County Land Use and Development, Section L-II 4.3.13 outlines the requirements for development within slopes that are in excess of 30 percent, subject to the approval of a Steep Slope Management Plan. As discussed in the certified EIR and as shown on the submitted project site plans, the subject project site is relatively flat and little grading would be required for the construction of the proposed Fuel Station. Thus, for these reasons, the proposed modifications to the project do not result in a change in the finding in the certified EIR of no impact associated with grading on slopes over 30 percent.

7b: Result in substantial soil erosion or the loss of topsoil?

As concluded by the EIR, impacts associated with erosion and loss to topsoil (Standard of Significance 7b from the CEQA Checklist are discussed in Hydrology and Water Quality.

Cumulative Impacts

The impacts associated with fault rupture and strong seismic ground shaking, seismic-related ground failure, including liquefaction and unstable soils, landslides, and expansive soils are based on site-specific conditions. These inherent conditions are an end result of natural events that occur through vast periods of geologic time and are not based on cumulative development. With proper evaluation of these conditions, compliance with existing codes and standards, such as Section 1803.2 of the California Building Code, the proposed modified project's contribution to significant impacts related to the area's geology would be less than cumulatively considerable with the implementation of Mitigation Measures MM 4.8.1a through 4.8.1g, which would mitigate potential erosion and soil stability impacts and MM 4.8.2, which would require that all project related utilities and infrastructure facilities shall be designed and constructed to seismic standards contained within California Building Code. Thus, based on the above discussion, the proposed modified project when combined with the impacts of past, present and reasonably foreseeable projects, would not create a substantial adverse effect related to Geology / Soils. For these reasons, the proposed modifications to the project do not create new or substantially more adverse cumulative impacts to Geology / Soils than those disclosed in the certified Rincon del Rio EIR and would be mitigated to the maximum extent possible by the incorporation of all feasible and applicable mitigation measures.

Mitigation: To mitigate potentially adverse soils or erosion impacts from project grading and construction, the following mitigation measures in addition to Mitigation Measure 5A shall be required:

Mitigation Measure 4.8.1a: The project applicant shall submit an erosion control plan to the County for approval pursuant to the Nevada County Land Use and Development Code Zoning Regulations. The County shall review the erosion control plan prior to the issuance of the grading permit. Erosion control

measures will include techniques such as physical and vegetative stabilization measures and runoff diversion measures. Additionally the plan will specify measures for reuse or disposal of excavated materials. If excavated material is suitable for the use of the project site, the plan shall minimize the elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan will include specific information regarding the eventual reuse or disposal site, transportation methods, disposal reuse management, and schedule. The erosion control plan will be in conformance with County standards and standards of the Nevada County Resource Conservation District. The County and the Central Valley Regional Water Quality Control Board shall be the monitoring agencies.
Timing: *Prior to issuance of grading permits.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Department of Public Works and Central Valley Regional Water Quality Control Board.*

Mitigation Measure 4.8.1b: The Developer shall submit the Erosion and Sediment Control Plan prepared by a licensed engineer as a part of the permit application information to the Corps of Engineers pursuant to compliance with MM 4.8.1a to ensure that full disclosure of the potential magnitude of impacts to wetlands are considered. The permit application information submitted to the Corps of Engineers shall also be submitted for review of the County Planning Department.
Timing: *Prior to issuance of the Grading Permit.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Planning and Department of Public Works.*

Mitigation Measure 4.8.1c: No single structure shall be supported partially upon hard rock and partially upon softer natural soils or engineered fill materials. Deepening of the foundation excavations shall be required to expose the recommended bearing materials, as determined by a qualified engineer. The proposed structures shall be supported upon continuous and/or isolated spread foundations extending at least 18 inches below building pad subgrade. Lowest adjacent soil grade shall be measured from the surface on which the capillary break gravel is placed or exterior compacted soil grade, whichever is lower. A minimum width of 12 inches shall be maintained for continuous foundations and a minimum plan dimension of 24 inches shall be maintained for isolated spread foundations. A continuous, reinforced foundation shall be utilized for the perimeter of the structure to act as a cut-off wall to help minimize infiltration beneath structures.
Timing: *Prior to commencement of construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Department of Public Works.*

Mitigation Measure 4.8.1d: The following measures shall be followed for the clearing and preparation of the project site:

- Construction areas designated to receive fill, remain at-grade or achieved by excavation should be scarified to a depth of at least 12 inches, moisture conditioned to at least the optimum moisture content and uniformly compacted to at least 90 percent of the ASTM D1557 maximum dry density. Scarification operations shall extend at least five feet beyond the perimeter building foundations and pavements, where possible.

- Building pads constructed partially by cut and partially by fill that exceed five feet in thickness, and fill differentials that exceed five feet shall be avoided where possible. If clay soils are encountered during earthwork, they shall be thoroughly mixed with on-site granular soils during fill placement and not used as fill within the upper two feet of building pads or those subgrades supporting exterior flatwork. Clay soils shall not be placed in keyways or in fills constructed on sloping ground.

- Rocky materials shall be thoroughly moisture conditioned to at least the optimum moisture content and uniformly compacted by three complete passes with a heavy, self-propelled sheepsfoot compacter to the satisfaction of an on-site, qualified engineer.

- Compaction of subgrades must be performed in the presence of a qualified engineer.

Timing: *Prior to commencement of construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Building Department.*

Mitigation Measure 4.8.1e: The applicant shall observe the following measures for the placement of fill on the project site:

- Rocky materials shall be placed in horizontal lifts about 12 inches in compacted thickness. The materials shall be uniformly and thoroughly moisture conditioned to the full depth of each lift. Compaction of the rocky fill materials shall be achieved by at least three successive passes with a Caterpillar 825 compactor.

- Engineered fill composed of native soils or imported materials shall be placed in horizontal lifts not exceeding six inches in compacted thickness with each layer uniformly moisture conditioned to at least the optimum moisture content and compacted to at least 90 percent of the maximum dry density.

- Engineered fill to be placed on existing slopes that are steeper than six horizontal to one vertical (6:1) should begin with a level bench constructed at the toe of the fill with benching done progressively up the slope at vertical increments not exceeding two feet. On slopes steeper than four horizontal to one vertical (4:1), a key should be constructed at the toe of the fill with the toe key at least 15 feet wide, centered along the toe of the fill slope, and excavated to a depth of at least two feet (measured from the down-slope side) into dense materials.

- The upper 12 inches of final building pad subgrades shall be moisture conditioned to at least the optimum moisture content and uniformly compacted to at least 90 percent relative compaction, or at least three complete passes with a heavy, self-propelled, sheepsfoot compaction regardless of whether final grade is achieved by excavation, filling, or left at existing grade.

- The upper six inches of pavement subgrade should be moisture conditioned to at least the optimum moisture content and uniformly compacted to not less than 95 percent relative compaction, or at least five complete passes with a heavy, self-propelled, sheepsfoot compactor, regardless of whether final grade is achieved by excavation, filling or left at existing grade.

- Final pavement subgrade processing and compaction should be performed after completion of underground utilities and just prior to aggregate base placement.

- Permanent excavation and fill slopes should be constructed no steeper than two horizontal to one vertical (2:1) and shall e vegetated as soon as practical following grading to minimize erosion.

- Backfill shall be mechanically compacted in thin lifts to at least 90 percent of the maximum dry density as determined by ASTM D1557. The upper 12 inches of utility trench backfill in pavement areas should be compacted to at least 95% of the maximum dry density. Utility trench backfill materials should consist of on-site granular soils or approved granular import material. NOTE: Rock over six inches in

diameter should not be used as trench backfill material AND rock over three inches in diameter should not be used as initial backfill to avoid impact damage to utility lines.

- A County approved engineer shall be present during site preparation and all grading operations.

Timing: *Prior to commencement of construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Building Department.*

Mitigation Measure 4.8.1f: The ground adjacent to all structures must be sloped away from the structure at a gradient no less than two percent (2%) for a distance of at least five (5) feet, where possible. Roof drains shall discharge onto paved surfaces leading away from the structural foundations or connected to non-perforated rigid piping directed to an appropriate drainage point away from the structures. Ponding of surface water shall be avoided near foundations.
Timing: *Prior to commencement of construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Building Department*

Mitigation Measure 4.8.1g: During construction activities, the project applicant shall employ the following mitigation measures:

- Expansive soils can be excavated and replaced with non-expansive materials. The required depth of excavation shall be specified by a registered geotechnical engineer based on actual soil conditions;

- Expansive soils may be treated in place by mixing them with lime. Lime-treatment alters the chemical composition of the expansive clay materials such that the soil becomes non-expansive; or,

- Implement other engineering practices for mitigation of expansive soil conditions considered appropriate by the Nevada County Department of Public Works.

Timing: *Prior to commencing building construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *The Nevada County Department of Public Works.*

Mitigation Measure 4.8.2: All project related utilities and infrastructure facilities shall be designed and constructed consistent with the seismic standards of the Uniform Building Code for Zone 3.
Timing: *Prior to commencing construction activities.*
Reporting: *Agency approval of grading or improvement permits.*
Enforcement/Monitoring: *Nevada County Department of Public Works.*

Mitigation Measure 4.8.3: The project applicant shall consult a corrosion engineer to further define the soil corrosion potential at the project site, or to determine the need or design parameters for cathodic protection or grounding systems.
Timing: *Prior to commencing construction activities.*
Reporting: Agency approval of grading or improvement permits.
Responsible Agency: *Nevada County Department of Public Works.*

8. GREENHOUSE GAS EMISSIONS

Existing Setting: Greenhouse gases (GHGs) are those gases that trap heat in the atmosphere. GHGs are emitted by natural and industrial processes, and the accumulation of GHGs in the atmosphere regulates the earth's temperature. GHGs that are regulated by the State and/or EPA are carbon dioxide (CO2), methane

(CH4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6) and nitrous oxide (NO2). CO2 emissions are largely from fossil fuel combustion. In California, approximately 43 percent of the CO2 emissions come from cars and trucks. Electricity generation is another important source of CO2 emissions. Agriculture is a major source of both methane and NO2, with additional methane coming primarily from landfills. Most HFC emissions come from refrigerants, solvents, propellant agents and industrial processes, and persist in the atmosphere for longer periods of time and have greater effects at lower concentrations compared to CO2. The adverse impacts of global warming include impacts to air quality, water supply, ecosystem balance, sea level rise (flooding), fire hazards, and an increase in health related problems.

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act, was adopted in September 2006 and requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through regulations to reduce emissions from stationary sources and from vehicles. The California Air Resources Board (ARB) is the State agency responsible for developing rules and regulations to cap and reduce GHG emissions. In addition, the Governor signed Senate Bill 97 in 2007 directing the California Office of Planning and Research to develop guidelines for the analysis and mitigation of the effects of greenhouse gas emissions and mandating that GHG impacts be evaluated in CEQA documents. CEQA Guidelines Amendments for GHG Emissions were adopted by OPR on December 30, 2009. The Northern Sierra Air Quality Management District (NSAQMD) has prepared a guidance document, *Guidelines for Assessing Air Quality Impacts of Land Use Projects*. Therefore, in order to satisfy CEQA requirements, projects should make a reasonable attempt to quantify, minimize and mitigate GHG emissions as feasible.

As such, the environmental and regulatory settings related to Greenhouse Gas Emissions provided in the certified EIR adequately describe the setting for the proposed modified project.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Greenhouse Gas Emissions in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the project:

8a: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As previously approved, the Higgins Marketplace project consisted of the development of a commercial shopping center, which would have consisted of an approximately 50,060 square-foot retail store (expected at the time to be a Bel-Air Market), two retail buildings (one 11,400 square feet and one 8,250 square feet), one 6,000 square-foot sit-down restaurant, and 411 parking stalls. The proposed Fuel Station would be constructed within an existing approximately 20,000-square-foot area of the project that has been graded, compacted with gravel and landscaped that is located south of the existing Holiday Market Grocery Store. Which is contained within an existing approximately 50,000-square-foot building area that was approved for development as part of the Higgins Marketplace. The project as proposed also includes a request to amend the previously approved Use Permit, U04-019 (AAP20-0005), to recognize the reduction in the size of the Holiday Market Grocery Store, from approximately 50,000 square feet to approximately 30,000 square feet.

As part of the proposed modified project, the applicant submitted a Comparative Greenhouse Gas Emissions Analysis, prepared by RCH Group, dated April 17, 2020. Greenhouse Gas Emissions were estimated with the California Emissions Model (CalEEMod) Version 2016.3.2, which is statewide land use emissions model for quantifying air quality and Greenhouse Gas Emissions from land use projects in California. Long-term operational emissions produced by motor vehicles, landscape maintenance, natural gas combustion for space and water heating, electricity use, water/wastewater conveyance and solid waste disposal were quantified. Estimated annual operational Greenhouse Gas Emissions from the previously approved project are displayed below in Table 1 with operational emissions from the proposed modified project displayed below in Table 2.

Table 1: Approved Project Annual Operational Greenhouse Gas Emissions

Source	Metric Tons of CO2e (Carbon Dioxide Equivalents Per Year)
Area	0.1
Energy	547.8
Mobile	4,2883
Waste	142.0
Water	18.3
Total	**4,996.5**

Table 2: Proposed Modified Project Annual Operational Greenhouse Gas Emissions

Source	Metric Tons of CO2e (Carbon Dioxide Equivalents Per Year)
Area	0.1
Energy	360.4
Mobile	3,242.9
Waste	89.4
Water	11.7
Total	**3,704.5**

Comparison of Previously Approved Project and Proposed Modified Project

The Proposed Modified Project would reduce annual operational Greenhouse Gas Emissions by approximately 1,292 metric tons of CO2e per year when compared with the previously approved project. Net annual operational Greenhouse Gas Emissions (Proposed Modified Project minus Previously Approved Project) are displayed below in Table 3

Source	Proposed Modified Project Metric Tons of CO2e Per Year	Previously Approved Project Metric Tons of CO2e Per Year	Net Emissions Metric Tons of CO2e Per Year
Area	0.1	0.1	0
Energy	360.4	547.8	(187.4)
Mobile	3,242.9	4,288.3	(1,045.4)
Waste	89.4	142.0	(52.6)
Water	11.7	18.3	(6.6)
Total	**3,704.5**	**4,996.5**	**(1,292.0)**

Greenhouse Gas Emissions from Fuel Pumps

As outlined in the RCH Group Report (April, 2020), fuel station pumps are not a direct source of Greenhouse Gas Emissions. Greenhouse Gas Emissions are generated through the combustion of petroleum fuels such as gasoline and diesel fuel. The NSAQMD (Rule 214 and 215) requires that all gasoline dispensing facilities to be equipped with a Phase I and Phase II vapor recovery system and would be conditioned to require an Authority to Construct Permit / Permit to Operate (for vapor recovery equipment). Vapor recovery systems collect gasoline vapors that would otherwise escape into the air during bulk fuel delivery (Phase 1) or fuel storage and vehicle refueling (Phase II). Phase I vapor recovery system components include the couplers that connect fuel delivery tanker trucks to the underground fuel storage tanks. Phase II vapor recovery system components include gasoline dispenser, nozzles, pipping, break away hoses and face plates, vapor processors and system monitors. In addition, the project would also be conditioned to require that the proposed Fuel Station comply with NSAQMD Rule 219 which regulates the storage and distribution of gasoline.

As evaluated above, the proposed modified project would result in a reduction in Greenhouse Gas Emissions compared to the previously approved project. The proposed modified project would reduce annual operational Greenhouse Gas Emissions by approximately 1,292 metric tons of CO2e per year compared to the previously approved project. Therefore, as proposed the modified project would not generate Greenhouse Gas Emissions, either directly or indirectly, that may have a significant impact on the environment. The Proposed Project would not result in potentially significant Greenhouse Gas Emission impacts for CEQA purposes and would provide a positive impact in comparison to the previously approved project. Thus, for these reasons, the proposed modified project would not result in a change to the finding in the certified EIR of less than significant impacts relative to the Greenhouse Gas Emissions. Therefore, based on the foregoing, no new or revised mitigation measures are required.

8b: Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

As noted above, the proposed modified project would reduce annual operational Greenhouse Gas Emissions by approximately 1,292 metric tons of CO2e per year compared to the previously approved project. As evaluated in the EIR and based on the submitted Comparative Greenhouse Gas Emissions Analysis report prepared by RCH Group (April, 2020) the proposed modified project would not conflict with the County's Energy Action Plan or County General Plan. Assembly Bill 32, which is the principal State law adopted for the purpose of reducing Greenhouse Gas Emissions, includes a quantitative goal of reducing emissions to 1990 levels by 2020. Statewide plans and regulations such as Greenhouse Gas Emissions standards for vehicles and the low carbon fuel standard are being implemented at the statewide level, and compliance at the specific plan or project level is not addressed. In September of 2016, Assembly Bill 32 was extended to achieve reductions in Greenhouse Gas Emissions of 40 percent below 1990 levels by 2030. The new plan, outlined in Senate Bill 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries. The assumption is that Assembly Bill 32 and other regulations will be successful in reducing Greenhouse Gas Emissions and reducing the cumulative Greenhouse Gas Emissions statewide by 2020 and beyond. The State has taken these measures, because no project individually could have a major impact (either positively or negatively) on the global concentration of Greenhouse Gas Emissions. Therefore, the proposed modified project would result in a significant impact if it would be in conflict with State regulations such as Assembly Bill 32 and Senate Bill 32. The proposed modified project would not conflict with the State plans/regulations because the proposed modified project would reduce Greenhouse Gas Emissions in comparison to the previously approved project and the primary goal of these State plans/regulations is to reduce Greenhouse Gas Emissions. Therefore, the Proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of Greenhouse Gas Emissions. Thus, for these reasons, the proposed modified project would not result in a change to the finding in the certified EIR of less than

significant impacts relative to the Greenhouse Gas Emissions. Therefore, based on the foregoing, no new or revised mitigation measures are required.

9. HAZARDS/HAZARDOUS MATERIALS

Existing Setting: The proposed modified project has the same setting related to Hazards and Hazardous Materials as the approved project. The setting is fully described in the certified EIR.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Hazards / Hazardous Materials in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the project:

9a: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

9b: 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?

The project as proposed is a combined application for a Development Permit to construct a proposed Fuel Station with four (4) self-service pump islands with eight (8) fueling positions adjacent the existing Holiday Market Grocery Store. Development would consist of the construction of a proposed approximately 4,524-square-foot station canopy that is approximately 22 feet in height for the Fuel Station and the installation of two (2) underground fuel storage tanks, consisting of one (1) 15,000-gallon tank for regular unleaded fuel and one (1) 12,000-gallon tank (split between 6,000 gallons for premium unleaded and 6,000 gallons for diesel). The proposed Fuel Station would be constructed within an existing approximately 20,000-square-foot area of the project site that has been graded, compacted with gravel and landscaped that is located south of the existing approximately 30,000-square-foot Holiday Market Grocery Store, which is contained within an existing approximately 50,000-square-foot building area that was approved for development as part of the Higgins Marketplace.

Construction of the proposed Fuel Station would require the use of heavy equipment and machinery, such as trucks and pavers, the operation of which could result in spill or accidental release of hazardous materials including fuels, engine oil, engine coolant, and lubricants. The transport, storage, labeling, use and disposal of any hazardous materials would be subject to federal, state and local regulations, which would minimize risks associated with hazardous materials during construction. Furthermore, as evaluated in the EIR, Mitigation Measure MM 4.3.2a, was applied which would require a designated staging area be designated for the refueling and maintenance of heavy equipment used during the projects construction. While the risk of exposure to hazardous materials cannot be eliminated, measures can be implemented to reduce risk to acceptable levels through the implementation of MM 4.3.2a, which would be obligatory for the proposed modified project. Therefore, the potential to create a significant hazard to the public or environment from the use of fuels, engine oil, engine coolant, and lubricants during construction of the proposed Fuel Station would be less than significant. As proposed, implementation of these Mitigation Measures would be obligatory for the proposed modified project and would therefore, not result in a change to the finding in the certified EIR of less than significant impact relative to the impacts related to these above-described

impacts. Implementation of these mitigation measures would be obligatory for the proposed modified project. Based on the foregoing, no new or revised mitigation measures are required.

Adherence to existing regulations, including but not limited to Title 49, Code of Federal Regulations, parts 100-185 (Hazardous Materials Regulations), California Health and Safety Code Titles 8, 22 and 26 and their enabling legislation set forth in California Health and Safety Code, Chapter 6.95 governing the storage of hazardous materials; and the applicant would be required as a condition of approval of the proposed modified project to file a Hazardous Materials Business Plan and obtain a Underground Storage Tank Installation Permit from the Nevada County Department of Environmental Health, Certified Unified Program Agency (CUPA). The applicant must adhere to all applicable codes and regulations regarding the storage of hazardous materials and the generation of hazardous wastes set forth in California Health and Safety Code Section 25500 – 25519 and 25100 – 25258.2 including the electronic reporting requirement to the California Environmental Reporting System (CERS).

Operation of the proposed Fuel Station would include the use, transport, and handling of hazardous materials. Specifically, operation would include the regular transportation of gasoline and diesel, refilling of the underground storage tanks, pumping gasoline to fuel dispensers, and use of the fuel dispensers by motorists. As a result, the proposed modified project could result in potentially adverse impacts to people and the environment as a result of hazardous materials being accidentally released into the environment (e.g. operators or motorists could spill gasoline while refueling, underground storage tanks or pipes dispensing fuel from underground storage tanks could leak, automobiles could crash into fuel dispensers, or motorists could refuel while having engine running causing a fire hazard). However, the proposed modified project including the operation of the Fuel Station would be required to operate in compliance with all applicable federal, state, and local requirements which lessen the potential for these impacts.

Some of these regulations include:

- State Water Resource Control Board Health and Safety Code, Section 25280, regarding underground storage tanks installed after 1988 which are required to have a leak detection system consisting of at least one of the following detection methods: Secondary containment with interstitial monitoring, automatic tank gauging systems (including continuous automatic tank gauging systems), vapor monitoring (including tracer compound analysis), groundwater monitoring, statistical inventory reconciliation, or other method meeting established performance standards.

- Efficacy requirements established by United States Environmental Protection Act require that leak detection methods be able to detect certain leak rates and that they also give the correct answer consistently. In general, methods must detect the specified leak rate with a probability of detection of at least 95 percent and a probability of false alarm of no more than 5 percent.

- Underground Storage Tanks and associated fuel delivery infrastructure, including fuel dispensers are required to comply with applicable federal, state, and local regulations, including those provisions established by Section 2540.7, Gasoline Dispensing and Service Stations, of the California Occupational Safety and Health Regulations and Chapter 38, Liquefied Petroleum Gases, of the California Fire Code.

- Furthermore, the project would be subject to routine inspection by federal, state, and local regulatory agencies with jurisdiction over fuel-dispensing facilities. Collectively, the routine inspection of the gas station and all of its associated fuel delivery infrastructure and above ground storage tanks by federal, state, and local regulatory agencies with jurisdiction over fuel-dispensing facilities, along with the continued mandated compliance with all federal, state, and local regulations, will ensure that this project is operated in a non-hazardous manner. Therefore, the construction of the proposed facilities,

as well as the short and long-term impacts associated with handling, storing, and dispensing of hazardous materials associated with a fuel dispensing would be less than significant.

Furthermore, as discussed under Impact 4.3.2 within the EIR, 4.7.1 in Section 4.7, Hydrology and Water Quality, the proposed project would be required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) listing best management practices (BMPs) that would be used to prevent or reduce the movement of sediment, nutrients, pesticides, and other pollutants from the construction site to surface water or groundwater. BMPs identified in the SWPPP would prevent spills associated with the use and handling of hazardous materials during construction activities from leaving the construction site and creating a significant hazard to the public or to the environment.

Therefore, given the above discussion, the proposed modified project would not result in the accidental release of hazardous materials into the environment. For these reasons, the proposed modified project would not result in a change to the finding in the certified EIR of less than significant impacts relative to the creation of hazards to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Based on the foregoing, no new or revised mitigation measures are required.

9c: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The subject project site is not located within one-quarter mile of an existing or proposed school. Therefore, for these reasons the proposed modified project would not change the finding in the certified EIR of not impact related to hazardous emissions or substances near a school.

9d: 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, create a significant hazard to the public or the environment?

The subject project site property is not within or adjacent to any hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, for these reasons the proposed modified project would not change the finding in the certified EIR of not impact related to the placement of the project on a hazardous waste site.

9e: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The subject project site is not located within airport land use plan nor is it located within two miles of a public airport or public use airport. Therefore, for these reasons the proposed modified project would not change the finding in the certified EIR of no impact related to people residing or working the vicinity of a public or private airport.

9f: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The EIR discussed that the Nevada County and Nevada Operational Area Emergency Operations Plan is considered to be the planning tool for emergency evacuation of threatened populations in Nevada County. The Nevada County General Plan identifies primary and secondary emergency evacuation routes in accordance with the Emergency Operations Plan. Although specific evacuation plans are developed on-site and are dependent on the type of incident and the urgency of the impending threat, the County's General

Plan generally identifies interstates, freeways, highways, and principal arterial routes as primary evacuation routes. Such routes provide the highest levels of capacity and contiguity and serve as the primary means of egress during an evacuation from Nevada County. Routes designated on the General Plan Land Use Maps as minor arterial and major collector routes are considered secondary evacuation routes. These routes supplement the primary evacuation routes and provide egress from local neighborhoods and communities (Nevada County 1996, p. 10-3).

As proposed, the modified project would not alter any allowable residential density, in the nearby area, change any of the existing road networks, or alter any existing emergency evacuation plans. The Nevada County Office of the Fire Marshal and the Nevada County Higgins Fire Protection District has reviewed the proposed modified project and did not comment on any adverse impacts related to emergency response or evacuation plans. Furthermore, occupants and employees of the project site would be notified of incident- and threat-specific evacuation plans via Public Address Systems, High-Low systems on law enforcement vehicles; local media via radio and television (including activation of the Emergency Alert System for local media outlets); and mass notification via landline, cellular telephone, and the Nevada County Code Red System.

For these reasons, the proposed modified project would not result in a change to the finding in the certified EIR of less than significant impact relative to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan. Based on the foregoing, no new or revised mitigation measures are required.

9g: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As discussed in the setting of the Hazardous Materials / Human Health section of the certified EIR, the proposed modified project site would be located in the State Responsibility Areas and is primarily in a high Fire Hazard Severity Zone located within the developed portion of the existing Higgins Marketplace.

As required by the approved project, the proposed modified project would be required to comply with the 2019 California Building Standards Code (Title 24 of the California Code of Regulations) and Defensible Space Requirements (Public Resources Code Sections 4290 and 4291), which establish minimum standards for materials and material assemblies to provide a reasonable level of exterior wildfire exposure protection for buildings in wildland-urban interface areas, the use of ignition-resistant materials and design to resist the intrusion of flame or burning embers projected by a vegetation fire, and the provision of defensible space around all structures. As discussed in the EIR and as would be required for the proposed modified project, the proposed Fuel Station would be required to meet the Wildland-Urban Interface Fire Area Building Standards and all other required 2019 California Building Standards Code.

In addition, the proposed project would be required to comply with all applicable Nevada County Code requirements intended to mitigate effects of wildland fire exposure within the State Responsibility Areas. According to the Code, the requirements contained in Chapter XVI (Fire Safety Regulations), as well as Chapter II (Zoning Regulations), Chapter IV (Subdivision Regulations), Chapter VII (Street Addressing and Naming), and Chapter V (Buildings) and County adopted road standards collectively provide the necessary minimum wildfire protection standards to minimize public safety effects with the establishment of land uses and buildings within SRA lands within Nevada County.

As discussed in the EIR, compliance with the California Building Standards Code, the defensible space requirements included in the Public Resources Code, and all applicable Nevada County Code requirements would ensure that the proposed modified project would provide the necessary wildfire protection standards to minimize the safety effects of being located in the SRA. In fact, the Nevada County Code would require

the proposed modified project to incorporate defensible space design consistent with Public Resources Code Section 4291, which according to the NEU Unit Fire Plan, is the single most effective method to protect personal and real property from wildland fires.

Therefore, as discussed above, the proposed modified project would not result in a change to the finding in the certified EIR of less than significant with the adopted mitigation measures. For these reasons, the proposed modifications to project do not result in a change to the conclusion in the certified EIR of less than significant impacts relative to the addressing project impacts unique to evacuating the site population in a manner consistent with County and state regulations on managing exposure to wildland fire hazards.

Cumulative Impacts

As evaluated in the EIR and based on the proposed modified project impacts of the approved project would combine with impacts of past, present and reasonably foreseeable project which would result in the use, transport, and handling of hazardous materials including gasoline and diesel and could create a hazard to the public a result of the construction of the proposed Fuel Station. As concluded by the EIR and as further evaluated in this Addendum to the EIR, while the development and operation of the Fuel Station could result in spill or accidental release of hazardous materials, including fuels, engine oil, engine coolant and lubricants. The transport, storage, labeling, use and disposal of any hazardous materials would be subject to federal, state and local regulations, which would minimize risks associated with hazardous materials during construction. Furthermore, as evaluated in the EIR, Mitigation Measure MM 4.3.2a, was applied which would require a designated staging area to be designated for the refueling and maintenance of heavy equipment used during the projects construction. While the risk of exposure to hazardous materials cannot be eliminated, measures can be implemented to reduce risk to acceptable levels through the implementation of project specific mitigation measures and project conditions of approval. In addition, impacts associated with hazards materials are generally site specific and each individual project is responsible for mitigating its specific risks. Therefore, the proposed modified project would not create new or substantially more adverse impacts to hazardous materials than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation: To mitigate potential impacts related to the release of potentially hazards materials the following mitigation measure shall apply:

Mitigation Measure 4.3.2a: Project grading and construction permits shall designate staging areas where fueling, oil-changing and maintenance activities are permitted. No fueling and oil-changing activities shall be allowed outside the designated staging areas. The staging areas, as much as practicable, shall be located on level terrain. Staging areas shall not be located within 200 feet of any stream channels or wetlands. The proposed staging areas shall be identified in the Storm Water Pollution Prevention Plan (SWPPP), which shall be reviewed and approved by the Regional Water Quality Control Board as part of the NPDES permit process.
Timing: *Prior to issuance of grading permits.*
Reporting: *Agency approval of grading or improvement permits.*
Responsible Agency: *Nevada County Community Development Agency, Planning Department.*

10. HYDROLOGY / WATER QUALITY

Existing Setting: The proposed modified project would be located on the same project site as the approved project and therefore has the same setting related to Hydrology / Water Quality, including the same hydrologic and flooding history, climate, surface and groundwater background, as soils, as the approved project. The setting is fully described in the certified EIR.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Hazards / Hazardous Materials in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the project:

10a: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

10e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As disused in the certified EIR, construction of the proposed project would introduce sediments and other contaminants typically associated with construction into storm water runoff, potentially resulting in the degradation of downstream surface water and groundwater quality. Storm water flowing over the project site during construction could carry various pollutants downstream such as sediment, nutrients, bacteria and viruses, oil and grease, heavy metals, organics, pesticides, gross pollutants, and miscellaneous waste. These pollutants could originate from soil disturbances, construction equipment, building materials, and workers. The proposed project has the potential to result in the generation of new dry weather runoff containing these pollutants and also has the potential to increase the concentration and/or total load of the pollutants in wet weather storm water runoff. Erosion potential and the possibility of water quality impacts are always present during construction and occur when protective vegetative cover is removed and soils are disturbed. In the case of the proposed modified project, it is primarily the grading and cut/fill associated with the site improvements, utilities, roadways, and building pad for the Fuel Stations that could contribute to erosion and water quality degradation. The EIR applied Mitigation Measures MM 4.7.1a, MM 4.7.1c and MM 4.7.2 as discussed under Impact 4.7.1 and Impact 4.7.2 of the certified EIR to ensure that soil disturbance associated with construction activities for the previously approved could cause soil erosion and sedimentation or the release of other pollutants in wet weather storm water runoff which would be obligatory for the proposed modified project/

The EIR conclude that in addition to statewide regulations, the proposed project would be subject to the requirements of Nevada County Chapter V, Article 19 of the Nevada County Land Use and Development Code requiring a grading permit. As part of the grading permit, the applicant would be required to submit a final grading, drainage and erosion and sediment control plan that would be approved by the Nevada County Building Department prior to issuance of grading or improvement plans.

An increase in impervious surface area would increase runoff potentially containing oil and grease, heavy metals, chemicals, and other urban pollutants. Runoff from the proposed landscape areas could also contribute pollutants from fertilizers and pesticides. The project proposes a drainage collection system consisting of both roadside ditches and underground drainage pipes. Runoff would be directed to water quality treatment facilities such as infiltration trenches and/or retention ponds prior to returning to sheet flow to connect to natural swales located on the site. Furthermore, consistent with the post-construction requirements of the State Water Resources Control Board General Construction Permit, best management practices will be implemented and low impact development (LID) techniques will be utilized to minimize off-site drainage and water quality degradation. Potential Best Management Practices (BMPs) to be implemented on the project site are described in detail in 10a above. Incorporation of LID techniques into the proposed development and implementation of appropriate BMPs post-construction would remove

sediment and pollutants from site runoff and minimize impacts to downstream surface water and groundwater resources.

Therefore, the proposed modified project would not result in a change to the finding in the certified EIR of less than significant impacts relative to the violation of any water quality standards of waste discharge requirements or otherwise substantially degrade surface or ground water quality. Based on the foregoing, no new or revised mitigation measures are required.

10b: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The EIR concluded that with development of the project, some of the pervious soils on the site will be replaced with impervious surfaces such as paving, roads and buildings. The addition of impervious surfaces would decrease the area available for water penetration, thereby reducing local groundwater recharge potential. However, all runoff from impervious surfaces would be directed to water quality treatment facilities such as infiltration trenches and/or retention ponds prior to returning to sheet flow to connect to natural swales located on the site. Therefore, because runoff would eventually be directed to areas with pervious surfaces such as natural swales, and because the area designated as open space would continue to provide for groundwater recharge, the potential reduction in groundwater recharge associated with the project is small. Furthermore, the project's domestic water demands will be met by surface water supplies provided by the Nevada Irrigation District (NID) rather than utilizing groundwater resources. Irrigation water demands have not been indicated as being supplied by groundwater.

Therefore, the proposed modified project would not result in a change to the finding in the certified EIR of less than significant impacts relative to the violation of any water quality standards of waste discharge requirements or otherwise substantially degrade surface or groundwater supplies or interfere substantially with groundwater recharge. Based on the foregoing, no new or revised mitigation measures are required.

10c: 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 that would:

10ci: Result in substantial erosion or siltation on- or off-site;

10d: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

10f: Place housing within a 100-year flood hazard area as mapped on a federal Flood hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

10g: Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

As described under Impact 3.9.4 above, the project includes the construction of a drainage system to manage drainage on the site and prevents any such ponding or drainage problems which includes the preparation of a detailed drainage report which is consistent with Nevada County Standards as required by Mitigation Measures MM 4.7.4, MM 4.7.5a, MM 4.7.5b which would be obligatory for the proposed modified project. Thus, the proposed modifications to the project would not result in a change to the finding in the certified EIR of less than significant impact relative to these impacts. Therefore, no people or structures would be exposed to risk of flooding and this impact would be less than significant. It should also be noted that the project would not place development within, or within 100 feet of, the 100-year floodplain. Therefore, the project is not required to prepare a Management Plan pursuant to the Nevada County Land Use and Development Code, Section L-II 4.3.10. Implementation of these mitigation measures would be obligatory

for the proposed modified project. Based on the foregoing, no new or revised mitigation measures are required.

10cii-iv:

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

iii: Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted run-off; or

iv: Impeded or redirect flood flows?

The proposed drainage system for the modified project would consist primarily of open roadside ditches as well as underground drainage pipelines where greater capacity is required. These drainage facilities will direct runoff to water quality treatment facilities such as infiltration trenches and/or retention ponds prior to returning to sheet flow to connect to natural swales located on the project site. The proposed drainage plan and associated drainage study will be reviewed by County staff to ensure that it has adequate capacity to manage anticipated storm water drainage on the site and to prevent any on- or off-site flooding. Furthermore, the proposed water quality treatment facilities and other erosion control measures to be implemented during and post-construction pursuant to the State's NPDES requirements (see Impact 4.7.1 in the EIR) would minimize soil erosion and sedimentation. Based on the foregoing, no new or revised mitigation measures are required.

Cumulative Impacts

The EIR concluded that existing, approved, proposed, and reasonably foreseeable development could alter drainage conditions, rates, volumes, and water quality, which could result in potential flooding and stormwater quality impacts within the overall watershed. However, as discussed in above in 10a-g, proposed project site design, including the proposed drainage system, water quality treatment facilities such as infiltration trenches and retention ponds, would reduce the project's contributions to cumulative runoff, water quality, and flooding impacts and would be less than cumulatively considerable with the implementation of Mitigation Measures MM 4.7.1a, MM 4.7.1c and MM 4.7.2 and MM 4.7.4, MM 4.7.5a, MM 4.7.5b. Thus, based on the above discussion, the proposed modified project when combined with the impacts of past, present and reasonably foreseeable projects, would not create a substantial adverse effected related to Hydrology / Water Quality. For these reasons, the proposed modifications to the project do not create a new or substantially more adverse cumulative impacts to Hydrology / Water Quality than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation: To mitigate potential impacts related to alterations of drainage features and storm water quality from construction and operation activities, the following mitigation measures shall apply:

Mitigation Measure 4.7.1a: Prior to the issuance of grading permits, the project applicant shall prepare a spill prevention and countermeasure plan describing measures to ensure proper collection and disposal of all pollutants handled or produced on the site during construction, including sanitary wastes, cement, and petroleum products. The plan shall be submitted to the County for approval and incorporation into the SWPPP. All construction contractors shall comply with the spill prevention and countermeasure plan.
Timing: *Prior to issuance of grading permits.*

Reporting: *Approval of grading or improvements permits*
Responsible Agency: *Nevada County Department of Public Works and CVRWQCB*

Mitigation Measure 4.7.1c: The project applicant shall develop and submit an erosion control plan, per Higgins Area Plan Policy 6, to manage site erosion during construction of the project. The developer shall be required to incorporate BMPs to provide for the removal and control of sediments and pollutants in site runoff to acceptable levels prior to discharge into downstream facilities.
Timing: *Prior to issuance of grading permits and improvement plans.*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works and CVRWQCB*

Mitigation Measure 4.7.2: Prior to the approval of improvement plans for each commercial center and for future light industrial and office uses, the applicable project applicant shall submit a water quality control program to the County. This program will specify the design of planned water quality facilities in the project's drainage system and will include the following items:

- All storm drain inlets and oil separators will be routinely cleaned and maintained during the dry months of July through September. The program will also establish maintenance responsibility, funding and schedules for servicing the drainage system.
- Storm drain inlets will also be labeled No Dumping – Drains to Streams.
- Energy dissipaters will be incorporated into drainage outlets into Ragsdale Creek.
- Sediment basins will include appropriate vegetation to naturally filter the drainage flows.
  The water quality control program may be incorporated into the final Wetland/Riparian Enhancement Plan and Flood Control Plan for Ragsdale Creek and will require County approval.

Timing: *Prior to the approval of improvement plans*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works and CVRWQCB.*

Mitigation Measure 4.7.4: The project applicant shall prepare a detailed drainage report consistent with County standards for submittal with the improvements plans. The drainage report shall include the following:

- An accurate calculation of the existing runoff coefficient conditions and anticipated flow conditions as a result of buildout of the Ragsdale Creek drainage basin.
- A detailed analysis of the effects that the project will have on peak flow conditions at the State Route 49 culvert and other downstream facilities. No net increase to 100-year storm event peak year discharged may be realized within the State's highway right of way and/or Caltrans drainage facilities as a result of the project. The analysis associated with the State Route 49 culvert shall be submitted to Caltrans for their review and concurrence.
- If increased drainage flows of the project are anticipated to contribute to drainage capacity deficiencies for downstream facilities during peak flow conditions, the project shall include onsite detention facilities adequate to mitigate project increases to peak flow conditions.
- Proof that the drainage report was prepared by a registered Civil Engineer.

Timing: *Prior to the approval of improvement plans*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works*

Mitigation Measure 4.7.5a: Prior to site grading, a detailed set of improvement plans with drainage design will be developed that analyzes the flow of drainage before and after grading.
Timing: *Prior to issuance of grading permit*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works*

Mitigation Measure 4.7.5b: Detention and conveyance facilities shall be designed to ensure that drainage flows are not discharged from the site in quantities or at velocities above those conditions that exist prior to grading.
Timing: *Prior to approval of improvement plans.*
Reporting: *Approval of grading or improvement permits*
Responsible Agency: *Nevada County Department of Public Works and CVRWQCB.*

11. LAND USE / PLANNING

Existing Setting: The proposed modified project would be located on the same project site as the approved project. As such, the regional and local land use and planning environmental and regulatory setting for the approved project, providing detail in the certified EIR, also applies to the proposed modified project.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Land Use / Planning in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

Would the project:

11a: Physically divide an established community?

As disclosed in the certified EIR, division of a community commonly occurs as a result of development of physical features that constitute a barrier to easy and frequent travel between two or more constituent parts of a community. For example, a large freeway structure with a few crossings could effectively split a community. The proposed modified project would construct a proposed Fuel Statin adjacent to the existing Holiday Market Grocery Store. The project site has been developed as the Higgins Marketplace commercial shopping center and is served by existing public roadways. Therefore, similar to as disclosed in the certified EIR, the proposed modified project would not create a barrier to travel between or to parts of a community. For this reason, the EIR determined that the approved project would have no impact resulting from a conflict with physically dividing a community.

11b: 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?

As proposed, the modified project would allow for the development of a Fuel Station within the existing Higgins Marketplace shopping center. Pursuant to the requirements of Nevada County Land Use and Development Code, Section L-II 2.4, the subject project site is zoned C2 (Community Commercial). The District provides for wide range of retail and service uses that serve the varied needs of large geographic areas. This district is consistent with all General Plan designations provided the proposed land uses are consistent with those designations within which the project is located.

Thus, given the above discussion, the proposed modifications to the project would not result in a change to the finding in the certified EIR of less than significant impacts relative to conflicts with applicable land use plans, policies or regulations. Based on the foregoing, no new or revised mitigation measure are required.

Cumulative Impacts

The EIR concluded that, because the approved project would not physically divide an established community; conflict with local plans, policies, or regulations; or conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Planning program. Generally, land use conflicts are site-specific and do not result in cumulative impacts. Site-specific incompatibility issues are addressed and mitigated on a project-by-project basis through implementation of the County's General Plan policies, Zoning Regulations, and Design Guidelines, as well as through the environmental review process. Thus, the proposed modifications to the project would create new or more substantially more adverse cumulative impacts to Land Use and Planning than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

12. MINERAL RESOURCES

Existing Setting: The project area is not mapped as being within a significant Mineral Resource Zone (MRZ-2). This project site is located within the Lake of the Pines Village Center and has been developed with the Higgins Marketplace retail shopping center. As such, the mineral resources regulatory setting for the approved project, providing detail in the certified EIR, also applies to the proposed modified project.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Land Use / Planning in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

12a: 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?

12b. 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?

As concluded in the EIR the proposed modified project is not mapped within a known mineral resource area or MRZ and would not change existing land uses on the project site that would result in a loss of availability of a locally important mineral resource recovery site. Therefore, the proposed modified project would not result in a change to the finding in the certified EIR of no impact relative to Mineral Resources. Based on the foregoing, no new or revised mitigation measures are required.

13. NOISE

Existing Setting: The General Plan and the Nevada County Land Use and Development Code establishes maximum allowable noise levels for land use projects. As described in the project description, the site is located within the existing Higgins Marketplace of southern Nevada County and is characterized by commercial development located adjacent to Highway 49.

The proposed modified project would be located on the same project site as the approved project as evaluated by the certified EIR. As such, the noise setting for the approved project, provided in detail in the certified EIR, also applies to the proposed modified project.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Noise in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

13a: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess standards established in the local General Plan or noise ordinance, or applicable standards of other agencies?

The certified Higgins Marketplace EIR evaluated the approved project for temporary noise impacts related to construction as well as long term noise impacts related to operation of the proposed project as they would relate to the project and surrounding sensitive noise receptors. As noted in the EIR, noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

As disclosed in the in the certified EIR and based on the noise analysis prepared by J.C. Brennan & Associates (2005), for the approved project, the proposed modified project would generate noise during construction that is typically associated with the operation of off-road equipment, including excavation equipment, material handlers, and portable generators. In addition, based on the noise analysis prepared by J.C. Brennan & Associates, and as evaluated in the certified EIR the proposed modified project would generate operational noise impacts which are typical of a Fuel Station, and the operation of a commercial grocery store and would be compliant with Nevada County Land Use and Development Code, Section L-II 4.1.7 – Noise.

Based on the report noise levels associated with individual construction equipment can reach levels of up to approximately 90 dBA Lmax (J.C. Brennan 2005). Noise from localized point sources, such as construction sites, typically decreases by approximately 6 dBA with each doubling of distance from source to receptor. Given this noise attenuation rate and typical construction equipment noise levels and usage rates, combined noise levels associated with construction activities can reach levels of up to approximately 84 dBA Leq at 50 feet (USEPA 1971). Depending on the location and type of construction activities conducted, construction-generated noise levels at the nearest existing offsite residential land uses, which are located north of the project site.

As discussed, above, similar to the approved project, construction activities for the proposed modified project would result in temporary, low-level noise impacts at the nearest residences closest to the subject project site primarily associated with excavation and earthmoving equipment. Mitigation Measure MM 4.5.1 would limit construction activities (excluding activities that would result in a safety concern to the public or construction workers, would be limited to the hours of 7 AM and 6 PM, Monday through Friday

and 8 AM and 5 PM on Saturdays. In addition, the Mitigation Measure would also require that equipment be properly maintained and be equipped with noise-reduction intake and exhaust mufflers that would reduce levels by approximately 10dBA. Implementation of this mitigation measure would be obligatory for the proposed modified project.

As discussed above, the construction and operation of the proposed modified project would have similar impacts on the exposure of persons to noise levels in excess of the Nevada County Noise Standards. However, with the implementation of Mitigation Measure MM 4.5.1 these impacts would be less than significant, as concluded by the EIR, relative to conflicts with the adopted Nevada County Noise Standards. Based on the foregoing, no new or revised mitigation measures are required.

13b: Generation of excessive ground borne vibration or ground borne noise levels?

The EIR concluded that the construction and of the approved project would not be projected to exceed applicable ground borne vibration criteria at nearby land uses sensitive noise receptors given that the construction activities based on the project would not require the use of pile drivers. As proposed, the it is anticipated that the modified project would also not require the use of pile drivers for construction and would rely on typical construction methods for a for the proposed Fuel Station approximately 4,524-square-foot canopy and associated development. Furthermore, as proposed, it is anticipated that operation of the proposed Fuel Station would not generate excessive ground borne vibration, beyond which is allowed in the Nevada County General Plan due to its relatively quiet operation. Therefore, the proposed modified project would not result in a change to the finding in the certified EIR of less than significant impacts relative to the generation of excessive ground borne vibration or ground borne noise levels. Based on the foregoing, no new or revised mitigation measures are required.

13c: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The EIR concluded that the project site is not in the vicinity of a public or private airport; the closest airport to the project site is the Auburn Municipal Airport, located over 4 miles to the south. The project site is not located within two miles of a public airport or public use airport, nor would the implementation of the proposed modified project affect airport operations or result in increased exposure of noise-sensitive receptors to aircraft noise. Therefore, for these reasons, the proposed modified project would not result in a change to the finding in the certified EIR of less than significant impacts to the exposure of people residing or working in the project area to aircraft noise. Based on the foregoing, no new or revised mitigation measures are required.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past, present, and reasonably foreseeable projects, would not create a substantial adverse effect related to Noise. For these reasons, the proposed modifications to the project do not create new or substantially more adverse cumulative impacts to noise levels that those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation Measures: To reduce potentially significant impacts associated with construction noise, the following mitigation measure shall be noted on improvement plans:

Mitigation Measure 4.5.1: The project applicant and all successors in interest shall ensure that construction activities adhere to the following measures with respect to hours of operation, muffling of internal

combustion engines, and other factors that affect construction noise generation and its effects on noise-sensitive land uses:

- Restrict construction activities to between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday. Restrict construction activities between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays. No construction activities shall occur on Sundays.

- All equipment shall be fitted with factory-equipped mufflers, and shall be in good working order.

- Locate all staging areas for equipment as far as possible from residential areas.

Timing: *The requirements shall be reflected on all grading and improvement plans and shall be placed in all construction contracts for individual contractors throughout the grading and construction process.*
Reporting: *Agency approval of grading or improvement plans.*
Responsible Agency: *The Nevada County Department of Public Works*

14. POPULATION / HOUSING

Existing Setting: The proposed modified project has the same setting related to population and housing as the approved project. The setting is fully described in the certified EIR.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Population / Housing in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

14a: 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)?

As approved, the EIR disclosed that the previously approved project would provide commercial and retail services for the existing and planned population in the area. No new housing development or associated population growth would be needed to serve or accommodate the previously approved project. Similarly to proposed modified project would allow for the construction of a Fuel Station which would support the existing commercial and retail businesses within the Higgins Marketplace Shopping Center. Thus as outlined in the EIR and as part of the proposed modified project, it is anticipated that employees of the project site, including the Fuel Station would reside in existing residential development within the surrounding area.

Thus, for these reasons, the proposed modifications to the project do not result in a change to the finding in the certified EIR of less than significant impacts relative to displacement of substantial numbers of people or housing requiring the construction of housing elsewhere.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past, present and reasonably foreseeable projects, would not create a substantial adverse effect related to Population / Housing. The proposed modified project would allow for the construction of Fuel Station which would support the Higgins Marketplace and surrounding area. Thus for these reasons, the proposed modifications to the

project do not create new or substantially more adverse cumulative impacts to Population / Housing than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

15. PUBLIC SERVICES

Existing Setting: The following public services are provided to this site:

The environmental setting for Public Services and Utilities is the same as described in the certified EIR. As such, the environmental and regulatory settings related to public services and utilities in the certified EIR adequately describes the setting for the proposed modified project.

Fire: The Higgins Fire Protection District (HFPD) District provides fire protection services to this site.
Police: The Nevada County Sheriff provides law enforcement services.
Water: Public water would be provided to the site through the Nevada Irrigation District (NID).
Transit: Nevada County Transit Services would provide bus service to the project site.
Sewer: Public sewer would be provided to the site through the Nevada County Sanitation District No. 1

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Public Services in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

15a: Result in substantial adverse physical impacts associated with the provision of or 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 following the public services:

Fire Protection:

As was evaluated in the EIR, the approved project is located within the Higgins Fire Protection District and the District has indicated that they can serve the project. As proposed, the modified project would be the construction of a proposed Fuel Station and the recognition of the construction of the existing approximately 30,000-square-foot Holiday Market Grocery Store within the Higgins Marketplace commercial shopping center.

As previously approved, all development related to the buildout of the modified project would be required to meet the minimum standards of the California Fire Code and the requirements of the Nevada County Land Use and Development code for fire flow, access and fuel modification. As shown on the submitted site plan, the area in which the Fuel Station would be located has already been developed and contains existing fire hydrants, access driveways and would be required to meet all required fire safe standards prior to building permit issuance and final occupancy approval.

These improvements were constructed as part of the construction of the existing Higgins Marketplace and would not result in greater impacts that those identified for the project construction in the relevant sections of the certified EIR and this Addendum. Thus, the proposed modifications to the project would not result in a change of to the finding in the certified EIR of less than significant impact. Based on the foregoing, no new or revised mitigation measures are required.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past, present, and reasonably foreseeable projects, would not create a substantial adverse effect related to Fire Protection. Implementing the proposed modified project would place demands on general governmental services and facilities provided by the County, which include, but are not limited to, fire services. All projects are assessed with development impact fees, which are used to off-set the cost of capital improvements needed to support new development. All projects are subject to review by the HFPD and the County's Fire Marshall to ensure consistency with the Nevada County Fire Plan and California Fire Code requirements. Each project's impacts are evaluated and mitigation established a project-by-project basis. For these reasons, the proposed modifications to the project do not create new or substantially more adverse cumulative impacts to Fire Protection than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Police Protection:

As was evaluated by the EIR, the approved project would receive law enforcement services from the Nevada County Sheriff Office. All projects are assessed with development fees which are deposited into the general fund to support increased impacts to the County's public services. The Nevada County Sheriff's Department receives funding from Nevada County's General Fund and a number of other state and federal grant funding sources. In addition, the proposed modified project, similar to the previously approved project would result in increased sales tax revenues to the General Fund that would also assist in offsetting increased costs associated with law enforcement. Thus, the proposed modifications to the project would not result in a change in the finding in the certified EIR of less than significant impacts relative to Law Enforcement services. Based on the foregoing, no new or revised mitigation measures are required.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past, present, and reasonably foreseeable projects, would not create a substantial adverse effect related to Law Enforcement. The County will generate revenue for police services through property taxes on new development, property tax increment (existing and new development), sales tax and state and federal grant sources. The need for additional funding sources, equipment or personnel is evaluated as part of the CEQA process prior to the consideration of any new project, similar the evaluation of the proposed modified project in this Addendum. If the County determines that a future project requires additional Sheriff's services, conditions of approval, mitigation measures and/or changes to County ordinances can be used to result in new services. At this time, and with the cumulative projects that were evaluated as part of the certified EIR, the cumulative service impacts associated with the proposed modified project are addressed through payment of the appropriate taxes. For these reasons, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Law Enforcement Services than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Schools:

As proposed, the modified project would allow for the construction of a proposed Fuel Station to be located south of the existing Holiday Market Grocery Store within the Higgins Marketplace, which would be a retail and commercial development. Therefore, no students would be generated as a result of the proposed modified project. However, payment of school developer fees associated with the proposed modified project would more than cover any employees that could potentially bring a child into the local school

districts. The payment of the school developer fees would reduce the impact of the project on school facility needs to less than significant and would not result in any physical effects to the environment. Thus, the proposed modifications to the project would not result in a change in the finding in the certified EIR of less than significant impacts relative to Public Schools. Based on the foregoing, no new or revised mitigation measures are required

Cumulative Impacts

As was disclosed in the certified EIR, and based on the proposed modified project to allow the construction of a Fuel Station to be located south of the existing Holiday Market Grocery Store it is anticipated that there would not be an increase in student population within either the Nevada Joint Union High School District and the Pleasant Ridge Union School District associated with the proposed modified project. Pursuant to the EIR, SB 50 enables school districts to levy developer impact fees on new residential, commercial, and industrial development. For these reasons, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Public Schools than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

16. RECREATION

Existing Setting: The project site is located within the Bear River Park District. No formal recreation facilities are located on or near the project site.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Recreation Public Services in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

16a: 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?

16b: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

16c: Conflict with established recreation uses of the area, including biking, equestrian and/or hiking trails?

The proposed modified project proposes to construct a Fuel Station which would serve the existing Higgins Marketplace Shopping Center and be located south of the existing Holiday Market Grocery Store. Thus, as proposed no new recreational facilities would be required and no deterioration of existing park facilities would occur as a result of the proposed modified project. As was disclosed in the EIR, the Bear River Park District has determined no new recreational facilities would be required and no deterioration of existing park facilities would occur as a result of the implementation of the proposed modified project.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past, present, and reasonably foreseeable projects, would not create a substantial adverse effect related to Parks and Recreation. Due to the commercial and service-oriented focus of the project, development of the proposed modified project would not incrementally increase the demand for parkland. Thus, for these reasons the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Parks and Recreation.

17. TRANSPORTATION

Existing Setting:

The subject project site is currently developed with the Higgins Marketplace, which contains an existing approximately 30,000-square-foot Holiday Market grocery store and an approximately 8,250-square-foot commercial retail building, which is comprised of tenant lease spaces. The Higgins Marketplace is located on the east side of Highway 49, in unincorporated southern Nevada County, near the Lake of the Pines community. The project site is also located within the Lake of the Pines Village Center and is also located within the boundaries of the Higgins Area Plan.

To the immediate north, the project site is bordered two parcels which are developed with existing single-family residences. Further to the north, beyond the single-family residences is the Higgins Center, which is an approximately 33,050-square-foot commercial shopping center complex immediately south of Combie Road. South of the project site, is undeveloped and contains topography and vegetation similar to that of the project site. An existing paved driveway, providing access to the two single-family residences to the north, borders the project site's western boundary. Located to the east of the project site is Sierra Storage, a mini-storage facility which contains multiple buildings and undeveloped areas with dense oak trees.

The project site is located east of Highway 49 and south Combie Road. Access to the project site is from Woodridge Drive via Highway 49 and from Higgins Road via Combie Road. Both Woodridge Drive and Higgins Road are located within a Private Road Division (PRD) and both roads have recently been improved as part of the development of the existing Higgins Marketplace.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Transportation in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

17a: Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle or pedestrian facilities?

17b: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

17c: Substantially increase hazards due to a geometric design feature (e.g., a sharp curve or dangerous intersection) or incompatible uses (e.g., farm equipment)?

17e: Result in an increase in traffic hazards to motor vehicles, bicyclists, or pedestrians, including short-term construction and long-term operational traffic?

Pursuant to the CEQA Guidelines Section 15064.3, consideration for evaluating a project's transportation impacts generally should be measured in Vehicle Miles Traveled as required by the updated CEQA Guidelines Appendix G. For purposes of this section, "Vehicle Miles Traveled" refers to the amount and distance of automobile travel attributed to a project. In addition, pursuant to Section 15061.3(b)(1), the criteria for analyzing land use projects indicates that generally projects with one-half mile on existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. In addition, the section also goes on to say that if existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles travel qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. In reviewing the proposed methodology for Vehicle Miles Traveled with the County of Nevada Department of Public Works, staff understands that the County does not yet have thresholds determined for measuring Vehicle Miles Traveled completely determined. Therefore, for purposes of the proposed modified project, this Addendum is going contain both a qualitative analysis for Vehicle Miles Traveled for constancy with the updated CEQA Guidelines Checklist and an addition analysis for Level of Service (LOS) as was evaluated by the certified EIR for the approved project.

Vehicle Miles Traveled

CEQA Guidelines note that the provisions of State Bill 743 are required beginning July 1, 2020. The guidelines also note that a lead agency may elect to require the provisions of this section earlier. Nevada County updated the CEQA Checklist on January 1, 2019 and requires new projects to be evaluated for VMT. As the County has not yet adopted quantitative standards to study VMT the County allows the assessment to be in the form of a Qualitative Analysis. Pursuant to CEQA Guidelines Section 15064.3(b)(3) if existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively.

VMT Reduction Alternatives that would be incorporated into the proposed modified project:

Trips generated by commercial / retail projects fit into two categories. Some trips will be made by patrons who would not otherwise be on the local street and who go out of their way to reach the site. These are "new" trips. Other trips will be made by patrons who are already driving by the site and simply interrupt a trip already being made to other destinations. These are "pass-by" or diverted trips. Various pass-by rates were used for proposed modified project as evaluated in the updated Traffic Analysis prepared by KD Anderson. Pass-by rates of 15% for retail uses, 20% for supermarket and 40% for the sit-down restaurant were used for the site. In addition to the pass-by / diverted link reduction an additional 5% internal capture was included to account for trips traveling within the project boundaries.

Based on the proposed modified project, is anticipated to be accessed by travelers who are already accessing the Holiday Market Grocery Store and by others who are utilizing the existing Higgins Marketplace, thus, it is not anticipated that the proposed modified project would result in an increase in VMT.

Average Daily Trips / Level of Service

An updated Trip Generation analysis was prepared by KD Anderson to determine the number of additional vehicle trips which would be generated by the proposed modified project and the construction of the Fuel Station. Trips generated by commercial / retail projects fit into two categories. Some trips will be made by patrons who would not otherwise be on the local street and who go out of their way to reach the site. These

are "new" trips. Other trips will be made by patrons who are already driving by the site and simply interrupt a trip already being made to other destinations. These are "pass-by" or diverted trips. Various pass-by rates were used for proposed modified project as evaluated in the updated Traffic Analysis prepared by KD Anderson.

Based on the updated Traffic Analysis prepared for the proposed modified project, it is anticipated that the total trips that would be generated by the proposed Fuel Station would be 177 Daily Peak AM Trips and 378 Daily Peak PM Trips. As evaluated by the EIR, the total number of daily AM Peak Hour Trips would be 427 and 694 daily PM Peak Hour Trips. Based on the analysis prepared for the proposed Fuel Station, while the project would increase the number of daily AM and PM peak hour trips, it is not anticipated that overall traffic volumes for the Higgins Marketplace would be increased from those which were analyzed in the Higgins Marketplace EIR due to the reduction in the size of the Holiday Market Grocery Store from approximately 50,000 square feet to approximately 30,000 square feet. Thus, the proposed modifications to the project would not result in a change in the finding in the certified EIR of less than significant impacts relative to these traffic impacts. Based on the foregoing, no new or revised mitigation measures are required

Queuing Analysis

A queuing analysis was completed for the proposed Fuel Station by KD Anderson to determine whether there is adequate storage on the existing project site without blocking adjacent roadways and drive aisles. The Fuel Station is projected to serve approximately 56 vehicles during the PM peak hour. The Fuel Station would have two fueling islands with eight fueling positions, two positions on each side of each island. It is assumed that all cars on one side of an island will queue behind the trailing fueling position. Each side of an island would service 14 vehicles.

Intersection Queuing

The quality of traffic flow can also be affected by queuing at intersections. For KD Anderson study, the lengths of peak period queues were identified and compared to available storage to determine whether spillover from turn lanes can affect adjoining travel or extend through adjacent intersections.

The projected queuing was reviewed for two intersections, Woodbridge Drive at Highway 49 and the North Project Driveway at Higgins Road. The p.m. peak hour conditions were reviewed as this represents the highest traffic volume conditions.

Internal Circulation

A review of internal site circulation was completed to identify possible conflict points. Access to the site will be from three driveways along Higgins Road and two driveways along Woodridge Road. The western driveway along Woodridge Road is approximately 600 feet from Highway 49; this provides adequate storage behind turning vehicles. The eastern driveway is located approximately 150 feet to the east. Queues that might develop for left turning vehicles would be short based on the projected westbound through movements.

The northern driveway along Higgins Road will be the main access into the project site, which is limited to a right-in/right-out turn movement, which left turns from Woodridge Drive to southbound Highway 49 not being permitted, as required by Mitigation Measure 4.4.1d, which would also be obligatory for the proposed modified project. The driveway road will have two inbound lanes and two outbound lanes, a left lane and a 75-foot right turn lane. The inbound lanes are about 260 feet long before reaching an all-way stop tee intersection. There, one lane will be right-only and will provide access to the restaurant pad and a perimeter main aisle leading to the west Woodridge Drive intersection. The through lane will proceed along the east side of the parking field and provide frontage access to the 11,000 square foot retail building and the Holiday Market. East-west parking aisles are provided, linking the two north-south main drive aisles. There are two marked pedestrian crossings on both main drive aisles, linking both sides of the project site.

The center and south driveways along Higgins Road provide access to the fuel station, the loading dock for the Holiday Market and a small parking area on the east side of the 11,000 square foot retail building. The center driveway would not be expected to be heavily used and may provide an area for employee parking as well as the access for the loading dock. The south driveway will provide access to the loading dock for deliveries but also serves as the main access driveway for the gas station.

Conclusions

The proposed modified project would add a Fuel Station in the southeast corner of the project site while reducing the square footage of the Holiday Market to approximately 30,000 square feet. The queuing analysis of the Fuel Station indicates that four cars would be expected to queue in any one lane during the peak hour. This queue will remain within the gas station area and not block adjacent roadways or drive aisles. Queuing was also reviewed for the p.m. peak hour at two main intersections, at the Highway 49 / Woodridge Drive intersection and at the Higgins Road / North Driveway intersection.

Therefore, as concluded by the EIR, that while a change in the traffic flow would be noticeable to the surrounding properties in terms of cars per day, the roadway conditions would be improved to accommodate the increased volumes and total traffic, thus ensuring that the design expectations of the roadways would be consistent the requirements of the Nevada County Land Use and Development Code and with the implementation of Mitigation Measure MM 4.4.1d, which would limit the turning movements to access the project site from Highway 49 and Woodridge Drive. Thus, as discussed above, these driveway improvements would be constructed as part of the proposed project and would not result in greater impacts than those identified in the relevant sections of the certified EIR and this Addendum. Thus, the proposed modifications to the project would not result in a change of the finding in the certified EIR of less than significant impact which regards to these traffic impacts. Based on the foregoing, no new or revised mitigation measures are required.

17d: Result in inadequate emergency access?

Nevada County Land Use and Development Code Chapter XVI (Fire Safety Regulations) and Chapter XVII (Road Standards) include standards for roads and private driveways to facilitate emergency access for evacuation and service response to structural and wildland fires. As proposed the modifications would not result in greater impacts than those identified in the relevant sections of the certified EIR and would be mitigated to the maximum extent practicable by the incorporation of all relevant sections of the certified EIR and this Addendum. Thus, the proposed modifications to the project would not result in a change of the finding in the certified EIR of less than significant impact. Based on the foregoing, no new or revised mitigation measures are required.

Cumulative Impacts

The EIR concluded that the approved project would not combine with the impacts of past, present, and reasonably foreseeable projects to create a substantial adverse effect related to changes in the transportation system or project traffic generation. Therefore, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Transportation and Traffic than those disclosed in the certified Higgins Marketplace EIR and for these reasons the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Transportation and Traffic.

Therefore, the proposed modifications to the project do not create new or substantially more adverse cumulative impacts to transportation and traffic than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation Measures: To reduce potentially significant impacts associated with traffic, the following mitigation measure shall be required and noted on improvement plans:

Mitigation Measure 4.4.1d: Access to and from northbound SR 49 at Woodridge Drive shall be limited to right-in/right-out turn movements. Left turns from Woodridge Drive to southbound SR 49 shall not be allowed. Left turns onto Woodridge Drive from southbound SR 49 shall be allowed.
Timing: *Prior to issuance of occupancy permit.*
Reporting: *Agency approval of permits or plans.*
Responsible Agency: *Nevada County Department of Public Works.*

18. TRIBAL CULTURAL RESOURCES

Existing Setting: Assembly Bill 52 (Chapter 532, Statutes 2014) required an update to Appendix G (Initial Study Checklist) of the CEQA Guidelines to include questions related to impacts to tribal cultural resources. Changes to Appendix G were approved by the Office of Administrative Law on September 27, 2016. Tribal Cultural Resources include sites, features, and places with cultural or sacred value to California Native American Tribes. The Washoe Tribe, United Auburn Indian Community of the Auburn Rancheria (UAIC), and the Shingle Springs Band of Miwok Indians have contacted the County to request consultation on projects falling within their delineated ancestral lands. The subject project is proposed within UAIC lands. Project setting information for the proposed modified project, including information on the area's natural environment, history, ethnography, and regulatory environment, is the same as that for the approved project site, and is provided in the certified EIR.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in a new or substantially more adverse significant impacts to Tribal Cultural Resources relation to the following questions as stated in the Nevada County CEQA Checklist:

18a: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The project was determined to fall within the areas identified by the Tsi Akim Maidu, United Auburn Indian Community (UAIC) and the Shingle Springs Band of Miwok Indians as ancestral lands. An initial distribution of the project application and the certified EIR along with the Cultural Resources Studies were sent to UAIC and the Shingle Springs Band of Miwok Indians on May 1, 2019. On May 28, 2020 an email from the Shingle Springs Band of Miwok Indians was sent to the Planning Department which indicated that the tribe is not aware of any known cultural resources on the project site. On June 15, 2020, an email from UAIC was sent to the Planning Department which indicated that the tribe had no comments on the proposed modified project and that certified EIR had addressed concerns with the proposed project.

As part of the previously approved project, and as discussed in the Certified EIR, the project site was surveyed for Cultural Resources and Mitigation Measures MM 4.10.1a, and MM 4.10.1b were incorporated into the proposed project. Based on the certified EIR, while the discovery of additional cultural resources has been determined to be potentially unlikely, MM 4.10.1a and MM 4.10.1b is included that would require construction to be halted in the event that there is a discovery of cultural resources, including historic, prehistoric, tribal, and paleontological resources. However, as discussed in Section 5, there is a chance that onsite grading could uncover cultural resources of importance to the UAIC and Shingle Springs Band of Miwok Indians. Thus, implementation of mitigation measure MM 4.10.1b would ensure work to halt if cultural resources are discovered and for local tribes to be notified. With this protection in place, impacts to Tribal Cultural Resources would be less than significant as disclosed within the certified EIR.

Cumulative Impacts

The EIR conclude that impacts of the approved project, along with other cumulative development in Nevada County, could contribute to the cumulative loss and/or disturbance of cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts and features), human remains and Tribal Cultural Resources. This contribution could be cumulatively considerable prior to mitigation. However with implementation of Mitigation Measures MM 4.10.1a, and MM 4.10.1b as well as adherence to Health and Safety Code Section 7050.5, PRC Section 5097.98, and CCR Section 15064.5(e), will ensure that any discoveries will be handled in accordance with state law and reduce the proposed project's contribution to these impacts to a less than cumulatively considerable level. Therefore, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Tribal Cultural Resources than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation: See Mitigation Measures 4.10.1a and 4.10.1b within Section 5 above.

19. UTILITIES / SERVICE SYSTEMS

Existing Setting: Electrical service is provided to this area by Pacific Gas & Electric Company and is currently available on the site. Public water is available to the property, however, the proposed Fuel Station would not contain plumbing facilities. There are a number of wireless telephone services available in western Nevada County but with variable coverage depending upon the carrier. AT&T provides land line phone service to this area. The subject project site is currently served by municipal sewer service from the Lake of the Pines Zone 2 Wastewater Treatment Plan.

Project Impacts

As in the certified Rincon del Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Utilities / Services Systems in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

19a: Require or result in the relocation or the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

19b: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Water Service

The existing Higgins Marketplace is served with potable water through existing system of treatment and distribution lines as was evaluated by the EIR. Currently, the Higgins Corner area is served potable water by the Lake of the Pines Water Treatment Plant. As was evaluated in the EIR, NID staff has indicated that no additional treatment equipment would be require to serve the proposed modified project and that distribution systems to could be connected to the project site trough existing roadways and rights-of-way to lessen potential environmental impacts.

As disclosed in the EIR, while adequate water would be available to serve the project, there is no timing and enforcement mechanism currently in place that would ensure the timing related to the design and construction of the proposed modified project's water distribution system. However, with the implementation of Mitigation Measure MM 4.11.4.2, which would require that prior to the approval of improvements plans for the proposed modified project, the applicant shall provide the County with an approved set of improvement plans which have been accepted by the Nevada Irrigation District, these impacts would be less than significant, as concluded by the EIR, relative to conflicts with the project's impacts to water supply from existing entitlements and conveyance facilities. Based on the foregoing, no new or revised mitigation measures are required.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past, present, and reasonably foreseeable projects, would not create a substantial adverse effect related to Water Supply. As was disclosed in the certified EIR, the proposed project, in combination with other proposed and approved projects in the area, would result in a cumulative demand for water supply that is consistent with the projections in the 2010 UWMP and the facilities already constructed by NID. Water supply, delivery, and fire flows must be demonstrated on a project-by-project basis. For these reasons, the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Water Supplies than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Wastewater Service

As was evaluated by the EIR, Nevada County Sanitation District #1 provides wastewater collection and treatment facilities in ten separate geographical zones within Nevada County and would provide wastewater service to the project site. The proposed modified project would consist of the construction of a Fuel Station which would not be staffed or connected to existing Nevada County Sanitation District wastewater collection.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past, present, and reasonably foreseeable projects, would not create a substantial adverse effect related to Wastewater. Thus, for these reasons the proposed modifications to the project would not create new or substantially more adverse cumulative impacts to Wastewater conveyance.

19c: 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 goals?

19d: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The EIR concluded that the approved project would require the project to participate in the recycling program offered through the County's franchised waste collection company's green waste collection program or equivalent method including: provide adequate space for waste and recycling containers; undertake a program of reuse of waste materials generated at the project; and during construction of the project, all recyclable materials would be diverted and recycled. Further, the project would be required to comply with federal, state, and local regulations relating to the disposal of solid waste. The project would also need to participate in the County's recycling efforts to assist the County in complying with AB 939. Mitigation Measure MM 4.11.6.1 would require that the applicant to comply with this requirement. Thus, implementation of Mitigation Measure MM 4.11.6.1 would be obligatory for the proposed modified project and the proposed modifications to the project would not result in a change to the finding in the certified EIR of less than significant impacts relating to Solid Waste regulations.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past present, and reasonably foreseeable projects, would not create a substantial adverse effect related to Solid Waste. As was disclosed in the certified EIR, the proposed project would increase the amount of waste that was anticipated to be generated, the project will participate in recycling programs that are available and contracted on a project-by-project basis, which will further reduce waste. As described above, the remaining life of the Ostrom Road Landfill in Yuba County is projected to be 55 years at a maximum daily throughput of 3,000 tons. The project's 2,580 pounds per day would not substantially affect the daily waste stream of the landfill. Ostrom Road Landfill is anticipated to have adequate capacity for cumulative levels of development. Thus, implementation of mitigation measure MM 4.11.6.1 would ensure that the project's waste stream would not substantially affect the daily limit and would be in compliance with AB939. The proposed modifications to the project would not result in a change to the finding in the certified EIR of less than significant impact relative to Solid Waste regulations.

Mitigation: To offset potentially adverse impacts related to Utilities / Service Systems, the following mitigation measure is recommended:

Mitigation Measure 4.11.4.2: Prior to approval of improvement plans for each building, the project applicant shall provide the County with an approved set of improvement plans accepted by NID, which shall include:

- Quantification of anticipated water usage by parcel.
- A comprehensive water system design for distribution piping and connection to the existing NID distribution system.
- Appropriate pipe sizing to accommodate minimum fire flow water pressures (as determined by California Department of Forestry and Fire Protection, NID and the Higgins Fire Protection District.)
- Identification of pipe sizing, pipe location, and the location of the tie-in with NID facilities
- Provisions for easement, rights-of-way, and in-fee land to NID for water facilities.

Timing: *Prior to improvement plan approval.*
Reporting: *Agency approval of grading or improvement plans.*
Responsible Agency: *Nevada County Planning Department and NID.*

Mitigation Measure 4.11.6.1: Prior to issuance of occupancy permits the applicant will complete the following mitigation measures:

1) All businesses will subscribe to waste collection and recycling services provided by the County's franchised waste collection company.

2) All businesses will participate in the recycling program offered through the County's franchised waste collection company. Businesses will recycle all items available through the company's program, or an equivalent method, which ensures that the waste is diverted away from landfill disposal.

3) Any green waste material generated at the project area such as lawn trimmings, shrubbery, and tree trimmings shall be diverted away from disposal through the County's franchised waste collection company's green waste collection program, or an equivalent method which ensures that the waste is diverted away from landfill disposal.

4) Adequate space for waste and recycling containers will be constructed at the complex to ensure ease of collection by the County's franchised waste collection company. The units housing the containers shall be constructed to allow sufficient space for the quantity of containers needed to ensure that the waste and recyclables can be collected in an efficient manner. Waste Management will be consulted to ensure that sufficient space is for recycling and trash containers.

Timing: *Prior to the issuance of occupancy permits for commercial and retail establishments.*
Reporting: *Agency approval of grading or improvement plans.*
Responsible Agency: *Nevada County Department of Public Works*

20. WILDFIRE

Existing Setting: The environmental setting for Wildfire is the same as described in the certified EIR. As such, the environmental and regulatory settings related to wildfire in the certified EIR adequately describes the setting for the proposed modified project.

Project Impacts

As in the certified Higgins Marketplace EIR analysis, this Addendum evaluates the potential for the proposed project to result in new or substantially more adverse significant impacts to Wildfire in relation to the following questions as stated in the Nevada County CEQA Checklist:

Impact Discussion:

20a: Substantially impair an adopted emergency response plan or emergency evacuation plan?

20b: Due to slope, prevailing winds, or other factor, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from wildfire or the uncontrollable spread of wildfire?

20c: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The Safety Element of the Nevada County General Plan addresses wildfire hazards in Nevada County and has several policies to improve fire safety. The Safety Element discusses the importance of ingress and egress by roadways, as well as maintaining the Nevada County Defensible Space Standards as described in Policy FP10.11.2. The Element also recognizes the importance of Public Resources Code 4290 and 4291 which are known as the State Responsible Area Fire Safe Regulations. Nevada County has also adopted a Local Hazard Mitigation Plan (LHMP) that was updated in August 2017. Objective 3.6 of the LHMP is to improve communities' capabilities to prevent/mitigate hazards by increasing the use of technologies. Goal 4 of the LHMP is to reduce fire severity and intensity, with Objective 4.4 to promote the implementation of fuel management on private and public lands.

The project site is located within southern Nevada County and is accessed by Highway 49 via Higgins Road and Woodridge Drive. Pursuant to Policy EP-10-1.6 of the Safety Element, transportation routes that are designated on the General Plan Land Use Maps as Interstates, freeways, highways, and other principal arterial routes shall be considered primary evacuation routes on a countywide basis. Such routes provide the highest levels of capacity and contiguity and serve as the primary means for egress from the County. The County Office of Emergency Services does not publish emergency evacuation plans because it is not know which direction a wildfire may travel in. All proposed improvements would require Building Permits and conformance with Chapter 5 of the Nevada County Land Use and Development Code for building and grading standards. Pursuant to Nevada County Land Use and Development Code Section L-II 4.3.18, the project would be require the submission and approval of a Fire Protection Plan by the Nevada County Fire Marshal. The Fire Protection Plan would include an evacuation plan, a fuels management plan, identification of emergency water supplies, and other fire protection measures. Mitigation Measures MM 4.11.1.2a, MM 4.11.1.2b, and 4.11.1.2c would require the applicant to comply with this requirement. Thus, the implementation of these Mitigation Measures would be obligatory for the proposed modified project. The proposed modified project would not result in a change to the finding in the certified EIR of less than significant impacts relating to the spread of wildfire and fire risks.

20d: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The proposed modified project would require Building Permits for the grading and site improvements, which would require compliance with the Nevada County grading standards outlined in Land Use and Development Code Section V, Article 13. The building permits would require grading and erosion control plans for the soil disturbance, and a drainage analysis to ensure no additional runoff leaves the project site. As part of the project improvements and site inspections by the Building Department, soil compaction testing would be required for the grading at the site for the proposed building and associated improvements. Furthermore, the project area is not in an area that is mapped with high landslide activity (U.S. Geological Service, 1970). The proposed modified project would not result in a change to the finding in the certified EIR of less than significant impacts relating to flooding, landslides, runoff, and post-fire slope instability.

Cumulative Impacts

The impacts of the approved project, when combined with the impacts of past, present, and reasonably foreseeable projects, would not create a substantial adverse effect related to Fire Protection. Implementing the proposed modified project would place demands on general governmental services and facilities provided by the County, which include, but are not limited to, fire services. All projects are assessed with development impact fees, which are used to off-set the cost of capital improvements needed to support new development. All projects are subject to review by the HFPD and the County's Fire Marshall to ensure consistency with the Nevada County Fire Plan and California Fire Code requirements. Each project's impacts are evaluated and mitigation established a project-by-project basis. For these reasons, the proposed modifications to the project do not create new or substantially more adverse cumulative impacts to Fire

Protection than those disclosed in the certified Higgins Marketplace EIR and would be mitigated to the maximum extent practicable by the incorporation of all feasible and applicable mitigation measures.

Mitigation: To offset potentially adverse impacts related to Wildfire, the following mitigation measures are recommended:

Mitigation Measure 4.11.1.2a: During construction of the proposed project and off-site improvements (roadway extension and pipeline infrastructure improvements), the project applicant shall perform the following tasks.

- All on-site flammable vegetation and fuels shall be legally disposed of or removed. Vegetation clearance around structures shall meet the minimum requirements of Public Resources Code 4291. Firebreaks shall be maintained by removing and clearing away all existing brush, flammable vegetation or combustible growth within 100 feet of structures.

- Temporary provisions for emergency access and fuel modification zones shall be provided. The project applicant shall prepare a temporary fire protection plan that will provide temporary emergency access and fuel modification zones for development.

- Any grass or other vegetation planted along cut/fill areas (i.e., roadways for erosion control purposes shall be low growing grasses and shall be on the Nevada County approved plant list. Tall grasses can subject the development to an increase in fire danger.

Timing: *Prior to and during construction activities.*
Reporting: *Agency approval of permits or plans.*
Responsible Agency: *Higgins Fire District and the Nevada County Fire Marshal.*

Mitigation Measure 4.11.1.2b: The project applicant shall submit the improvement plans for the site to the Nevada County Fire Marshal and the Higgins Fire District for review and approval.

- Designation of a fuel modification zone or greenbelt established along the perimeter of the project site. Perimeter fuel breaks will be a minimum of 30 feet (typically ranging between 30 and 100 feet) as required by the Nevada County Fire Marshal. The developer, with the assistance of CFD and HFD, will determine the specific dimensions of each fuel modification zone located along the project perimeter based on the location, topography, access points, vegetation, degree of exposure, local weather conditions, and design and construction of structures.

- Designation of a 10-foot wide fuel modification zone established and maintained along each side of Woodridge Court.

- Project emergency access shall be designed to meet District, County, and State standards. Nevada County requires a 20-foot road right-of-way for local streets, with 18 feet of paving, a 10-foot fuel modification zone on either side of the road.

Timing: *Prior to approval of the improvement plans.*
Reporting: *Agency approval of permits or plans.*
Responsible Agency: *Higgins Fire District and the Nevada County Fire Marshal.*

Mitigation Measure 4.11.1.2c: The project applicant shall submit a Vegetative Fuel Management Plan to the Nevada County Fire Marshal and the Higgins Fire District. The plan shall contain information about fuel modification zones/fuel breaks, canopy spacing, roads, and types of plants to be used in

landscaping and erosion control. Fuel management shall occur outside of aquatic and riparian woodland areas and wetland areas as shown in **Figure 3.0-3**. The Plan shall include:

- Requirements that fire resistant landscaping is used in the fuel modification zones for project accesses.

- Provisions and funding for maintenance of fuel modification zones by the project applicant.

- No trees that will grow over 20 feet in height will be planted or allowed to grow within 20 feet of any high voltage power line.

Timing: *Prior to approval of the improvement plans.*
Reporting: *Agency approval of permits or plans.*
Responsible Agency: *Higgins Fire District and Nevada County Fire Marshal.*

APPENDIX A – REFERENCE SOURCES

County of Nevada, Nevada County Zoning Regulations, adopted July 2000, and as amended.

County of Nevada, Nevada County General Plan: Volume 1: Goals, Objectives, Policies and Implementation Measures. 1995, and as amended. Prepared with the assistance of Harland Bartholomew & Associates, Inc. (Sacramento, CA). Nevada County, CA.

County of Nevada, Community Development Agency, Planning Department. November 2007. *Higgins Marketplace Draft Environmental Impact Report.* SCH #2005022022. Nevada County, CA. Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

County of Nevada Community Development Agency, Planning Department, *Higgins Marketplace Final Environmental Impact Report*. SCH #2005022022. Nevada County, CA. Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

County of Nevada Community Development Agency, Planning Department, *Higgins Marketplace, Mitigation Monitoring and Reporting Program.* SCH # 2005022022. Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

KD Anderson & Associates, April 2020, *Higgins Marketplace – Circulation Study for Higgins Fuel Station, Nevada County.* Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

KD Anderson & Associates, July 2020, *Higgins Marketplace – Circulation Study for Higgins Fuel Station, Nevada County.* Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

KD Anderson & Associates, August 2020, *Higgins Marketplace – Circulation Study for Higgins Fuel Station, Nevada County.* Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

RCH Group, April 2020, *Higgins Fuel Station Pre-Application (PRE19-0003) – Comparative Greenhouse Gas Emission Analysis (Approved Project vs. Proposed Project).* Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

RCH Group, April 2020, *Higgins Fuel Station Pre-Application (PRE19-0003) – Fuel Station Energy Use Analysis.* Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

RCH Group, April 2020, *Higgins Marketplace Shopping Center Fuel Station Development and Use Permit Amendment Application – Comparative Air Quality Emissions Analysis (Approved Project vs. Proposed Project) and Fuel Station Health Risk Assessment.* Available at: Nevada County Planning Department, 950 Maidu Avenue, Nevada City, CA 95959

APPENDIX B – HEALTH RISK ASSESSMENT

APPENDIX C – SITE PLANS

Higgins Marketplace Shopping Center Fuel Station
Nevada County, California

Health Risk Assessment Technical Report

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January 5, 2021

1.0 Introduction

The County of Nevada Community Development Planning Department requested that a health impact assessment (HRA) be completed for a proposed fuel station to evaluate the health impacts on nearby sensitive receptors. This document presents the results of a HRA associated with the Higgins Marketplace Shopping Center Fuel Station in Nevada County, California. This HRA focuses on health impacts on existing residences from emissions of toxic air contaminants (TAC)[1] from operations associated with the fuel station. This HRA was conducted to determine the health impacts, in terms of cancer risk and non-cancer hazards, using the significance thresholds identified by the Northern Sierra Air Quality Management District (NSAQMD)'s *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects*.[2] This HRA was prepared based on the California Office of Environmental Health Hazard Assessment (OEHHA)'s *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*.[3] The supporting information, methodology, assumptions, and detailed results associated with this HRA are provided in the **Health Risk Assessment Methodology, Assumptions, and Results** at the end of this narrative.

2.0 Project Overview

The proposed project is the Higgins Marketplace Shopping Center Fuel Station in Nevada County, California (with four self-service pump stations with eight fueling positions). The NSAQMD requires all gasoline dispensing facilities to be equipped with a Phase I and Phase II vapor recovery system. The proposed fuel station would be subject to NSAQMD's Rules 213, 214 and 215, which govern the storage and distribution of gasoline. Vapor recovery systems collect gasoline vapors that would otherwise escape into the air during bulk fuel delivery (Phase I) or fuel storage and vehicle refueling (Phase II). Phase I refers to control methods used for reducing emissions when tank trucks unload into underground storage tanks. Phase I vapor recovery system components include the couplers that connect tanker trucks to the underground tanks, spill containment drain valves, overfill prevention devices, and vent pressure/vacuum valves. A Phase I vapor balance system employs a vapor return hose which

[1] Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality. TAC are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., gasoline service stations, dry cleaners). TAC are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TAC are regulated at the regional, state, and federal level.

[2] Northern Sierra Air Quality Management District (NSAQMD)'s *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects*, May 31, 2016, https://www.nevadacityca.gov/files/documents/Grove-NSAQMD-CalEEMod1324075240030317PM.pdf

[3] Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html

returns gasoline vapor displaced from the underground storage tank to the tank truck storage compartment being emptied. Phase II vapor recovery system components include gasoline dispensers, nozzles, piping, break away, hoses, face plates, vapor processors, and system monitors. Phase II refers to control methods used for reducing vehicle/equipment refueling emissions. The Phase II systems are designed to convey the vapors displaced from vehicle fuel tanks to underground storage tanks vapor space. Both balance systems and assist systems were assumed to capture 95 percent control of the vapors released from the vehicle fuel tank, with an overall efficiency of 90 percent. In addition, all gasoline will be stored underground with valves installed on the tank vent pipes to further control gasoline vapor emissions. The project would include three underground storage tanks ranging from 10,000 to 25,000 gallons in capacity. Based on traffic estimation data, there would be approximately 1,348 trips per day (97 trips per morning peak and 111 trips per evening peak)[4] associated with the fuel station.[5] An average fueling of 12 gallons per trip was assumed. Approximately 1.67 million gallons of gasoline and 0.39 million gallons of diesel would be dispensed annually.[6]

3.0 Health Impact Analysis

Short-term and long-term health impacts related to the operation of the proposed project were evaluated. The analysis focuses on hourly and annual emissions from operation of the fuel station. Regulatory models used to estimate health impacts include:

- Air toxics emissions from the fuel station were estimated based on the methodology recommended by the California Air Pollution Control Officers Association (CAPCOA) *Gasoline Service Station Industry-wide Risk Assessment Guidelines*.[7] Fuel dispensing and loading storage tank operations would result in volatile organic compounds (VOC) emissions which include air toxics such as acrolein, benzene, 1,3-butadiene, ethyl benzene, formaldehyde, and toluene.
- AERMOD (American Meteorological Society/USEPA Regulatory Model) is an atmospheric dispersion model which can simulate point, area, volume, and line emissions sources and has the capability to include simple, intermediate, and complex

[4] Morning peak hour includes 50 incoming and 47 outgoing and evening peak hour includes 55 incoming and 56 outgoing. As such, it is assumed that during the morning peak hour 50 vehicles use the fuel station and during the evening peak hour 56 vehicles use the fuel station.

[5] KD Anderson, *Trip Generation Associated with Revised Site Plan*, January 2, 2020

[6] CEC, 2020. *California Retail Fuel Outlet Annual Reporting (CEC-A15) Results*, https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting

[7] California Air Pollution Control Officers Association, *Gasoline Service Station Industry-wide Risk Assessment Guidelines*, November 1997 www.arb.ca.gov/ab2588/rrap-iwra/GasIWRA.pdf

terrain along with meteorological conditions and multiple receptor locations.[8,9] AERMOD is executed to yield estimated 1-hour maximum and annual average concentrations (in μg/m^3) at each receptor.

Threshold of Significance

The significance of potential impacts was determined based on State CEQA Guidelines, Appendix G. Using Appendix G evaluation thresholds, the proposed project would be considered to have significant health impacts if it were to expose sensitive receptors to substantial pollutant concentrations.

The thresholds and methodologies from the NSAQMD's *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects* were used to evaluate the potential health impacts of operation of the proposed project. The thresholds of significance applied to assess project-level health impacts are:

- Exposure of persons by siting a new source of substantial levels of TAC resulting in (a) a cancer risk level greater than 10 in one million, or (b) a noncancerous risk (chronic or acute) hazard index greater than 1.0. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers.

CAPCOA guidance states sensitive land uses should be avoided within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A minimum 50-foot distance between receptors and typical gasoline dispensing facilities—that is, facilities with an annual throughput of less than 3.6 million gallons per year.[10] The proposed project is a typical gasoline dispensing facilities and would not be located within 50 feet of a sensitive receptor.

Health Impact Evaluation

This HRA was conducted following methodologies in OEHHA's *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*.[11] This was accomplished by applying the estimated concentrations at the receptors analyzed to the established cancer risk estimates and acceptable reference concentrations for non-cancer health effects.

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[8] US Environmental Protection Agency Preferred/Recommended Models, *AERMOD Modeling System*, https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models#aermod

[9] Title 40 CFR Part 51, *Revision to the Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions; Final Rule,* http://www.epa.gov/ttn/scram/guidance/guide/appw_05.pdf

[10] California Air Pollution Control Officers Association, *Health Risk Assessment of Proposed Land Use Project*, July 2009, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

[11] Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html

Recent OEHHA's revisions to its *Guidance Manual* were primarily designed to ensure that the greater sensitivity of children to cancer and other health risks is reflected in HRA. For example, OEHHA now recommends that risks be analyzed separately for multiple age groups, focusing especially on young children and teenagers, rather than the past practice of analyzing risks to the general population, without distinction by age. OEHHA also now recommends that statistical "age sensitivity factors" be incorporated into a HRA, and that children's relatively high breathing rates be accounted for. On the other hand, the *Guidance Manual* revisions also include some changes that would reduce calculated health risks. For example, under the former guidance, OEHHA recommended that residential cancer risks be assessed by assuming 70 years of exposure at a residential receptor; under the *Guidance Manual*, this assumption is lessened to 30 years.

The proposed project would constitute a new emission source of air toxics due to operation of a fuel station. Studies have demonstrated that air toxics within volatile emissions of gasoline are a human carcinogen and that acute (short-term) and/or chronic (long-term) inhalation exposure to these air toxics poses an acute and/or chronic health impact.

Health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. Individual cancer risk is the likelihood that a person exposed to air toxic concentrations over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The maximally exposed individual (MEI) represents the worst–case risk estimate, based on a theoretical person continuously exposed for a lifetime at the point of highest compound concentration in the air. This is a highly conservative assumption, since most people do not remain at home all day and on average residents change residences every 11 to 12 years. In addition, this assumption assumes that residents are experiencing outdoor concentrations for the entire exposure period.

This HRA analyzes the cancer risks to sensitive receptors in the vicinity of the proposed project, using emission rates (in pounds per hour and pounds per year) based on CAPCOA's *Gasoline Service Station Industry-wide Risk Assessment Guidelines*. Air toxics emission rates were input into the USEPA's AERMOD atmospheric dispersion model to calculate ambient air concentrations at receptors in the proposed project vicinity. This HRA is intended to provide a worst–case estimate of the increased exposure by employing a standard emission estimation program, an accepted pollutant dispersion model, approved toxicity factors, and conservative exposure parameters.

In accordance with OEHHA *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, this HRA was accomplished by applying the highest estimated concentrations of TAC at the receptors analyzed to the established cancer potency factors and acceptable reference concentrations for non-cancer health effects. Increased cancer risks were calculated using the modeled air toxics concentrations and OEHHA-recommended

methodologies for both a child exposure (3rd trimester through two years of age) and adult exposure. The cancer risk calculations were based on applying the OEHHA-recommended age sensitivity factors and breathing rates, as well as fraction of time at home and an exposure duration of 30 years, to the air toxics concentration exposures. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing air pollutants. The supporting methodology and assumptions used in this HRA are provided in **Health Risk Assessment Methodology, Assumptions, and Results** at the end of this narrative.

These conservative methodologies tend to overestimate both non-carcinogenic and carcinogenic health risk, possibly by an order of magnitude or more. Therefore, for carcinogenic risks, the actual probabilities of cancer formation in the populations of concern due to exposure to carcinogenic pollutants are likely to be lower than the risks derived using this HRA methodology. The extrapolation of toxicity data in animals to humans, the estimation of concentration prediction methods within dispersion models; and the variability in lifestyles, fitness and other confounding factors of the human population also contribute to the overestimation of health impacts. Therefore, the results of this HRA are highly overstated.

Health Impacts Associated with Existing Residences

The following describes this HRA results associated with existing receptors due to project operations. As shown in **Table 1**, the maximum cancer risk from project operations emissions, primarily due to benzene and 1,3-butasiene, for a residential-adult receptor would be 0.5 per million and for a residential-child receptor would be 1.8 per million.

Table 1: Estimated Health Impacts for Proposed Project

Source	Cancer Risk (adult/child)	Hazard Impact (acute/chronic)
Proposed Project Operations	**0.49/1.79**	**0.44/0.01**
Significance Threshold	10	1.0
Potentially Significant (Yes or No)?	No	No

The maximum concentrations would occur at a residential receptor (also known as the maximum exposed individual or MEI) to the southeast of the project site. Thus, the cancer risk due to project operations are below the significance threshold of 10 per million and would be less than significant.

Non-Cancer Health Hazard Associated with Existing Receptors

Both acute (short-term) and chronic (long-term) adverse health impacts unrelated to cancer are measured against a hazard index (HI), which is defined as the ratio of the exposure concentration from the proposed project to a reference exposure level (REL) that could cause adverse health effects. The REL are published by OEHHA based on epidemiological research. The ratio (referred to as the Hazard Quotient [HQ]) of each non-carcinogenic substance that

affects a certain organ system is added to produce an overall HI for that organ system. The overall HI is calculated for each organ system. The impact is considered to be significant if the overall HI for the highest-impacted organ system is greater than 1.0.

The acute HI would be 0.44, primarily due to benzene and acrolein emissions. The acute HI would be below the project-level threshold of 1 and the impact of the proposed project would therefore be less than significant. The chronic HI would be 0.01. The chronic HI would be below the project-level threshold of 1 and the impact of the proposed project would therefore be less than significant.

Health Impact Analysis Methodology, Assumptions, and Results

A health risk assessment is accomplished in four steps: 1) hazards identification, 2) exposure assessment, 3) toxicity assessment, and 4) risk characterization. These steps cover the estimation of air emissions, the estimation of the air concentrations resulting from a dispersion analysis, the incorporation of the toxicity of the pollutants emitted, and the characterization of the risk based on exposure parameters such as breathing rate, age adjustment factors, and exposure duration; each depending on receptor type (i.e., residence, school, daycare centers, hospitals, senior care facilities, recreational areas, adult, infant, child).

This HRA was conducted in accordance with technical guidelines developed by federal, state, and regional agencies, including U.S. Environmental Protection Agency (USEPA), California Environmental Protection Agency (CalEPA), California Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*.[1] This HRA focused on operation of the fuel station and air toxics emissions such as benzene and 1,3-butadiene.

TERMS AND DEFINITIONS

As the practice of conducting a HRA is particularly complex and involves concepts that are not altogether familiar to most people, several terms and definitions are provided that are considered essential to the understanding of the approach, methodology and results:

Acute effect – a health effect (non-cancer) produced within a short period of time (few minutes to several days) following an exposure to toxic air contaminants.

Cancer risk – the probability of an individual contracting cancer from a lifetime (i.e., 70 year) exposure to TAC such as benzene in the ambient air.

Chronic effect – a health effect (non-cancer) produced from a continuous exposure occurring over an extended period of time (weeks, months, years).

Hazard Index (HI) – the unitless ratio of an exposure level over the acceptable reference dose. The HI can be applied to multiple compounds in an additive manner.

Hazard Quotient (HQ) – the unitless ratio of an exposure level over the acceptable reference dose. The HQ is applied to individual compounds.

Toxic Air Contaminants – any air pollutant that is capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). The current California list of TAC lists approximately 200 compounds.

[1] Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, March 6, 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html.

Human Health Effects - comprise disorders such as eye watering, respiratory or heart ailments, and other (i.e., non-cancer) related diseases.

Health Risk Assessment – an analysis designed to predict the generation and dispersion of TAC in the outdoor environment, evaluate the potential for exposure of human populations, and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure.

Incremental – under CEQA, the net difference (or change) in conditions or impacts when comparing the baseline to future year project conditions.

Maximum exposed individual (MEI) – an individual assumed to be located at the point where the highest concentrations of TAC, and therefore, health risks are predicted to occur.

Non-cancer risks – health risks such as eye watering, respiratory or heart ailments, and other non-cancer related diseases.

Receptors – the locations where potential health impacts or risks are predicted (i.e., schools, residences, and recreational sites).

LIMITATIONS AND UNCERTAINTIES

There are a number of important limitations and uncertainties commonly associated with a HRA due to the wide variability of human exposures to TAC, the extended timeframes over which the exposures are evaluated, and the inability to verify the results. Limitations and uncertainties associated with this HRA and identified by the CalEPA include: (a.) lack of reliable monitoring data; (b.) extrapolation of toxicity data in animals to humans; (c.) estimation errors in calculating TAC emissions; (d.) concentration prediction errors with dispersion models; and (e.) the variability in lifestyles, fitness and other confounding factors of the human population. This HRA was performed using the best available data and methodologies, notwithstanding the following uncertainties:

- There are uncertainties associated with the estimation of emissions from project activities. Where project-specific data, such as emission factors, are not available, default assumptions in emission models were used.
- The limitations of the air dispersion model provide a source of uncertainty in the estimation of exposure concentrations. According to USEPA, errors due to the limitation of the algorithms implemented in the air dispersion model in the highest estimated concentrations of +/- 10 percent to 40 percent are typical.[2]

[2] US Environmental Protection Agency, *Guideline on Air Quality Models (Revised), 40 Code of Federal Regulations, Part 51, Appendix W,* November 2005, https://www3.epa.gov/scram001/guidance/guide/appw_05.pdf

- The source parameters used to model emission sources add uncertainty. For all emission sources, the source parameters used source-specific, recommended as defaults, or expected to produce more conservative results. Discrepancies might exist in actual emissions characteristics of an emission source and its representation in the dispersion model.
- The exposure duration estimates do not take into account that people do not usually reside at the same location for 30 years and that other exposures (i.e., school children) are also of much shorter durations than was assumed in this HRA. This exposure duration is a highly conservative assumption, since most people do not remain at home all day and on average residents change residences every 11 to 12 years. In addition, this assumption adopts that residents are experiencing outdoor concentrations for the entire exposure period.
- For the risk and hazards calculations as well as the cumulative health impact, numerous assumptions must be made in order to estimate human exposure to pollutants. These assumptions include parameters such as breathing rates, exposure time and frequency, exposure duration, and human activity patterns. While a mean value derived from scientifically defensible studies is the best estimate of central tendency, most of the exposure variables used in this HRA are high-end estimates. The combination of several high-end estimates used as exposure parameters may substantially overestimate pollutant intake. The excess lifetime cancer risks calculated in this HRA are therefore likely to be higher than may be required to be protective of public health.

In summary, the estimated health impacts are based primarily on a series of conservative assumptions related to predicted environmental concentrations, exposure, and chemical toxicity. The use of conservative assumptions tends to produce upper-bound estimates of risk. Air Districts acknowledge this uncertainty by stating: "the methods used [to estimate risk] are conservative, meaning that the real risks from the source may be lower than the calculations, but it is unlikely that they will be higher." The USEPA notes that the conservative assumptions used in a HRA are intended to assure that the estimated risks do not underestimate the actual risks posed by a site and that the estimated risks do not necessarily represent actual risks experienced by populations at or near a site.[3]

HAZARDS IDENTIFICATION

CARB has developed a list of TAC, where a TAC is "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health (California Health and Safety Code Section 39655). All USEPA

[3] US Environmental Protection Agency, *Risk Assessment Guidance for Superfund Human Health Risk Assessment*, December 1989, https://www.epa.gov/sites/production/files/2015-09/documents/rags_a.pdf

hazardous air pollutants are TAC. CARB administers the Air Toxics "Hot Spots" program under Assembly Bill 2588 "Hot Spots" Information and Assessment Act, which requires periodic local review of facilities which emit TAC. Local air agencies periodically must prioritize stationary sources of TAC and prepare health risk assessments for high-priority sources.

Operational emissions are associated with the dispensing of fuel to customer vehicles and refilling the underground fuel storage tanks. Air toxics emissions from these activities were estimated based on the methodology recommended by the CAPCOA's *Gasoline Service Station Industry-wide Risk Assessment Guidelines*.[4] Fuel dispensing and loading storage tank operations would result in VOC emissions which include air toxics such as acrolein, benzene, 1,3-butadiene, ethyl benzene, formaldehyde, and toluene (although a total of 16 air toxics contained within gasoline fuel were included in the analysis).[5] The proposed project would result in 1.06 tons of VOC emissions per year; approximately 9 percent from storage tanks and 90 percent from fuel dispensing. A brief description of these air toxics follows:

Acrolein

Acrolein is a clear or yellow liquid with a disagreeable odor. Acrolein is used as an intermediate in the production of acrylic acid, as well as a pesticide to control algae, weeds, bacteria, and mollusks. Small amounts of acrolein can be formed and emitted into the air when trees, tobacco, other plants, gasoline, and oil are burned. Acrolein may also be released into the environment in emissions and effluents from manufacturing and use facilities and in emissions from combustion. Exposure to high concentrations of acrolein may damage the lungs and could cause death. Breathing lower amounts may cause watery eyes, burning of the nose and throat, and decreased breathing rate.[6]

Benzene

Benzene is a volatile, colorless, flammable liquid that has a sweet odor. It is a chemical intermediate in the synthesis of compounds such as plastics, resins, nylon, synthetic fibers, synthetic rubbers, lubricants, dyes, detergents, drugs, and pesticides. Major sources of atmospheric releases include vehicle exhaust emissions, evaporative gasoline fumes, emissions from vehicle service stations and industrial emissions. Other potential sources of atmospheric benzene include cigarette smoke and landfill emissions. High levels can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion and unconsciousness. Eating or

[4] California Air Pollution Control Officers Association, *Gasoline Service Station Industry-wide Risk Assessment Guidelines*, November 1997 www.arb.ca.gov/ab2588/rrap-iwra/GasIWRA.pdf

[5] Diesel fuel has a low volatility and thus is not included in this analysis.

[6] Agency for Toxic Substance and Disease Registry ToxFAQ for Acrolein, https://www.atsdr.cdc.gov/toxfaqs/tfacts124.pdf

drinking foods containing high levels of benzene can cause vomiting, irritation of the stomach, dizziness, sleepiness, convulsions, rapid heart rate, etc. Again, none of these conditions are typically found in the outdoor environment.[7]

1,3-butadiene

1,3-butadiene is a colorless gas. At room temperature, the gas has a gasoline-like odor. This pollutant is a byproduct of petroleum processing and is used in the production of synthetic rubber and plastics. It is also found in gasoline vapor, automobile exhaust, other fossil fuel combustion products and cigarette smoke. Inhalation is the primary pathway for humans. Breathing very high levels of 1,3-butadiene for a short time may cause central nervous system damage, blurred vision, nausea, fatigue, headache, decreased blood pressure and pulse rate, and unconsciousness. Breathing lower levels of this pollutant may cause irritation of the eyes, nose, and throat. However, neither of these conditions are typically found in the outdoor environment.[8]

Formaldehyde

At room temperature, formaldehyde is a colorless, flammable gas that has a distinct, pungent smell. Formaldehyde is a product of incomplete combustion and is emitted into the air by burning wood, coal, kerosene, and natural gas, by automobiles and by cigarettes; it is also a naturally occurring substance. Formaldehyde can be released to soil, water, and air by industrial sources and can off-gas from materials made with it. Humans can be exposed to formaldehyde through inhalation of contaminated air and smog. Low levels of formaldehyde can cause irritation of the eyes, nose, throat, and skin. Some epidemiological studies found an increased incidence of nose and throat cancer in exposed individuals, whereas other studies could not confirm this finding.[9]

Toluene

Toluene is a colorless, clear liquid that occurs naturally in crude oil. It is also produced in the process of manufacturing gasoline and other fuels from crude oil. Airport-related sources of toluene include aircraft, ground support equipment, motor vehicles, heating plants, and gasoline fuel storage tanks. Low to moderate levels of toluene can affect the nervous system and cause tiredness, confusion, weakness, memory loss, nausea, loss of appetite, and hearing and

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[7] Agency for Toxic Substance and Disease Registry ToxFAQ for Benzene, https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=38&tid=14

[8] Agency for Toxic Substance and Disease Registry ToxFAQ for 1,3-Butadiene, https://www.atsdr.cdc.gov/toxfaqs/tfacts28.pdf

[9] Agency for Toxic Substance and Disease Registry ToxFAQ for Formaldehyde, https://www.atsdr.cdc.gov/toxfaqs/tfacts111.pdf

color vision loss. Inhaling high levels of toluene in a short time can make a person feel light-headed, dizzy, or sleepy, and can cause unconsciousness and death.[10]

Emission Estimates

These air toxic emissions would result from fuel loading, breathing (both related to the underground storage tanks), refueling, and spillage (both related to the fuel pumps). The following are additional details concerning these emission points:

- Loading emissions occur when a cargo tank truck unloads gasoline to the storage tanks at the gasoline station. Storage tank vapors are emitted from the vent pipe during the initial fuel transfer period. These emissions are significantly reduced when the vent pipe includes a pressure/vacuum valve.

- Gasoline vapors are emitted from the storage tank vent pipe due to temperature and pressure changes within the storage tank vapor space.

- During the refueling process, gasoline vapors are emitted at the vehicle/nozzle interface.

- Spillage emissions occur from the spills during vehicle fueling.

CAPCOA's *"Hot Spots" Program Gasoline Service Station Industry-wide Risk Assessment Guidelines* was used to estimate TAC emissions that would result from the proposed gasoline station. The calculations are based on maximum hourly gasoline throughput and a typical annual gasoline throughput based on maximum vehicle volume and number of fuel pumps with underground storage tanks and vapor recovery systems, and 90 percent overall control efficiency. Speciation profiles for gasoline were developed from the CARB's *Speciation Profiles and Size Fractions (#882)*. Speciation profiles are the fraction of specific TAC within VOC emissions.

The fuel throughput estimates were a result of dividing retail sales volumes by the number of retail fuel stations from the California Energy Commission's California Retail Fuel Outlet Annual Reporting Results. Approximately 1.67 million gallons of gasoline and 0.39 million gallons of diesel would be dispensed annually.[11]

EXPOSURE ASSESSMENT

Dispersion is the process by which atmospheric pollutants disseminate due to wind and vertical stability. The results of a dispersion analysis are used to assess pollutant concentrations at or near an emission source. The results of an analysis allow predicted concentrations of pollutants

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[10] Agency for Toxic Substance and Disease Registry ToxFAQ for Toluene, https://www.atsdr.cdc.gov/toxfaqs/tfacts56.pdf

[11] CEC, *California Retail Fuel Outlet Annual Reporting (CEC-A15) Results*, https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting

to be compared directly to air quality standards and other criteria such as health risks based on modeled concentrations.

A rising pollutant plume reacts with the environment in several ways before it levels off. First, the plume's own turbulence interacts with atmospheric turbulence to entrain ambient air. This mixing process reduces and eventually eliminates the density and momentum differences that cause the plume to rise. Second, the wind transports the plume during its rise and entrainment process. Higher winds mix the plume more rapidly, resulting in a lower final rise. Third, the plume interacts with the vertical temperature stratification of the atmosphere, rising as a result of buoyancy in the unstable-to-neutrally stratified mixed layer. However, after the plume encounters the mixing lid and the stably stratified air above, its vertical motion is dampened.

Molecules of gas or small particles injected into the atmosphere will separate from each other as they are acted on by turbulent eddies. The Gaussian mathematical model such as AERMOD simulates the dispersion of the gas or particles within the atmosphere. The formulation of the Gaussian model is based on the following assumptions:

- The predictions are not time-dependent (all conditions remain unchanged with time)
- The wind speed and direction are uniform, both horizontally and vertically, throughout the region of concern
- The rate of diffusion is not a function of position
- Diffusion in the direction of the transporting wind is negligible when compared to the transport flow

Dispersion Modeling Approach

Air dispersion modeling was performed to estimate the downwind dispersion of emissions resulting from fuel station operations. The following sections present the fundamental components of an air dispersion modeling analysis including air dispersion model selection and options, receptor locations, meteorological data, and source exhaust parameters.

Model Selection and Options

AERMOD (Version 19191)[12] was used for the dispersion analysis. AERMOD is the USEPA preferred atmospheric dispersion modeling system for general industrial sources. The model can simulate point, area, volume, and line sources. AERMOD is the appropriate model for this analysis based on the coverage of simple, intermediate, and complex terrain. It also predicts both short-term and long-term (annual) average concentrations. The model was executed using the regulatory default options (stack-tip downwash, buoyancy-induced dispersion, and final

[12] US Environmental Protection Agency, AERMOD Modeling System, https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models

plume rise), default wind speed profile categories, default potential temperature gradients, and assuming no pollutant decay.

The selection of the appropriate dispersion coefficients depends on the land use within three kilometers (km) of the project site. The types of land use were based on the classification method defined by Auer (1978); using pertinent United States Geological Survey (USGS) 1:24,000 scale (7.5 minute) topographic maps of the area. If the Auer land use types of heavy industrial, light-to-moderate industrial, commercial, and compact residential account for 50 percent or more of the total area, the USEPA *Guideline on Air Quality Models*[13] recommends using urban dispersion coefficients; otherwise, the appropriate rural coefficients can be used. Based on observation of the area surrounding the project site, rural dispersion coefficients were applied within AERMOD.

Receptor Locations

Some receptors are considered more sensitive to air pollutants than others, because of preexisting health problems, proximity to the emissions source, or duration of exposure to air pollutants. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential areas are also considered sensitive to poor air quality because people in residential areas are often at home for extended periods. Recreational land uses are moderately sensitive to air pollution because vigorous exercise associated with recreation places having a high demand on respiratory system function.

Sensitive receptors were placed at receptors to estimate health impacts due to proposed project operation on existing residences and Cornerstone Christian School. The nearest residence is located at the caretaker for the Keep-It Self-Storage, located 400 feet to the southeast of the project site. The project site is surrounded by residential, retail/commercial uses, and open space. **Figure 1** displays the location of the sensitive receptors used in this HRA. Receptors were placed at a height of 1.8 meters (typical breathing height). Terrain elevations for receptor locations were used based on available USGS information for the area. AERMAP (Version 18081)[14] was used to develop the terrain elevations.

Meteorological Data

Hourly meteorological data from Auburn Municipal Airport (surface data), located approximately 5.5 miles to the southeast of the proposed project, and Sacramento International

[13] US Environmental Protection Agency, *Guideline on Air Quality Models (Revised), 40 Code of Federal Regulations, Part 51, Appendix W,* November 2005, https://www3.epa.gov/scram001/guidance/guide/appw_05.pdf

[14] US Environmental Protection Agency, AERMAP, https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models

Airport (upper air) were used in the dispersion modeling analysis. Meteorological data from 2009 through 2013 were used.[15] **Figure 2** displays the annual wind rose. Wind directions are predominately from the east with a high frequency of calm wind speed conditions (greater than 25 percent), as shown in **Figure 3**. The average annual wind speed is 5.4 miles per hour (2.4 meters per second).

Source Release Characteristics

Spillage and refueling emissions are treated as a volume source with the dimensions of four meters high by 13 meters long and 13 meters wide. Spillage release height is zero and refueling release height is one meter. Loading and breathing emissions are treated as a point source. Loading and breathing emissions used a stack height of 12 feet and a stack diameter of two inches.[16]

It is assumed that the fuel station operates continuously throughout the year. Further, it is assumed that 80 percent of the daily emissions occur equally each hour from 6 a.m. to 8 p.m. and the remaining 20 percent of the daily emissions occur equally each hour from 8 p.m. to 6 a.m.[17]

[15] California Air Resources Board, Hotspots Analysis and Reporting Program Meteorological Files**,** October 5, 2015, https://www.arb.ca.gov/toxics/harp/metfiles2.htm

[16] South Coast Air Quality Management District, *Emission Inventory and Risk Assessment Guidelines for Gasoline Dispensing Stations*, January 2007, http://www.aqmd.gov/docs/default-source/planning/risk-assessment/gas_station_hra.pdf

[17] South Coast Air Quality Management District, *Emission Inventory and Risk Assessment Guidelines for Gasoline Dispensing Stations*, January 2007, http://www.aqmd.gov/docs/default-source/planning/risk-assessment/gas_station_hra.pdf

Figure 1: Health Risk Assessment Receptors

Figure 2: Windrose for Auburn Municipal Airport

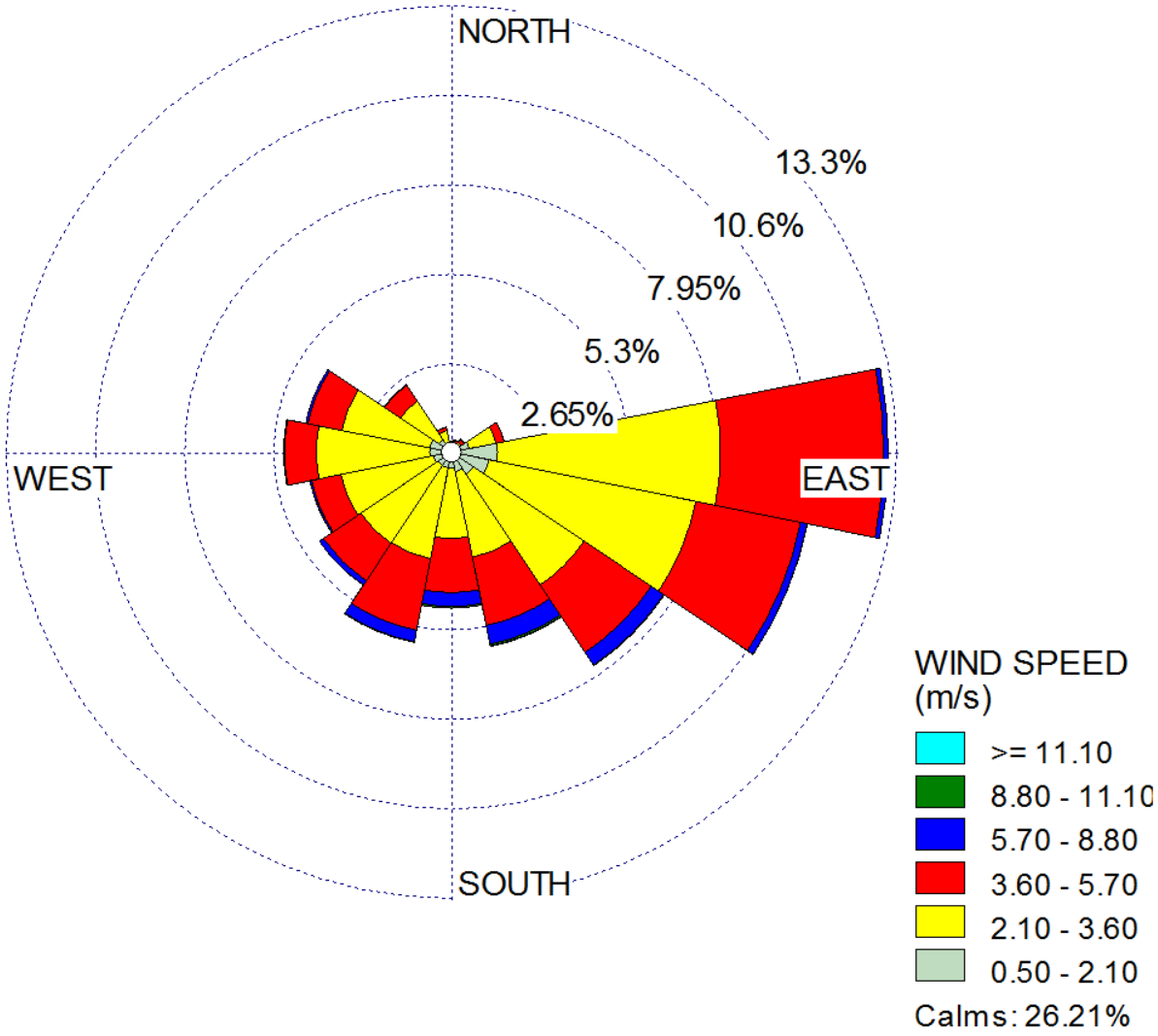
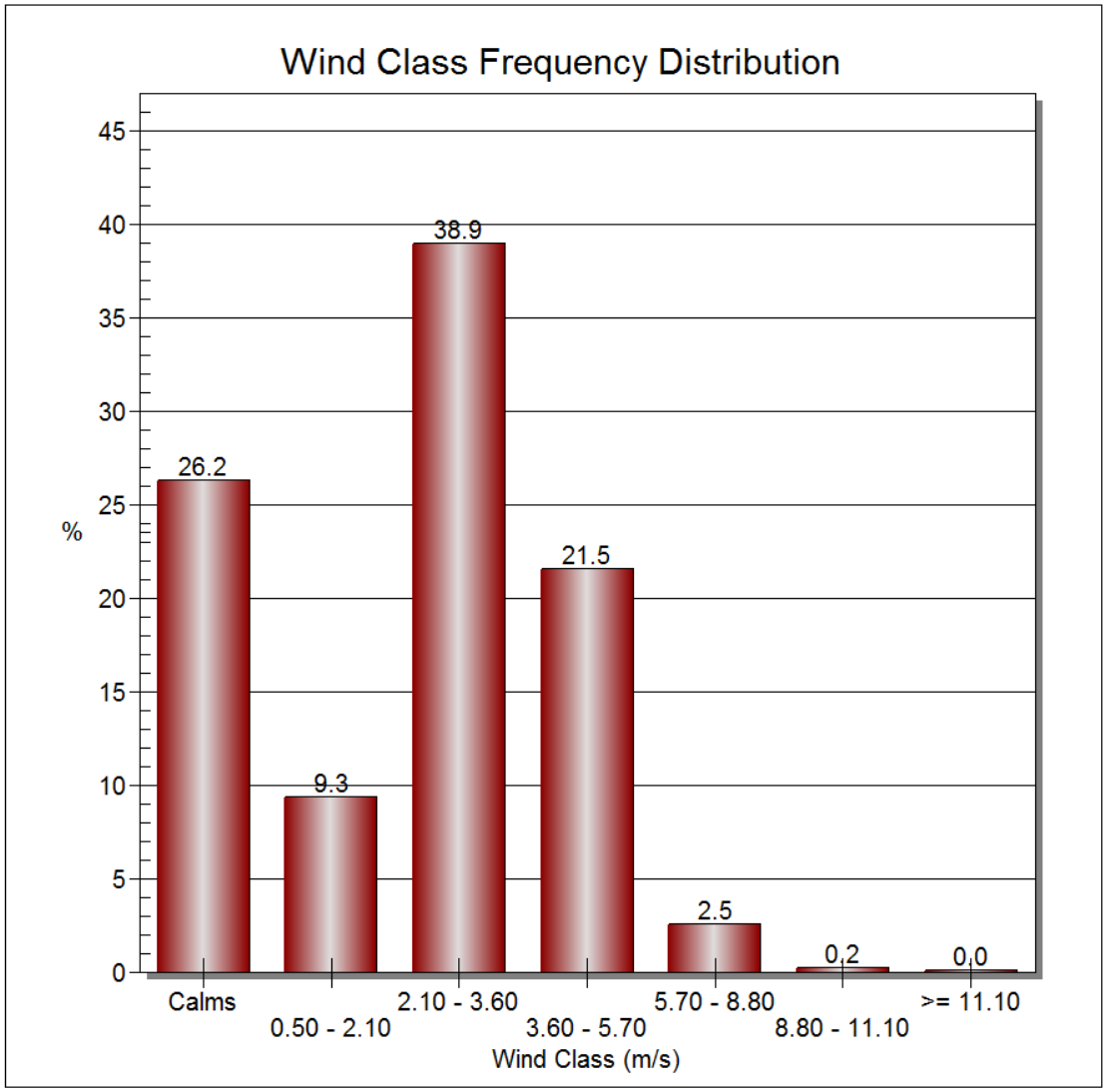


Figure 3: Wind Speed Distribution for Auburn Municipal Airport



EXPOSURE PARAMETERS

This HRA was conducted following methodologies in OEHHA's *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*.[18] This was accomplished by applying the estimated concentrations at the receptors analyzed to the established cancer risk estimates and acceptable reference concentrations for non-cancer health effects.

OEHHA's revisions to its *Guidance Manual* were primarily designed to ensure that the greater sensitivity of children to cancer and other health risks is reflected in HRAs. For example, OEHHA now recommends that risks be analyzed separately for multiple age groups, focusing especially on young children and teenagers, rather than the past practice of analyzing risks to the general population, without distinction by age. OEHHA also now recommends that statistical "age sensitivity factors" be incorporated into a HRA, and that children's relatively high breathing rates be accounted for. On the other hand, the *Guidance Manual* revisions also include some changes that would reduce calculated health risks. For example, under the former guidance, OEHHA recommended that residential cancer risks be assessed by assuming 70 years of exposure at a residential receptor; under the *Guidance Manual*, this assumption is lessened to 30 years.

OEHHA has developed exposure factors (e.g., daily breathing rates) for six age groups including the last trimester to birth, birth to 2 years, 2 to 9 years, 2 to 16 years, 16 to 30 years, and 16 to 70 years. These age bins allow for more refined exposure information to be used when estimating exposure and the potential for developing cancer over a lifetime. This means that exposure variates are needed for the third trimester, ages zero to less than two, ages two to less than nine, ages two to less than 16, ages 16 to less than 30, and ages 16 to 70. Residential receptors utilize the 95th percentile breathing rate values. The breathing rates are age-specific and are 1,090 liters per kilogram-day for ages less than 2 years, 745 liters per kilogram-day for ages 2 to 16 years, 335 liters per kilogram-day for ages 16 to 30 years, and 290 liters per kilogram-day for ages 30 to 70 years. A school child breathing rate is 520 liters per kilogram-day and an off-site worker breathing rate is 230 liters per kilogram-day.

OEHHA developed age sensitivity factors (ASF) to take into account the increased sensitivity to carcinogens during early-in-life exposures. OEHHA recommends that cancer risks be weighted by a factor of 10 for exposures that occur from the third trimester of pregnancy to 2 years of age, and by a factor of 3 for exposures from 2 years through 15 years of age.

Based on OEHHA recommendations, the cancer risk to residential receptors assumes exposure occurs 24 hours per day for 350 days per year while accounting for a percentage of time at home. OEHHA evaluated information from activity pattern databases to estimate the fraction of

[18] Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, March 6, 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html

time at home (FAH) during the day. This information was used to adjust exposure duration and cancer risk based on the assumption that a person is not present at home continuously for 24 hours and therefore exposure to emissions is not occurring when a person is away from their home. In general, the FAH factors are age-specific and are 0.85 for ages less than 2 years, 0.72 for ages 2 to 16 years, and 0.73 for ages 30 to 70 years.

OEHHA has decreased the exposure duration currently being used for estimating cancer risk at the maximum exposed individual resident from 70 years to 30 years. This is based on studies showing that 30 years is a reasonable estimate of the 90th to 95th percentile of residency duration in the population. Additionally, OEHHA recommends using the 9 and 70-year exposure duration to represent the potential impacts over the range of residency periods.

Given the exposure durations of less than 24 hours, sensitive recreational receptors were evaluated for acute impacts only. Based on OEHHA recommendations, for children at school sites, exposure is assumed to occur 10 hours per day for 180 days (or 36 weeks) per year. Cancer risk estimates for children at school sites are calculated based on 9 year exposure duration. School sites also include teachers and other adult staff which are treated as off-site workers. The following table presents a summary of the health risk assessment exposure factors.

Health Risk Assessment Exposure Factors

Receptor	Age	Age Specific Factor	Breathing Rate (L/kg-day)	Fraction of Time	Daily Exposure	Annual Exposure
Residential	Third Trimester	10	361	0.85	24 hours	350 days
	0 to 2	10	1,090	0.85	24 hours	350 days
	2 to 16	3	572	0.72	24 hours	350 days
	16 to 30	1	261	0.73	24 hours	350 days
School Child	2 to 16	3	581	1	10 hours	180 days

Source: Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, March 6, 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html

RISK CHARACTERIZATION

Cancer risk is defined as the lifetime probability of developing cancer from exposure to carcinogenic substances. Cancer risks are expressed as the chance in one million of getting cancer (i.e., number of cancer cases among one million people exposed). The cancer risks are assumed to occur exclusively through the inhalation pathway. The cancer risk can be estimated by using the cancer potency factor (milligrams per kilogram of body weight per day [mg/kg-day]), the 30-year annual average concentration (microgram per cubic meter [$\mu g/m^3$]), and the lifetime exposure adjustment.

Following guidelines established by OEHHA, the incremental cancer risks attributable to the proposed project were calculated by applying exposure parameters to modeled air toxics

concentrations in order to determine the inhalation dose (mg/kg-day) or the amount of pollutants inhaled per body weight mass per day. The cancer risks occur exclusively through the inhalation pathway; therefore, the cancer risks can be estimated from the following equation:

$$\text{Dose-inh} = \frac{C_{air} * \{DBR\} * A * ASF * FAH * EF * ED * 10^{-6}}{AT}$$

where:

Dose-inh	= Dose of the toxic substance through inhalation in mg/kg-day
10^{-6}	= Micrograms to milligrams conversion, Liters to cubic meters conversion
C_{air}	= Concentration in air in microgram (μg)/cubic meter (m^3)
{DBR}	= Daily breathing rate in liter (L)/kg body weight – day
A	= Inhalation absorption factor, 1.0
ASF	= Age Sensitivity Factor
EF	= Exposure frequency (days/year)
ED	= Exposure duration (years)
FAH	= Fraction of Time at Home
AT	= Averaging time period over which exposure is averaged in days (25,550 days for a 70 year cancer risk)

To determine incremental cancer risk, the estimated inhalation dose attributed to the proposed project was multiplied by the cancer potency slope factor (cancer risk per mg/kg-day). The cancer potency slope factor is the upper bound on the increased cancer risk from a lifetime exposure to a pollutant. These slope factors are based on epidemiological studies and are different values for different pollutants. This allows the estimated inhalation dose to be equated to a cancer risk.

Non-cancer adverse health impacts, acute (short-term) and chronic (long-term), are measured against a hazard index (HI), which is defined as the ratio of the predicted incremental exposure concentration from the proposed project to a published reference exposure level (REL) that could cause adverse health effects as established by OEHHA. The ratio (referred to as the Hazard Quotient [HQ]) of each non-carcinogenic substance that affects a certain organ system is added to produce an overall HI for that organ system. The overall HI is calculated as the total for each organ system. If the overall HI for the highest-impacted organ system is greater than one, then the impact is considered to be significant.

The HI is an expression used for the potential for non-cancer health effects. The relationship for the non-cancer health effects is given by the annual concentration (in $\mu g/m^3$) and the REL (in $\mu g/m^3$). The acute hazard index was determined using the "simple" concurrent maximum approach, which tends to be conservative (i.e., overpredicts).

The relationship for the non-cancer health effects is given by the following equation:

$$HI = C/REL$$

where:

HI = Hazard index; an expression of the potential for non-cancer health effects.

C = Annual average concentration ($\mu g/m^3$) during the 70 year exposure period.

REL = Concentration at which no adverse health effects are anticipated.

The following table provides the toxicity values for each of the air toxics associated with the proposed project.

Pollutant Toxicity Values

Pollutant	Slope Factor (mg/kg-day)	Acute REL ($\mu g/m^3$)	Chronic REL ($\mu g/m^3$)
Benzene	0.1	27	3
Ethylbenzene	0.0087		2000
Formaldehyde	0.021	55	9
Naphthalene	0.12		9
Styrene		21000	900
Toluene		5000	420
Xylene		22000	700
Methyl alcohol		28000	4000
Acetaldehyde	0.01	470	140
Methyl ethyl ketone		13000	
1,3-butadiene	0.6	660	2
Acrolein		2.5	0.35
n-hexane			7000
Methyl t-butyl ether	0.0018		8000

Source: *Office of Environmental Health Hazards Assessment – Chemical Database,* https://oehha.ca.gov/chemicals

Fuel Station Emission Calculations

Health Risk Assessment Results

VOC Emissions from Underground Gasoline Tanks

Tank Number	Tank Capacity (gal)	Throughput (gal/hr)	Throughput (gal/yr)	Emission Rate [1] ($lb/10^3$ gal gas)	Emission Rate [2] ($lb/10^3$ gal gas)	VOC Emissions (lb/hr)	VOC Emissions (lb/yr)	VOC Emissions (ton/yr)
1	25,000	224	556,128	0.084	0.025	0.024	60.6	0.030
2	25,000	224	556,128	0.084	0.025	0.024	60.6	0.030
3	25,000	224	556,128	0.084	0.025	0.024	60.6	0.030
Total Breathing	75,000	672	1,668,383	0.084		0.056	140	0.070
Total Working	75,000	672	1,668,383		0.025	0.017	41.7	0.021

1 Includes emissions from tank breathing and emptying as well as vapor loss between the tank and the gas pump

2 Emissions from balanced submerged filling underground tank

Hourly (Maximum)		Annual (Average)	
8	pumps	8	pumps
56	vehicles per peak hour	12	vehicles per average hour
1,348	vehicles per day	290	vehicles per day
12	gallons per trip	12	gallons per trip
672	gallons per peak hour	1,668,383	gallons per year
		105,852	trips per year
		776,951	miles per year

KD Anderson, January 2, 2020
California Energy Commission's California Retail Fuel Outlet Annual Reporting Results

			Breathing lb/hr	Breathing lb/year
	Breathing			
7.11E-03	Hourly (g/s)	formaldehyde	9.71E-04	2.41E+00
2.02E-03	Annual (g/s)	methyl alcohol	2.31E-04	5.75E-01
	Working	benzene	1.51E-03	3.74E+00
2.12E-03	Hourly (g/s)	acetaldehyde	1.41E-04	3.50E-01
6.00E-04	Annual (g/s)	methyl ethyl ketone (mek) (2-butanone)	1.13E-05	2.80E-02
		naphthalene	2.82E-05	7.01E-02
		o-xylene	7.23E-04	1.79E+00
		isopropylbenzene (cumene)	5.64E-06	1.40E-02
		ethylbenzene	6.15E-04	1.53E+00
		styrene	6.77E-05	1.68E-01
		1,3-butadiene	3.10E-04	7.71E-01
		acrolein (2-propenal)	7.90E-05	1.96E-01
		m-xylene	2.08E-03	5.17E+00
		toluene	3.36E-03	8.34E+00
		n-hexane	9.03E-04	2.24E+00
		propionaldehyde	2.26E-05	5.61E-02
		2,2,4-trimethylpentane	9.82E-04	2.44E+00
		methyl t-butyl ether (mtbe)	1.11E-03	2.75E+00

	Working lb/hr	Working lb/year
formaldehyde	2.89E-04	7.17E-01
methyl alcohol	6.89E-05	1.71E-01
benzene	4.49E-04	1.11E+00
acetaldehyde	4.20E-05	1.04E-01
methyl ethyl ketone (mek) (2-butanone)	3.36E-06	8.34E-03
naphthalene	8.40E-06	2.09E-02
o-xylene	2.15E-04	5.34E-01
isopropylbenzene (cumene)	1.68E-06	4.17E-03
ethylbenzene	1.83E-04	4.55E-01
styrene	2.02E-05	5.01E-02
1,3-butadiene	9.24E-05	2.29E-01
acrolein (2-propenal)	2.35E-05	5.84E-02
m-xylene	6.20E-04	1.54E+00
toluene	1.00E-03	2.48E+00
n-hexane	2.69E-04	6.67E-01
propionaldehyde	6.72E-06	1.67E-02
2,2,4-trimethylpentane	2.92E-04	7.26E-01
methyl t-butyl ether (mtbe)	3.29E-04	8.18E-01

VOC Emissions from Fuel Dispensing

Throughput (gal/hr)	Throughput (gal/yr)	Emission Factor (lb VOC 10^3/gal)		VOC Emissions (lb/hr)	VOC Emissions (ton/yr)
672	1,668,383	0.74	Refueling	0.497	0.617
672	1,668,383	0.42	Spillage	0.282	0.350
			Total	0.780	0.968

	Refueling		Refueling	
6.27E-02	Hourly (g/s)		lb/hr	lb/year
1.78E-02	Annual (g/s)	formaldehyde	8.55E-03	2.12E+01
	Spillage	methyl alcohol	2.04E-03	5.06E+00
3.56E-02	Hourly (g/s)	benzene	1.33E-02	3.30E+01
1.01E-02	Annual (g/s)	acetaldehyde	1.24E-03	3.09E+00
		methyl ethyl ketone (mek) (2-butanone)	9.95E-05	2.47E-01
		naphthalene	2.49E-04	6.17E-01
		o-xylene	6.37E-03	1.58E+01
		isopropylbenzene (cumene)	4.97E-05	1.23E-01
		ethylbenzene	5.42E-03	1.35E+01
		styrene	5.97E-04	1.48E+00
		1,3-butadiene	2.74E-03	6.79E+00
		acrolein (2-propenal)	6.96E-04	1.73E+00
		m-xylene	1.83E-02	4.56E+01
		toluene	2.96E-02	7.35E+01
		n-hexane	7.96E-03	1.98E+01
		propionaldehyde	1.99E-04	4.94E-01
		2,2,4-trimethylpentane	8.65E-03	2.15E+01
		methyl t-butyl ether (mtbe)	9.75E-03	2.42E+01

	Spillage	
	lb/hr	lb/year
formaldehyde	4.85E-03	1.21E+01
methyl alcohol	1.16E-03	2.87E+00
benzene	7.54E-03	1.87E+01
acetaldehyde	7.06E-04	1.75E+00
methyl ethyl ketone (mek) (2-butanone)	5.64E-05	1.40E-01
naphthalene	1.41E-04	3.50E-01
o-xylene	3.61E-03	8.97E+00
isopropylbenzene (cumene)	2.82E-05	7.01E-02
ethylbenzene	3.08E-03	7.64E+00
styrene	3.39E-04	8.41E-01
1,3-butadiene	1.55E-03	3.85E+00
acrolein (2-propenal)	3.95E-04	9.81E-01
m-xylene	1.04E-02	2.59E+01
toluene	1.68E-02	4.17E+01
n-hexane	4.52E-03	1.12E+01
propionaldehyde	1.13E-04	2.80E-01
2,2,4-trimethylpentane	4.91E-03	1.22E+01
methyl t-butyl ether (mtbe)	5.53E-03	1.37E+01

0.01 Chronic Hazard Impact
1 Significance Threshold
No Significant?

0.44 Acute Hazard Impact
1 Significance Threshold
No Significant?

1.79 Cancer Risk (Child)
10 Significance Threshold
No Significant?

0.49 Cancer Risk (Adult)
10 Significance Threshold
No Significant?

Health Risk Assessment Assumptions

3	Chronic Reference Exposure Level (ug/m3)	
27	Acute Reference Exposure Level (ug/m3)	
0.1	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Benzene

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	6.19	1.17E-02	1,090	10.0	0.85	0.15
2	2023	6.19	1.17E-02	1,090	10.0	0.85	0.15
3	2024	6.19	1.17E-02	745	4.75	0.72	0.04
4	2025	6.19	1.17E-02	745	3.00	0.72	0.03
5	2026	6.19	1.17E-02	745	3.00	0.72	0.03
6	2027	6.19	1.17E-02	745	3.00	0.72	0.03
7	2028	6.19	1.17E-02	745	3.00	0.72	0.03
8	2029	6.19	1.17E-02	745	3.00	0.72	0.03
9	2030	6.19	1.17E-02	745	3.00	0.72	0.03
10	2031	6.19	1.17E-02	745	3.00	0.72	0.03
11	2032	6.19	1.17E-02	745	3.00	0.72	0.03
12	2033	6.19	1.17E-02	745	3.00	0.72	0.03
13	2034	6.19	1.17E-02	745	3.00	0.72	0.03
14	2035	6.19	1.17E-02	745	3.00	0.72	0.03
15	2036	6.19	1.17E-02	745	3.00	0.72	0.03
16	2037	6.19	1.17E-02	745	3.00	0.72	0.03
17	2038	6.19	1.17E-02	335	1.70	0.73	0.01
18	2039	6.19	1.17E-02	335	1.00	0.73	0.00
19	2040	6.19	1.17E-02	335	1.00	0.73	0.00
20	2041	6.19	1.17E-02	335	1.00	0.73	0.00
21	2042	6.19	1.17E-02	335	1.00	0.73	0.00
22	2043	6.19	1.17E-02	335	1.00	0.73	0.00
23	2044	6.19	1.17E-02	335	1.00	0.73	0.00
24	2045	6.19	1.17E-02	335	1.00	0.73	0.00
25	2046	6.19	1.17E-02	335	1.00	0.73	0.00
26	2047	6.19	1.17E-02	335	1.00	0.73	0.00
27	2048	6.19	1.17E-02	335	1.00	0.73	0.00
28	2049	6.19	1.17E-02	335	1.00	0.73	0.00
29	2050	6.19	1.17E-02	335	1.00	0.73	0.00
30	2051	6.19	1.17E-02	335	1.00	0.73	0.00

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.23	Acute Hazard Impact
1	Significance Threshold
No	Significant?
0.73	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
0.20	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

2000	Chronic Reference Exposure Level (ug/m3)	
	Acute Reference Exposure Level (ug/m3)	
0.0087	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Ethylbenzene

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022		4.76E-03	1,090	10.0	0.85	0.01
2	2023		4.76E-03	1,090	10.0	0.85	0.01
3	2024		4.76E-03	745	4.75	0.72	0.00
4	2025		4.76E-03	745	3.00	0.72	0.00
5	2026		4.76E-03	745	3.00	0.72	0.00
6	2027		4.76E-03	745	3.00	0.72	0.00
7	2028		4.76E-03	745	3.00	0.72	0.00
8	2029		4.76E-03	745	3.00	0.72	0.00
9	2030		4.76E-03	745	3.00	0.72	0.00
10	2031		4.76E-03	745	3.00	0.72	0.00
11	2032		4.76E-03	745	3.00	0.72	0.00
12	2033		4.76E-03	745	3.00	0.72	0.00
13	2034		4.76E-03	745	3.00	0.72	0.00
14	2035		4.76E-03	745	3.00	0.72	0.00
15	2036		4.76E-03	745	3.00	0.72	0.00
16	2037		4.76E-03	745	3.00	0.72	0.00
17	2038		4.76E-03	335	1.70	0.73	0.00
18	2039		4.76E-03	335	1.00	0.73	0.00
19	2040		4.76E-03	335	1.00	0.73	0.00
20	2041		4.76E-03	335	1.00	0.73	0.00
21	2042		4.76E-03	335	1.00	0.73	0.00
22	2043		4.76E-03	335	1.00	0.73	0.00
23	2044		4.76E-03	335	1.00	0.73	0.00
24	2045		4.76E-03	335	1.00	0.73	0.00
25	2046		4.76E-03	335	1.00	0.73	0.00
26	2047		4.76E-03	335	1.00	0.73	0.00
27	2048		4.76E-03	335	1.00	0.73	0.00
28	2049		4.76E-03	335	1.00	0.73	0.00
29	2050		4.76E-03	335	1.00	0.73	0.00
30	2051		4.76E-03	335	1.00	0.73	0.00

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
	Acute Hazard Impact
1	Significance Threshold
No	Significant?
0.03	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
0.01	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

9	Chronic Reference Exposure Level (ug/m3)	
55	Acute Reference Exposure Level (ug/m3)	
0.021	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Formaldehyde

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	3.99	7.51E-03	1,090	10.0	0.85	0.02
2	2023	3.99	7.51E-03	1,090	10.0	0.85	0.02
3	2024	3.99	7.51E-03	745	4.75	0.72	0.01
4	2025	3.99	7.51E-03	745	3.00	0.72	0.00
5	2026	3.99	7.51E-03	745	3.00	0.72	0.00
6	2027	3.99	7.51E-03	745	3.00	0.72	0.00
7	2028	3.99	7.51E-03	745	3.00	0.72	0.00
8	2029	3.99	7.51E-03	745	3.00	0.72	0.00
9	2030	3.99	7.51E-03	745	3.00	0.72	0.00
10	2031	3.99	7.51E-03	745	3.00	0.72	0.00
11	2032	3.99	7.51E-03	745	3.00	0.72	0.00
12	2033	3.99	7.51E-03	745	3.00	0.72	0.00
13	2034	3.99	7.51E-03	745	3.00	0.72	0.00
14	2035	3.99	7.51E-03	745	3.00	0.72	0.00
15	2036	3.99	7.51E-03	745	3.00	0.72	0.00
16	2037	3.99	7.51E-03	745	3.00	0.72	0.00
17	2038	3.99	7.51E-03	335	1.70	0.73	0.00
18	2039	3.99	7.51E-03	335	1.00	0.73	0.00
19	2040	3.99	7.51E-03	335	1.00	0.73	0.00
20	2041	3.99	7.51E-03	335	1.00	0.73	0.00
21	2042	3.99	7.51E-03	335	1.00	0.73	0.00
22	2043	3.99	7.51E-03	335	1.00	0.73	0.00
23	2044	3.99	7.51E-03	335	1.00	0.73	0.00
24	2045	3.99	7.51E-03	335	1.00	0.73	0.00
25	2046	3.99	7.51E-03	335	1.00	0.73	0.00
26	2047	3.99	7.51E-03	335	1.00	0.73	0.00
27	2048	3.99	7.51E-03	335	1.00	0.73	0.00
28	2049	3.99	7.51E-03	335	1.00	0.73	0.00
29	2050	3.99	7.51E-03	335	1.00	0.73	0.00
30	2051	3.99	7.51E-03	335	1.00	0.73	0.00

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.07	Acute Hazard Impact
1	Significance Threshold
No	Significant?
0.10	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
0.03	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

9	Chronic Reference Exposure Level (ug/m3)	
	Acute Reference Exposure Level (ug/m3)	
0.12	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Naphthalene

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022		2.18E-04	1,090	10.0	0.85	0.0
2	2023		2.18E-04	1,090	10.0	0.85	0.0
3	2024		2.18E-04	745	4.75	0.72	0.00
4	2025		2.18E-04	745	3.00	0.72	0.00
5	2026		2.18E-04	745	3.00	0.72	0.00
6	2027		2.18E-04	745	3.00	0.72	0.00
7	2028		2.18E-04	745	3.00	0.72	0.00
8	2029		2.18E-04	745	3.00	0.72	0.00
9	2030		2.18E-04	745	3.00	0.72	0.00
10	2031		2.18E-04	745	3.00	0.72	0.00
11	2032		2.18E-04	745	3.00	0.72	0.00
12	2033		2.18E-04	745	3.00	0.72	0.00
13	2034		2.18E-04	745	3.00	0.72	0.00
14	2035		2.18E-04	745	3.00	0.72	0.00
15	2036		2.18E-04	745	3.00	0.72	0.00
16	2037		2.18E-04	745	3.00	0.72	0.00
17	2038		2.18E-04	335	1.70	0.73	0.00
18	2039		2.18E-04	335	1.00	0.73	0.00
19	2040		2.18E-04	335	1.00	0.73	0.00
20	2041		2.18E-04	335	1.00	0.73	0.00
21	2042		2.18E-04	335	1.00	0.73	0.00
22	2043		2.18E-04	335	1.00	0.73	0.00
23	2044		2.18E-04	335	1.00	0.73	0.00
24	2045		2.18E-04	335	1.00	0.73	0.00
25	2046		2.18E-04	335	1.00	0.73	0.00
26	2047		2.18E-04	335	1.00	0.73	0.00
27	2048		2.18E-04	335	1.00	0.73	0.00
28	2049		2.18E-04	335	1.00	0.73	0.00
29	2050		2.18E-04	335	1.00	0.73	0.00
30	2051		2.18E-04	335	1.00	0.73	0.00

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
	Acute Hazard Impact
1	Significance Threshold
No	Significant?
0.02	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
0.00	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

900	Chronic Reference Exposure Level (ug/m3)	
21000	Acute Reference Exposure Level (ug/m3)	
	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Stryrene

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	0.28	5.24E-04	1,090	10.0	0.85	
2	2023	0.28	5.24E-04	1,090	10.0	0.85	
3	2024	0.28	5.24E-04	745	4.75	0.72	
4	2025	0.28	5.24E-04	745	3.00	0.72	
5	2026	0.28	5.24E-04	745	3.00	0.72	
6	2027	0.28	5.24E-04	745	3.00	0.72	
7	2028	0.28	5.24E-04	745	3.00	0.72	
8	2029	0.28	5.24E-04	745	3.00	0.72	
9	2030	0.28	5.24E-04	745	3.00	0.72	
10	2031	0.28	5.24E-04	745	3.00	0.72	
11	2032	0.28	5.24E-04	745	3.00	0.72	
12	2033	0.28	5.24E-04	745	3.00	0.72	
13	2034	0.28	5.24E-04	745	3.00	0.72	
14	2035	0.28	5.24E-04	745	3.00	0.72	
15	2036	0.28	5.24E-04	745	3.00	0.72	
16	2037	0.28	5.24E-04	745	3.00	0.72	
17	2038	0.28	5.24E-04	335	1.70	0.73	
18	2039	0.28	5.24E-04	335	1.00	0.73	
19	2040	0.28	5.24E-04	335	1.00	0.73	
20	2041	0.28	5.24E-04	335	1.00	0.73	
21	2042	0.28	5.24E-04	335	1.00	0.73	
22	2043	0.28	5.24E-04	335	1.00	0.73	
23	2044	0.28	5.24E-04	335	1.00	0.73	
24	2045	0.28	5.24E-04	335	1.00	0.73	
25	2046	0.28	5.24E-04	335	1.00	0.73	
26	2047	0.28	5.24E-04	335	1.00	0.73	
27	2048	0.28	5.24E-04	335	1.00	0.73	
28	2049	0.28	5.24E-04	335	1.00	0.73	
29	2050	0.28	5.24E-04	335	1.00	0.73	
30	2051	0.28	5.24E-04	335	1.00	0.73	

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.00	Acute Hazard Impact
1	Significance Threshold
No	Significant?
	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

420	Chronic Reference Exposure Level (ug/m3)	
5,000	Acute Reference Exposure Level (ug/m3)	
	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Toluene

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	13.8	2.60E-02	1,090	10.0	0.85	
2	2023	13.8	2.60E-02	1,090	10.0	0.85	
3	2024	13.8	2.60E-02	745	4.75	0.72	
4	2025	13.8	2.60E-02	745	3.00	0.72	
5	2026	13.8	2.60E-02	745	3.00	0.72	
6	2027	13.8	2.60E-02	745	3.00	0.72	
7	2028	13.8	2.60E-02	745	3.00	0.72	
8	2029	13.8	2.60E-02	745	3.00	0.72	
9	2030	13.8	2.60E-02	745	3.00	0.72	
10	2031	13.8	2.60E-02	745	3.00	0.72	
11	2032	13.8	2.60E-02	745	3.00	0.72	
12	2033	13.8	2.60E-02	745	3.00	0.72	
13	2034	13.8	2.60E-02	745	3.00	0.72	
14	2035	13.8	2.60E-02	745	3.00	0.72	
15	2036	13.8	2.60E-02	745	3.00	0.72	
16	2037	13.8	2.60E-02	745	3.00	0.72	
17	2038	13.8	2.60E-02	335	1.70	0.73	
18	2039	13.8	2.60E-02	335	1.00	0.73	
19	2040	13.8	2.60E-02	335	1.00	0.73	
20	2041	13.8	2.60E-02	335	1.00	0.73	
21	2042	13.8	2.60E-02	335	1.00	0.73	
22	2043	13.8	2.60E-02	335	1.00	0.73	
23	2044	13.8	2.60E-02	335	1.00	0.73	
24	2045	13.8	2.60E-02	335	1.00	0.73	
25	2046	13.8	2.60E-02	335	1.00	0.73	
26	2047	13.8	2.60E-02	335	1.00	0.73	
27	2048	13.8	2.60E-02	335	1.00	0.73	
28	2049	13.8	2.60E-02	335	1.00	0.73	
29	2050	13.8	2.60E-02	335	1.00	0.73	
30	2051	13.8	2.60E-02	335	1.00	0.73	

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.00	Acute Hazard Impact
1	Significance Threshold
No	Significant?
	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

700	Chronic Reference Exposure Level (ug/m3)	
22000	Acute Reference Exposure Level (ug/m3)	
	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Xylene

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	16.7	1.50E-03	1,090	10.0	0.85	
2	2023	16.7	1.50E-03	1,090	10.0	0.85	
3	2024	16.7	1.50E-03	745	4.75	0.72	
4	2025	16.7	1.50E-03	745	3.00	0.72	
5	2026	16.7	1.50E-03	745	3.00	0.72	
6	2027	16.7	1.50E-03	745	3.00	0.72	
7	2028	16.7	1.50E-03	745	3.00	0.72	
8	2029	16.7	1.50E-03	745	3.00	0.72	
9	2030	16.7	1.50E-03	745	3.00	0.72	
10	2031	16.7	1.50E-03	745	3.00	0.72	
11	2032	16.7	1.50E-03	745	3.00	0.72	
12	2033	16.7	1.50E-03	745	3.00	0.72	
13	2034	16.7	1.50E-03	745	3.00	0.72	
14	2035	16.7	1.50E-03	745	3.00	0.72	
15	2036	16.7	1.50E-03	745	3.00	0.72	
16	2037	16.7	1.50E-03	745	3.00	0.72	
17	2038	16.7	1.50E-03	335	1.70	0.73	
18	2039	16.7	1.50E-03	335	1.00	0.73	
19	2040	16.7	1.50E-03	335	1.00	0.73	
20	2041	16.7	1.50E-03	335	1.00	0.73	
21	2042	16.7	1.50E-03	335	1.00	0.73	
22	2043	16.7	1.50E-03	335	1.00	0.73	
23	2044	16.7	1.50E-03	335	1.00	0.73	
24	2045	16.7	1.50E-03	335	1.00	0.73	
25	2046	16.7	1.50E-03	335	1.00	0.73	
26	2047	16.7	1.50E-03	335	1.00	0.73	
27	2048	16.7	1.50E-03	335	1.00	0.73	
28	2049	16.7	1.50E-03	335	1.00	0.73	
29	2050	16.7	1.50E-03	335	1.00	0.73	
30	2051	16.7	1.50E-03	335	1.00	0.73	

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.00	Acute Hazard Impact
1	Significance Threshold
No	Significant?
	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

4000	Chronic Reference Exposure Level (ug/m3)	
28000	Acute Reference Exposure Level (ug/m3)	
	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Methyl alcohol

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	0.95	1.79E-03	1,090	10.0	0.85	
2	2023	0.95	1.79E-03	1,090	10.0	0.85	
3	2024	0.95	1.79E-03	745	4.75	0.72	
4	2025	0.95	1.79E-03	745	3.00	0.72	
5	2026	0.95	1.79E-03	745	3.00	0.72	
6	2027	0.95	1.79E-03	745	3.00	0.72	
7	2028	0.95	1.79E-03	745	3.00	0.72	
8	2029	0.95	1.79E-03	745	3.00	0.72	
9	2030	0.95	1.79E-03	745	3.00	0.72	
10	2031	0.95	1.79E-03	745	3.00	0.72	
11	2032	0.95	1.79E-03	745	3.00	0.72	
12	2033	0.95	1.79E-03	745	3.00	0.72	
13	2034	0.95	1.79E-03	745	3.00	0.72	
14	2035	0.95	1.79E-03	745	3.00	0.72	
15	2036	0.95	1.79E-03	745	3.00	0.72	
16	2037	0.95	1.79E-03	745	3.00	0.72	
17	2038	0.95	1.79E-03	335	1.70	0.73	
18	2039	0.95	1.79E-03	335	1.00	0.73	
19	2040	0.95	1.79E-03	335	1.00	0.73	
20	2041	0.95	1.79E-03	335	1.00	0.73	
21	2042	0.95	1.79E-03	335	1.00	0.73	
22	2043	0.95	1.79E-03	335	1.00	0.73	
23	2044	0.95	1.79E-03	335	1.00	0.73	
24	2045	0.95	1.79E-03	335	1.00	0.73	
25	2046	0.95	1.79E-03	335	1.00	0.73	
26	2047	0.95	1.79E-03	335	1.00	0.73	
27	2048	0.95	1.79E-03	335	1.00	0.73	
28	2049	0.95	1.79E-03	335	1.00	0.73	
29	2050	0.95	1.79E-03	335	1.00	0.73	
30	2051	0.95	1.79E-03	335	1.00	0.73	

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.00	Acute Hazard Impact
1	Significance Threshold
No	Significant?
	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

140	Chronic Reference Exposure Level (ug/m3)	
470	Acute Reference Exposure Level (ug/m3)	
0.01	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Acetaldehyde

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	0.58	1.09E-03	1,090	10.0	0.85	0.00
2	2023	0.58	1.09E-03	1,090	10.0	0.85	0.00
3	2024	0.58	1.09E-03	745	4.75	0.72	0.00
4	2025	0.58	1.09E-03	745	3.00	0.72	0.00
5	2026	0.58	1.09E-03	745	3.00	0.72	0.00
6	2027	0.58	1.09E-03	745	3.00	0.72	0.00
7	2028	0.58	1.09E-03	745	3.00	0.72	0.00
8	2029	0.58	1.09E-03	745	3.00	0.72	0.00
9	2030	0.58	1.09E-03	745	3.00	0.72	0.00
10	2031	0.58	1.09E-03	745	3.00	0.72	0.00
11	2032	0.58	1.09E-03	745	3.00	0.72	0.00
12	2033	0.58	1.09E-03	745	3.00	0.72	0.00
13	2034	0.58	1.09E-03	745	3.00	0.72	0.00
14	2035	0.58	1.09E-03	745	3.00	0.72	0.00
15	2036	0.58	1.09E-03	745	3.00	0.72	0.00
16	2037	0.58	1.09E-03	745	3.00	0.72	0.00
17	2038	0.58	1.09E-03	335	1.70	0.73	0.00
18	2039	0.58	1.09E-03	335	1.00	0.73	0.00
19	2040	0.58	1.09E-03	335	1.00	0.73	0.00
20	2041	0.58	1.09E-03	335	1.00	0.73	0.00
21	2042	0.58	1.09E-03	335	1.00	0.73	0.00
22	2043	0.58	1.09E-03	335	1.00	0.73	0.00
23	2044	0.58	1.09E-03	335	1.00	0.73	0.00
24	2045	0.58	1.09E-03	335	1.00	0.73	0.00
25	2046	0.58	1.09E-03	335	1.00	0.73	0.00
26	2047	0.58	1.09E-03	335	1.00	0.73	0.00
27	2048	0.58	1.09E-03	335	1.00	0.73	0.00
28	2049	0.58	1.09E-03	335	1.00	0.73	0.00
29	2050	0.58	1.09E-03	335	1.00	0.73	0.00
30	2051	0.58	1.09E-03	335	1.00	0.73	0.00

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.00	Acute Hazard Impact
1	Significance Threshold
No	Significant?
0.01	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
0.00	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

	Chronic Reference Exposure Level (ug/m3)	
13000	Acute Reference Exposure Level (ug/m3)	
	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Methyl ethyl ketone

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	4.64E-02		1,090	10.0	0.85	-
2	2023	4.64E-02		1,090	10.0	0.85	-
3	2024	4.64E-02		745	4.75	0.72	-
4	2025	4.64E-02		745	3.00	0.72	-
5	2026	4.64E-02		745	3.00	0.72	-
6	2027	4.64E-02		745	3.00	0.72	-
7	2028	4.64E-02		745	3.00	0.72	-
8	2029	4.64E-02		745	3.00	0.72	-
9	2030	4.64E-02		745	3.00	0.72	-
10	2031	4.64E-02		745	3.00	0.72	-
11	2032	4.64E-02		745	3.00	0.72	-
12	2033	4.64E-02		745	3.00	0.72	-
13	2034	4.64E-02		745	3.00	0.72	-
14	2035	4.64E-02		745	3.00	0.72	-
15	2036	4.64E-02		745	3.00	0.72	-
16	2037	4.64E-02		745	3.00	0.72	-
17	2038	4.64E-02		335	1.70	0.73	-
18	2039	4.64E-02		335	1.00	0.73	-
19	2040	4.64E-02		335	1.00	0.73	-
20	2041	4.64E-02		335	1.00	0.73	-
21	2042	4.64E-02		335	1.00	0.73	-
22	2043	4.64E-02		335	1.00	0.73	-
23	2044	4.64E-02		335	1.00	0.73	-
24	2045	4.64E-02		335	1.00	0.73	-
25	2046	4.64E-02		335	1.00	0.73	-
26	2047	4.64E-02		335	1.00	0.73	-
27	2048	4.64E-02		335	1.00	0.73	-
28	2049	4.64E-02		335	1.00	0.73	-
29	2050	4.64E-02		335	1.00	0.73	-
30	2051	4.64E-02		335	1.00	0.73	-

	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.00	Acute Hazard Impact
1	Significance Threshold
No	Significant?
	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

2	Chronic Reference Exposure Level (ug/m3)	
660	Acute Reference Exposure Level (ug/m3)	
0.6	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	1,3-Butadiene

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	1.28	2.40E-03	1,090	10.0	0.85	0.18
2	2023	1.28	2.40E-03	1,090	10.0	0.85	0.18
3	2024	1.28	2.40E-03	745	4.75	0.72	0.05
4	2025	1.28	2.40E-03	745	3.00	0.72	0.03
5	2026	1.28	2.40E-03	745	3.00	0.72	0.03
6	2027	1.28	2.40E-03	745	3.00	0.72	0.03
7	2028	1.28	2.40E-03	745	3.00	0.72	0.03
8	2029	1.28	2.40E-03	745	3.00	0.72	0.03
9	2030	1.28	2.40E-03	745	3.00	0.72	0.03
10	2031	1.28	2.40E-03	745	3.00	0.72	0.03
11	2032	1.28	2.40E-03	745	3.00	0.72	0.03
12	2033	1.28	2.40E-03	745	3.00	0.72	0.03
13	2034	1.28	2.40E-03	745	3.00	0.72	0.03
14	2035	1.28	2.40E-03	745	3.00	0.72	0.03
15	2036	1.28	2.40E-03	745	3.00	0.72	0.03
16	2037	1.28	2.40E-03	745	3.00	0.72	0.03
17	2038	1.28	2.40E-03	335	1.70	0.73	0.01
18	2039	1.28	2.40E-03	335	1.00	0.73	0.00
19	2040	1.28	2.40E-03	335	1.00	0.73	0.00
20	2041	1.28	2.40E-03	335	1.00	0.73	0.00
21	2042	1.28	2.40E-03	335	1.00	0.73	0.00
22	2043	1.28	2.40E-03	335	1.00	0.73	0.00
23	2044	1.28	2.40E-03	335	1.00	0.73	0.00
24	2045	1.28	2.40E-03	335	1.00	0.73	0.00
25	2046	1.28	2.40E-03	335	1.00	0.73	0.00
26	2047	1.28	2.40E-03	335	1.00	0.73	0.00
27	2048	1.28	2.40E-03	335	1.00	0.73	0.00
28	2049	1.28	2.40E-03	335	1.00	0.73	0.00
29	2050	1.28	2.40E-03	335	1.00	0.73	0.00
30	2051	1.28	2.40E-03	335	1.00	0.73	0.00

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.00	Acute Hazard Impact
1	Significance Threshold
No	Significant?
0.90	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
0.25	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

0.35	Chronic Reference Exposure Level (ug/m3)	
2.5	Acute Reference Exposure Level (ug/m3)	
	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Acrolein

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022	0.32	6.11E-04	1,090	10.0	0.85	
2	2023	0.32	6.11E-04	1,090	10.0	0.85	
3	2024	0.32	6.11E-04	745	4.75	0.72	
4	2025	0.32	6.11E-04	745	3.00	0.72	
5	2026	0.32	6.11E-04	745	3.00	0.72	
6	2027	0.32	6.11E-04	745	3.00	0.72	
7	2028	0.32	6.11E-04	745	3.00	0.72	
8	2029	0.32	6.11E-04	745	3.00	0.72	
9	2030	0.32	6.11E-04	745	3.00	0.72	
10	2031	0.32	6.11E-04	745	3.00	0.72	
11	2032	0.32	6.11E-04	745	3.00	0.72	
12	2033	0.32	6.11E-04	745	3.00	0.72	
13	2034	0.32	6.11E-04	745	3.00	0.72	
14	2035	0.32	6.11E-04	745	3.00	0.72	
15	2036	0.32	6.11E-04	745	3.00	0.72	
16	2037	0.32	6.11E-04	745	3.00	0.72	
17	2038	0.32	6.11E-04	335	1.70	0.73	
18	2039	0.32	6.11E-04	335	1.00	0.73	
19	2040	0.32	6.11E-04	335	1.00	0.73	
20	2041	0.32	6.11E-04	335	1.00	0.73	
21	2042	0.32	6.11E-04	335	1.00	0.73	
22	2043	0.32	6.11E-04	335	1.00	0.73	
23	2044	0.32	6.11E-04	335	1.00	0.73	
24	2045	0.32	6.11E-04	335	1.00	0.73	
25	2046	0.32	6.11E-04	335	1.00	0.73	
26	2047	0.32	6.11E-04	335	1.00	0.73	
27	2048	0.32	6.11E-04	335	1.00	0.73	
28	2049	0.32	6.11E-04	335	1.00	0.73	
29	2050	0.32	6.11E-04	335	1.00	0.73	
30	2051	0.32	6.11E-04	335	1.00	0.73	

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
0.13	Acute Hazard Impact
1	Significance Threshold
No	Significant?
	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

7000	Chronic Reference Exposure Level (ug/m3)	
	Acute Reference Exposure Level (ug/m3)	
	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Hexane

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022		6.99E-03	1,090	10.0	0.85	
2	2023		6.99E-03	1,090	10.0	0.85	
3	2024		6.99E-03	745	4.75	0.72	
4	2025		6.99E-03	745	3.00	0.72	
5	2026		6.99E-03	745	3.00	0.72	
6	2027		6.99E-03	745	3.00	0.72	
7	2028		6.99E-03	745	3.00	0.72	
8	2029		6.99E-03	745	3.00	0.72	
9	2030		6.99E-03	745	3.00	0.72	
10	2031		6.99E-03	745	3.00	0.72	
11	2032		6.99E-03	745	3.00	0.72	
12	2033		6.99E-03	745	3.00	0.72	
13	2034		6.99E-03	745	3.00	0.72	
14	2035		6.99E-03	745	3.00	0.72	
15	2036		6.99E-03	745	3.00	0.72	
16	2037		6.99E-03	745	3.00	0.72	
17	2038		6.99E-03	335	1.70	0.73	
18	2039		6.99E-03	335	1.00	0.73	
19	2040		6.99E-03	335	1.00	0.73	
20	2041		6.99E-03	335	1.00	0.73	
21	2042		6.99E-03	335	1.00	0.73	
22	2043		6.99E-03	335	1.00	0.73	
23	2044		6.99E-03	335	1.00	0.73	
24	2045		6.99E-03	335	1.00	0.73	
25	2046		6.99E-03	335	1.00	0.73	
26	2047		6.99E-03	335	1.00	0.73	
27	2048		6.99E-03	335	1.00	0.73	
28	2049		6.99E-03	335	1.00	0.73	
29	2050		6.99E-03	335	1.00	0.73	
30	2051		6.99E-03	335	1.00	0.73	

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
	Acute Hazard Impact
1	Significance Threshold
No	Significant?
	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Health Risk Assessment Assumptions

8000	Chronic Reference Exposure Level (ug/m3)	
	Acute Reference Exposure Level (ug/m3)	
0.0018	Cancer Potency Slope Factor (cancer risk per mg/kg-day)	
350	days per year	
25,550	days per lifetime	
1,090	95th Percentile Daily Breathing Rates (L/kg-day)	0<2 Years
861	95th Percentile Daily Breathing Rates (L/kg-day)	2<9 Years
745	95th Percentile Daily Breathing Rates (L/kg-day)	2<16 Years
335	95th Percentile Daily Breathing Rates (L/kg-day)	16<30 Years
290	95th Percentile Daily Breathing Rates (L/kg-day)	30<70 Years
0.85	fraction of time at home	0<2 Years
0.72	fraction of time at home	2<16 Years
0.73	fraction of time at home	16<70 Years

Project:	Nevada County Higgins Marketplace
Date:	December 29, 2020
Condition:	Operations
Receptor:	Existing Residence/School
Pollutant:	Methyl t-butyl ether

Exposure Year	Calender Year	Maximum 1-Hour Concentration (ug/m3)	Annual Concentration (ug/m3)	Daily Breathing Rates (L/kg-day)	Exposure Factor	fraction of time at home	Cancer Risk
1	2022		8.56E-03	1,090	10.0	0.85	0.00
2	2023		8.56E-03	1,090	10.0	0.85	0.00
3	2024		8.56E-03	745	4.75	0.72	0.00
4	2025		8.56E-03	745	3.00	0.72	0.00
5	2026		8.56E-03	745	3.00	0.72	0.00
6	2027		8.56E-03	745	3.00	0.72	0.00
7	2028		8.56E-03	745	3.00	0.72	0.00
8	2029		8.56E-03	745	3.00	0.72	0.00
9	2030		8.56E-03	745	3.00	0.72	0.00
10	2031		8.56E-03	745	3.00	0.72	0.00
11	2032		8.56E-03	745	3.00	0.72	0.00
12	2033		8.56E-03	745	3.00	0.72	0.00
13	2034		8.56E-03	745	3.00	0.72	0.00
14	2035		8.56E-03	745	3.00	0.72	0.00
15	2036		8.56E-03	745	3.00	0.72	0.00
16	2037		8.56E-03	745	3.00	0.72	0.00
17	2038		8.56E-03	335	1.70	0.73	0.00
18	2039		8.56E-03	335	1.00	0.73	0.00
19	2040		8.56E-03	335	1.00	0.73	0.00
20	2041		8.56E-03	335	1.00	0.73	0.00
21	2042		8.56E-03	335	1.00	0.73	0.00
22	2043		8.56E-03	335	1.00	0.73	0.00
23	2044		8.56E-03	335	1.00	0.73	0.00
24	2045		8.56E-03	335	1.00	0.73	0.00
25	2046		8.56E-03	335	1.00	0.73	0.00
26	2047		8.56E-03	335	1.00	0.73	0.00
27	2048		8.56E-03	335	1.00	0.73	0.00
28	2049		8.56E-03	335	1.00	0.73	0.00
29	2050		8.56E-03	335	1.00	0.73	0.00
30	2051		8.56E-03	335	1.00	0.73	0.00

0.00	Chronic Hazard Impact
1	Significance Threshold
No	Significant?
	Acute Hazard Impact
1	Significance Threshold
No	Significant?
0.01	Cancer Risk (Child)
10	Significance Threshold
No	Significant?
0.00	Cancer Risk (Adult)
10	Significance Threshold
No	Significant?

Attachment B

CalEEMod Emissions Modeling Outputs

i. Summer Daily Operational Emissions for Approved Project

ii. Winter Daily Operational Emissions for Approved Project

iii. Summer Daily Operational Emissions for Proposed Project

iv. Winter Daily Operational Emissions for Proposed Project

Higgins Marketplace Shopping Center Approved

Nevada County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	17.12	1000sqft	0.39	17,124.00	0
Parking Lot	226.00	Space	2.03	90,400.00	0
Supermarket	50.06	1000sqft	1.15	50,060.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	80
Climate Zone	1			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approved Project

Construction Phase - No Construction Analysis

Off-road Equipment - No Construction Analysis

Trips and VMT - no construction analysis

Grading - King Engineering, 2020

Architectural Coating -

Vehicle Trips - KD Anderson & Associates, Inc., 2020

Energy Mitigation - 2019 Building Energy Efficiency Standards Title 24

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblLandUse	LandUseSquareFeet	17,120.00	17,124.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4505	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Energy	0.0380	0.3458	0.2905	2.0800e-003		0.0263	0.0263		0.0263	0.0263		415.0018	415.0018	7.9500e-003	7.6100e-003	417.4680
Mobile	21.4875	105.6001	141.8589	0.3883	21.5802	0.3756	21.9558	5.7765	0.3539	6.1304		39,506.3580	39,506.3580	2.9132		39,579.1880
Total	**22.9760**	**105.9462**	**142.1794**	**0.3904**	**21.5802**	**0.4020**	**21.9822**	**5.7765**	**0.3803**	**6.1568**		**39,921.4240**	**39,921.4240**	**2.9213**	**7.6100e-003**	**39,996.7244**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4505	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Energy	0.0272	0.2468	0.2074	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.2132	296.2132	5.6800e-003	5.4300e-003	297.9735
Mobile	21.4875	105.6001	141.8589	0.3883	21.5802	0.3756	21.9558	5.7765	0.3539	6.1304		39,506.3580	39,506.3580	2.9132		39,579.1880
Total	**22.9651**	**105.8472**	**142.0963**	**0.3898**	**21.5802**	**0.3945**	**21.9747**	**5.7765**	**0.3728**	**6.1493**		**39,802.6353**	**39,802.6353**	**2.9191**	**5.4300e-003**	**39,877.2299**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.05**	**0.09**	**0.06**	**0.15**	**0.00**	**1.87**	**0.03**	**0.00**	**1.98**	**0.12**	**0.00**	**0.30**	**0.30**	**0.08**	**28.65**	**0.30**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2020	6/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.42

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.4875	105.6001	141.8589	0.3883	21.5802	0.3756	21.9558	5.7765	0.3539	6.1304		39,506.3580	39,506.3580	2.9132		39,579.1880
Unmitigated	21.4875	105.6001	141.8589	0.3883	21.5802	0.3756	21.9558	5.7765	0.3539	6.1304		39,506.3580	39,506.3580	2.9132		39,579.1880

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	5,118.13	8,890.16	8331.99	6,956,737	6,956,737
Total	5,118.13	8,890.16	8,331.99	6,956,737	6,956,737

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Parking Lot	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Supermarket	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0272	0.2468	0.2074	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.2132	296.2132	5.6800e-003	5.4300e-003	297.9735
NaturalGas Unmitigated	0.0380	0.3458	0.2905	2.0800e-003		0.0263	0.0263		0.0263	0.0263		415.0018	415.0018	7.9500e-003	7.6100e-003	417.4680

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	3527.52	0.0380	0.3458	0.2905	2.0800e-003		0.0263	0.0263		0.0263	0.0263		415.0018	415.0018	7.9500e-003	7.6100e-003	417.4680
Total		**0.0380**	**0.3458**	**0.2905**	**2.0800e-003**		**0.0263**	**0.0263**		**0.0263**	**0.0263**		**415.0018**	**415.0018**	**7.9500e-003**	**7.6100e-003**	**417.4680**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	2.51781	0.0272	0.2468	0.2074	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.2132	296.2132	5.6800e-003	5.4300e-003	297.9735
Total		**0.0272**	**0.2468**	**0.2074**	**1.4800e-003**		**0.0188**	**0.0188**		**0.0188**	**0.0188**		**296.2132**	**296.2132**	**5.6800e-003**	**5.4300e-003**	**297.9735**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4505	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Unmitigated	1.4505	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8100e-003	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Total	**1.4505**	**2.8000e-004**	**0.0301**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0642**	**0.0642**	**1.7000e-004**		**0.0684**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8100e-003	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Total	**1.4505**	**2.8000e-004**	**0.0301**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0642**	**0.0642**	**1.7000e-004**		**0.0684**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Higgins Marketplace Shopping Center Approved

Nevada County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	17.12	1000sqft	0.39	17,124.00	0
Parking Lot	226.00	Space	2.03	90,400.00	0
Supermarket	50.06	1000sqft	1.15	50,060.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	80
Climate Zone	1			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approved Project

Construction Phase - No Construction Analysis

Off-road Equipment - No Construction Analysis

Trips and VMT - no construction analysis

Grading - King Engineering, 2020

Architectural Coating -

Vehicle Trips - KD Anderson & Associates, Inc., 2020

Energy Mitigation - 2019 Building Energy Efficiency Standards Title 24

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblLandUse	LandUseSquareFeet	17,120.00	17,124.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4505	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Energy	0.0380	0.3458	0.2905	2.0800e-003		0.0263	0.0263		0.0263	0.0263		415.0018	415.0018	7.9500e-003	7.6100e-003	417.4680
Mobile	18.0004	108.4232	168.3835	0.3615	21.5802	0.3879	21.9681	5.7765	0.3657	6.1422		36,719.1000	36,719.1000	3.2489		36,800.3218
Total	**19.4889**	**108.7693**	**168.7041**	**0.3636**	**21.5802**	**0.4143**	**21.9945**	**5.7765**	**0.3921**	**6.1686**		**37,134.1660**	**37,134.1660**	**3.2570**	**7.6100e-003**	**37,217.8582**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4505	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Energy	0.0272	0.2468	0.2074	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.2132	296.2132	5.6800e-003	5.4300e-003	297.9735
Mobile	18.0004	108.4232	168.3835	0.3615	21.5802	0.3879	21.9681	5.7765	0.3657	6.1422		36,719.1000	36,719.1000	3.2489		36,800.3218
Total	**19.4781**	**108.6703**	**168.6209**	**0.3630**	**21.5802**	**0.4068**	**21.9870**	**5.7765**	**0.3845**	**6.1611**		**37,015.3774**	**37,015.3774**	**3.2547**	**5.4300e-003**	**37,098.3637**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.06**	**0.09**	**0.05**	**0.17**	**0.00**	**1.82**	**0.03**	**0.00**	**1.92**	**0.12**	**0.00**	**0.32**	**0.32**	**0.07**	**28.65**	**0.32**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2020	6/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.42

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	18.0004	108.4232	168.3835	0.3615	21.5802	0.3879	21.9681	5.7765	0.3657	6.1422		36,719.1000	36,719.1000	3.2489		36,800.3218
Unmitigated	18.0004	108.4232	168.3835	0.3615	21.5802	0.3879	21.9681	5.7765	0.3657	6.1422		36,719.1000	36,719.1000	3.2489		36,800.3218

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	5,118.13	8,890.16	8331.99	6,956,737	6,956,737
Total	5,118.13	8,890.16	8,331.99	6,956,737	6,956,737

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Parking Lot	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Supermarket	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0272	0.2468	0.2074	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.2132	296.2132	5.6800e-003	5.4300e-003	297.9735
NaturalGas Unmitigated	0.0380	0.3458	0.2905	2.0800e-003		0.0263	0.0263		0.0263	0.0263		415.0018	415.0018	7.9500e-003	7.6100e-003	417.4680

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	3527.52	0.0380	0.3458	0.2905	2.0800e-003		0.0263	0.0263		0.0263	0.0263		415.0018	415.0018	7.9500e-003	7.6100e-003	417.4680
Total		**0.0380**	**0.3458**	**0.2905**	**2.0800e-003**		**0.0263**	**0.0263**		**0.0263**	**0.0263**		**415.0018**	**415.0018**	**7.9500e-003**	**7.6100e-003**	**417.4680**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	2.51781	0.0272	0.2468	0.2074	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.2132	296.2132	5.6800e-003	5.4300e-003	297.9735
Total		**0.0272**	**0.2468**	**0.2074**	**1.4800e-003**		**0.0188**	**0.0188**		**0.0188**	**0.0188**		**296.2132**	**296.2132**	**5.6800e-003**	**5.4300e-003**	**297.9735**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4505	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Unmitigated	1.4505	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8100e-003	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Total	**1.4505**	**2.8000e-004**	**0.0301**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0642**	**0.0642**	**1.7000e-004**		**0.0684**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1094					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8100e-003	2.8000e-004	0.0301	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0642	0.0642	1.7000e-004		0.0684
Total	**1.4505**	**2.8000e-004**	**0.0301**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0642**	**0.0642**	**1.7000e-004**		**0.0684**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Higgins Marketplace Shopping Center Proposed

Nevada County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	15.99	1000sqft	0.37	15,995.00	0
Parking Lot	226.00	Space	2.03	90,400.00	0
Gasoline/Service Station	8.00	Pump	0.03	1,129.40	0
Supermarket	30.77	1000sqft	0.71	30,770.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	80
Climate Zone	1			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Proposed Project

Construction Phase - No Construction Analysis

Off-road Equipment - No Construction Analysis

Grading - King Engineering, 2020

Architectural Coating -

Vehicle Trips - KD Anderson & Associates, Inc., 2020

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	6/26/2020	6/1/2020
tblLandUse	LandUseSquareFeet	15,990.00	15,995.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0746	0.0507	0.5468	1.2300e-003	0.1232	8.4000e-004	0.1241	0.0327	7.8000e-004	0.0335	0.0000	122.3625	122.3625	4.6300e-003	0.0000	122.4783
Maximum	**0.0746**	**0.0507**	**0.5468**	**1.2300e-003**	**0.1232**	**8.4000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**	**0.0000**	**122.3625**	**122.3625**	**4.6300e-003**	**0.0000**	**122.4783**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0746	0.0507	0.5468	1.2300e-003	0.1232	8.4000e-004	0.1241	0.0327	7.8000e-004	0.0335	0.0000	122.3625	122.3625	4.6300e-003	0.0000	122.4783
Maximum	**0.0746**	**0.0507**	**0.5468**	**1.2300e-003**	**0.1232**	**8.4000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**	**0.0000**	**122.3625**	**122.3625**	**4.6300e-003**	**0.0000**	**122.4783**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9458	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Energy	0.0235	0.2136	0.1795	1.2800e-003		0.0162	0.0162		0.0162	0.0162		256.3638	256.3638	4.9100e-003	4.7000e-003	257.8872
Mobile	16.1892	78.4999	102.2168	0.2764	14.9226	0.2662	15.1889	3.9945	0.2508	4.2453		28,132.1305	28,132.1305	2.1636		28,186.2198
Total	**17.1586**	**78.7138**	**102.4250**	**0.2777**	**14.9226**	**0.2826**	**15.2052**	**3.9945**	**0.2672**	**4.2616**		**28,388.5557**	**28,388.5557**	**2.1686**	**4.7000e-003**	**28,444.1725**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9458	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Energy	0.0235	0.2136	0.1795	1.2800e-003		0.0162	0.0162		0.0162	0.0162		256.3638	256.3638	4.9100e-003	4.7000e-003	257.8872
Mobile	16.1892	78.4999	102.2168	0.2764	14.9226	0.2662	15.1889	3.9945	0.2508	4.2453		28,132.1305	28,132.1305	2.1636		28,186.2198
Total	**17.1586**	**78.7138**	**102.4250**	**0.2777**	**14.9226**	**0.2826**	**15.2052**	**3.9945**	**0.2672**	**4.2616**		**28,388.5557**	**28,388.5557**	**2.1686**	**4.7000e-003**	**28,444.1725**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2020	6/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.4

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0746	0.0507	0.5468	1.2300e-003	0.1232	8.4000e-004	0.1241	0.0327	7.8000e-004	0.0335		122.3625	122.3625	4.6300e-003		122.4783
Total	**0.0746**	**0.0507**	**0.5468**	**1.2300e-003**	**0.1232**	**8.4000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**		**122.3625**	**122.3625**	**4.6300e-003**		**122.4783**

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0746	0.0507	0.5468	1.2300e-003	0.1232	8.4000e-004	0.1241	0.0327	7.8000e-004	0.0335		122.3625	122.3625	4.6300e-003		122.4783
Total	**0.0746**	**0.0507**	**0.5468**	**1.2300e-003**	**0.1232**	**8.4000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**		**122.3625**	**122.3625**	**4.6300e-003**		**122.4783**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.1892	78.4999	102.2168	0.2764	14.9226	0.2662	15.1889	3.9945	0.2508	4.2453		28,132.1305	28,132.1305	2.1636		28,186.2198
Unmitigated	16.1892	78.4999	102.2168	0.2764	14.9226	0.2662	15.1889	3.9945	0.2508	4.2453		28,132.1305	28,132.1305	2.1636		28,186.2198

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Gasoline/Service Station	1,348.48	1,348.48	1348.48	776,951	776,951
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	3,145.92	5,464.44	5121.36	4,276,045	4,276,045
Total	4,494.40	6,812.92	6,469.84	5,052,996	5,052,996

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Gasoline/Service Station	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Other Asphalt Surfaces	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Parking Lot	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Supermarket	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0235	0.2136	0.1795	1.2800e-003		0.0162	0.0162		0.0162	0.0162		256.3638	256.3638	4.9100e-003	4.7000e-003	257.8872
NaturalGas Unmitigated	0.0235	0.2136	0.1795	1.2800e-003		0.0162	0.0162		0.0162	0.0162		256.3638	256.3638	4.9100e-003	4.7000e-003	257.8872

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Gasoline/Service Station	10.8608	1.2000e-004	1.0600e-003	8.9000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.2777	1.2777	2.0000e-005	2.0000e-005	1.2853
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	2168.23	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0860	255.0860	4.8900e-003	4.6800e-003	256.6019
Total		**0.0235**	**0.2136**	**0.1795**	**1.2900e-003**		**0.0162**	**0.0162**		**0.0162**	**0.0162**		**256.3638**	**256.3638**	**4.9100e-003**	**4.7000e-003**	**257.8872**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Gasoline/Service Station	0.0108608	1.2000e-004	1.0600e-003	8.9000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.2777	1.2777	2.0000e-005	2.0000e-005	1.2853
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	2.16823	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0860	255.0860	4.8900e-003	4.6800e-003	256.6019
Total		**0.0235**	**0.2136**	**0.1795**	**1.2900e-003**		**0.0162**	**0.0162**		**0.0162**	**0.0162**		**256.3638**	**256.3638**	**4.9100e-003**	**4.7000e-003**	**257.8872**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9458	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Unmitigated	0.9458	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2228					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6900e-003	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Total	**0.9458**	**2.6000e-004**	**0.0288**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0615**	**0.0615**	**1.6000e-004**		**0.0655**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2228					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6900e-003	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Total	**0.9458**	**2.6000e-004**	**0.0288**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0615**	**0.0615**	**1.6000e-004**		**0.0655**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Higgins Marketplace Shopping Center Proposed

Nevada County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	15.99	1000sqft	0.37	15,995.00	0
Parking Lot	226.00	Space	2.03	90,400.00	0
Gasoline/Service Station	8.00	Pump	0.03	1,129.40	0
Supermarket	30.77	1000sqft	0.71	30,770.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	80
Climate Zone	1			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Proposed Project

Construction Phase - No Construction Analysis

Off-road Equipment - No Construction Analysis

Grading - King Engineering, 2020

Architectural Coating -

Vehicle Trips - KD Anderson & Associates, Inc., 2020

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	6/26/2020	6/1/2020
tblLandUse	LandUseSquareFeet	15,990.00	15,995.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	15.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0765	0.0665	0.5412	1.1300e-003	0.1232	8.4000e-004	0.1241	0.0327	7.8000e-004	0.0335	0.0000	112.4863	112.4863	4.4100e-003	0.0000	112.5967
Maximum	**0.0765**	**0.0665**	**0.5412**	**1.1300e-003**	**0.1232**	**8.4000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**	**0.0000**	**112.4863**	**112.4863**	**4.4100e-003**	**0.0000**	**112.5967**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0765	0.0665	0.5412	1.1300e-003	0.1232	8.4000e-004	0.1241	0.0327	7.8000e-004	0.0335	0.0000	112.4863	112.4863	4.4100e-003	0.0000	112.5967
Maximum	**0.0765**	**0.0665**	**0.5412**	**1.1300e-003**	**0.1232**	**8.4000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**	**0.0000**	**112.4863**	**112.4863**	**4.4100e-003**	**0.0000**	**112.5967**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9458	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Energy	0.0235	0.2136	0.1795	1.2800e-003		0.0162	0.0162		0.0162	0.0162		256.3638	256.3638	4.9100e-003	4.7000e-003	257.8872
Mobile	13.5184	80.3593	123.0667	0.2570	14.9226	0.2757	15.1983	3.9945	0.2599	4.2543		26,111.3048	26,111.3048	2.4252		26,171.9353
Total	**14.4877**	**80.5732**	**123.2749**	**0.2583**	**14.9226**	**0.2920**	**15.2147**	**3.9945**	**0.2762**	**4.2706**		**26,367.7300**	**26,367.7300**	**2.4303**	**4.7000e-003**	**26,429.8880**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9458	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Energy	0.0235	0.2136	0.1795	1.2800e-003		0.0162	0.0162		0.0162	0.0162		256.3638	256.3638	4.9100e-003	4.7000e-003	257.8872
Mobile	13.5184	80.3593	123.0667	0.2570	14.9226	0.2757	15.1983	3.9945	0.2599	4.2543		26,111.3048	26,111.3048	2.4252		26,171.9353
Total	**14.4877**	**80.5732**	**123.2749**	**0.2583**	**14.9226**	**0.2920**	**15.2147**	**3.9945**	**0.2762**	**4.2706**		**26,367.7300**	**26,367.7300**	**2.4303**	**4.7000e-003**	**26,429.8880**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2020	6/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.4

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.0665	0.5412	1.1300e-003	0.1232	8.4000e-004	0.1241	0.0327	7.8000e-004	0.0335		112.4863	112.4863	4.4100e-003		112.5967
Total	**0.0765**	**0.0665**	**0.5412**	**1.1300e-003**	**0.1232**	**8.4000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**		**112.4863**	**112.4863**	**4.4100e-003**		**112.5967**

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.0665	0.5412	1.1300e-003	0.1232	8.4000e-004	0.1241	0.0327	7.8000e-004	0.0335		112.4863	112.4863	4.4100e-003		112.5967
Total	**0.0765**	**0.0665**	**0.5412**	**1.1300e-003**	**0.1232**	**8.4000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**		**112.4863**	**112.4863**	**4.4100e-003**		**112.5967**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.5184	80.3593	123.0667	0.2570	14.9226	0.2757	15.1983	3.9945	0.2599	4.2543		26,111.3048	26,111.3048	2.4252		26,171.9353
Unmitigated	13.5184	80.3593	123.0667	0.2570	14.9226	0.2757	15.1983	3.9945	0.2599	4.2543		26,111.3048	26,111.3048	2.4252		26,171.9353

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Gasoline/Service Station	1,348.48	1,348.48	1348.48	776,951	776,951
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	3,145.92	5,464.44	5121.36	4,276,045	4,276,045
Total	4,494.40	6,812.92	6,469.84	5,052,996	5,052,996

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Gasoline/Service Station	9.50	7.30	7.30	2.00	79.00	19.00	14	27	59
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Gasoline/Service Station	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Other Asphalt Surfaces	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Parking Lot	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726
Supermarket	0.432784	0.041924	0.243794	0.145104	0.037735	0.006629	0.014825	0.066285	0.001808	0.000743	0.006060	0.000582	0.001726

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0235	0.2136	0.1795	1.2800e-003		0.0162	0.0162		0.0162	0.0162		256.3638	256.3638	4.9100e-003	4.7000e-003	257.8872
NaturalGas Unmitigated	0.0235	0.2136	0.1795	1.2800e-003		0.0162	0.0162		0.0162	0.0162		256.3638	256.3638	4.9100e-003	4.7000e-003	257.8872

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Gasoline/Service Station	10.8608	1.2000e-004	1.0600e-003	8.9000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.2777	1.2777	2.0000e-005	2.0000e-005	1.2853
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	2168.23	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0860	255.0860	4.8900e-003	4.6800e-003	256.6019
Total		**0.0235**	**0.2136**	**0.1795**	**1.2900e-003**		**0.0162**	**0.0162**		**0.0162**	**0.0162**		**256.3638**	**256.3638**	**4.9100e-003**	**4.7000e-003**	**257.8872**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Gasoline/Service Station	0.0108608	1.2000e-004	1.0600e-003	8.9000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.2777	1.2777	2.0000e-005	2.0000e-005	1.2853
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	2.16823	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0860	255.0860	4.8900e-003	4.6800e-003	256.6019
Total		**0.0235**	**0.2136**	**0.1795**	**1.2900e-003**		**0.0162**	**0.0162**		**0.0162**	**0.0162**		**256.3638**	**256.3638**	**4.9100e-003**	**4.7000e-003**	**257.8872**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9458	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Unmitigated	0.9458	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2228					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6900e-003	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Total	**0.9458**	**2.6000e-004**	**0.0288**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0615**	**0.0615**	**1.6000e-004**		**0.0655**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2228					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6900e-003	2.6000e-004	0.0288	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0615	0.0615	1.6000e-004		0.0655
Total	**0.9458**	**2.6000e-004**	**0.0288**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0615**	**0.0615**	**1.6000e-004**		**0.0655**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

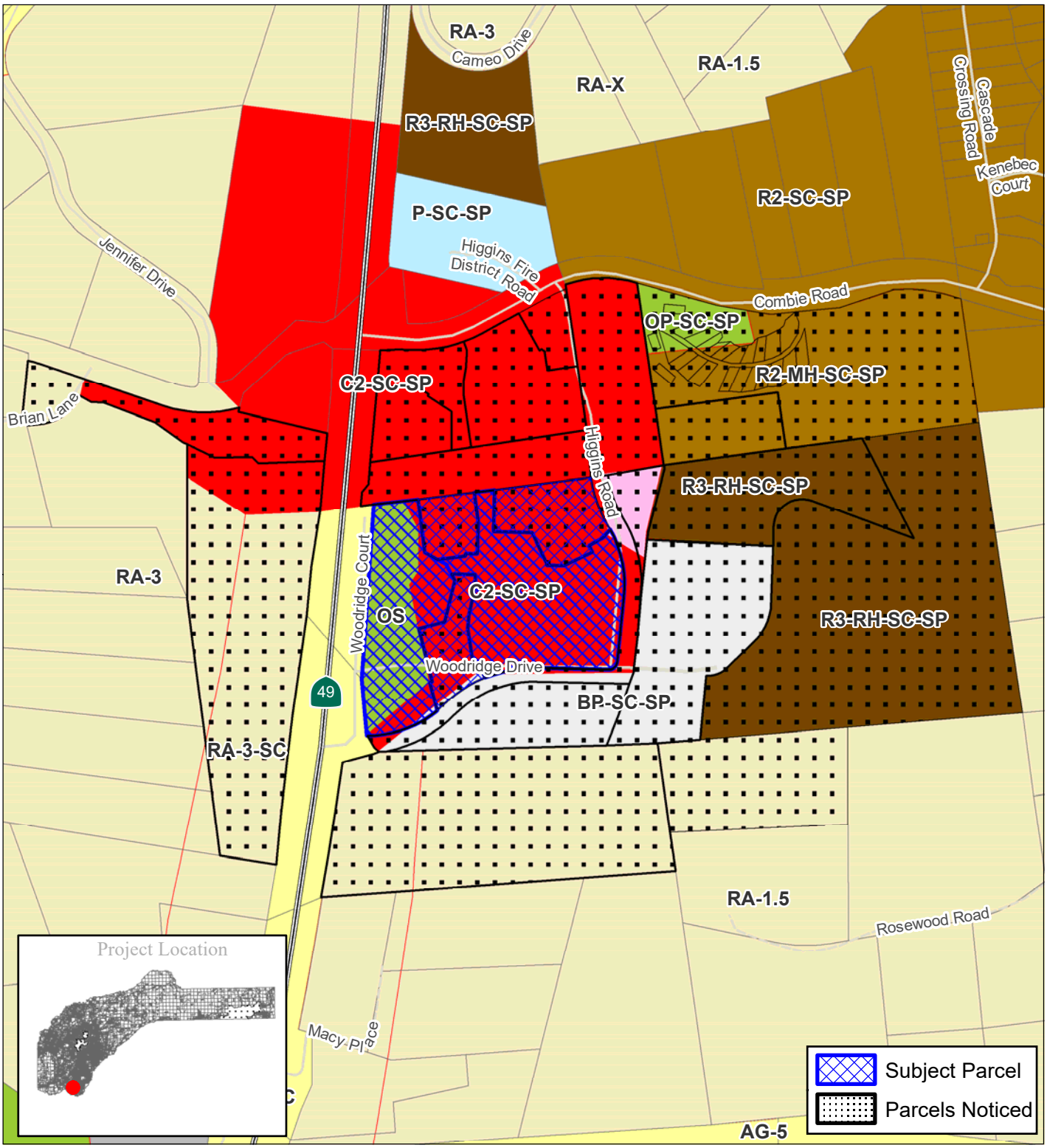
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Higgins Marketplace and Fuel Station
PLN20-0087; AAP20-0005; DVP20-1; EIS20-0003
Assessor Parcel Number: 057-260-024
Address: 21656 Higgins Road
Zoning, Noticed Parcels & Vicinity Map



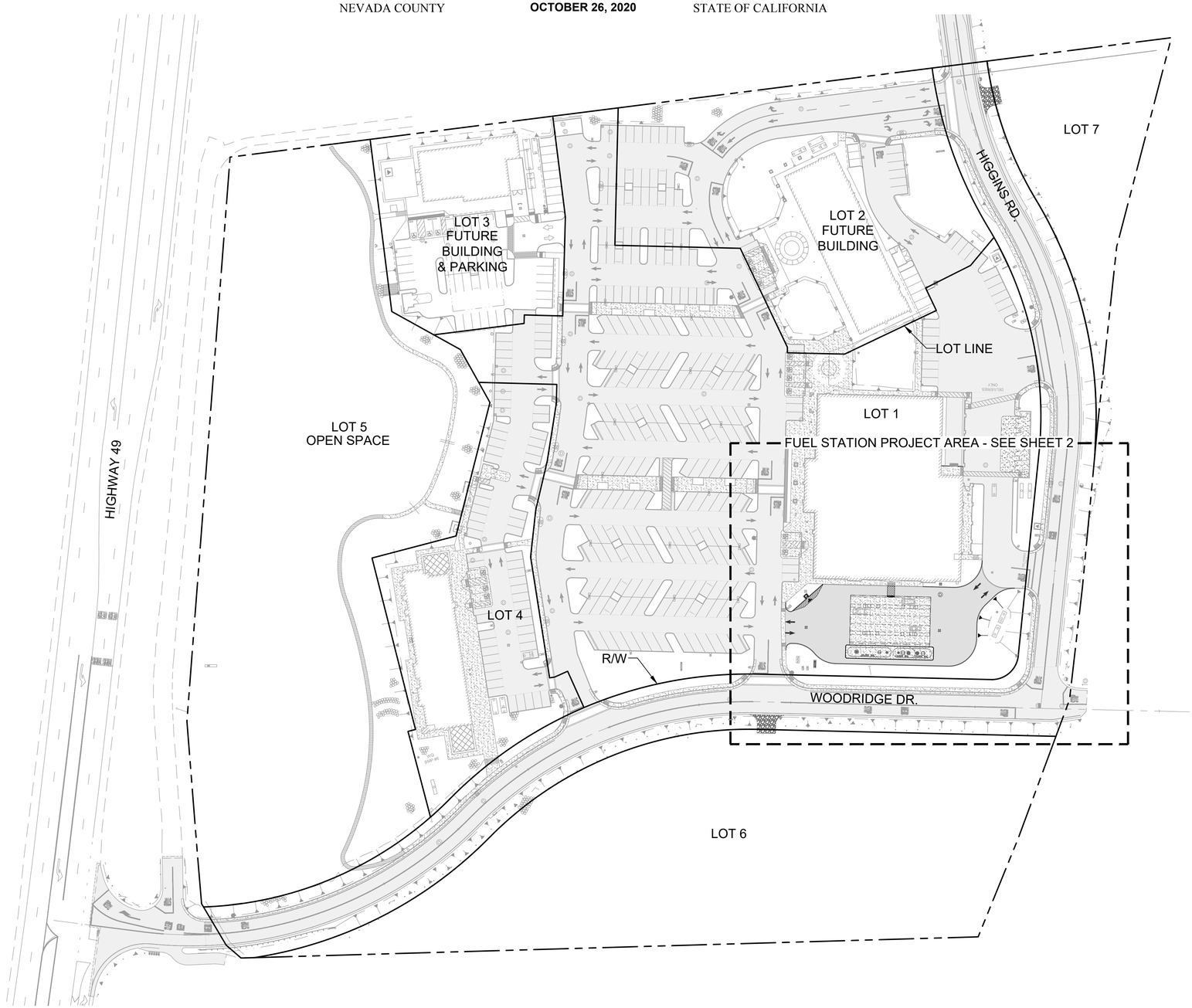
N

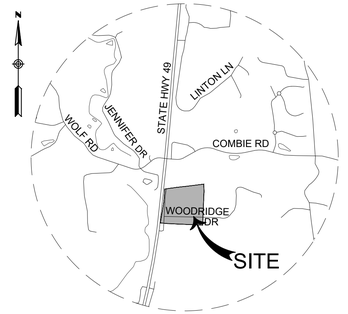
0 245 490 980 Feet

SITE PLAN

HIGGINS FUEL STATION

NEVADA COUNTY **OCTOBER 26, 2020** STATE OF CALIFORNIA





VICINITY MAP

NTS

N

60 30 0 60

SCALE: 1" = 60'

HIGGINS MARKETPLACE CONTACTS:

OWNER & DEVELOPER:
NORTH STATE GROCERY, INC
DBA HOLIDAY MARKET (COMMERCIAL LESSEE)
P.O. BOX 439
COTTONWOOD, CA 96022
PHONE: (530) 377-7137
EMAIL: MLECLERC@NSGROCERY.COM
COMTACT: MICHEL LECLERC

OWNER REPRESENTATIVE:
KKP LAKE OF THE PINES, LLC
1731 EAST ROSEVILLE PARKWAY, SUITE 270
ROSEVILLE, CA 95661
PHONE: (916) 780-6670
EMAIL: FKATZ@KKPROP.NET
CONTACT: FRED KATZ

CIVIL ENGINEER:
KING ENGINEERING, INC.
200 AUBURN FOLSOM RD., SUITE 201
AUBURN, CA 95603
PHONE: (530) 272-8328
EMAIL:
CURTIS.KING@KING-ENGINEERING-INC.COM
CONTACT: CURTIS KING

SURVEYOR:
BURRELL CONSULTING GROUP INC.
1001 ENTERPRISE WAY, SUITE 100
ROSEVILLE, CA 95678
PHONE: (916) 783-8898
FAX: (916) 783-8222
CONTACT: JERRY APLASS

ARCHITECT:
TIMOTHY SHEIL
P.O. BOX 571
COOL, CA 95614
PHONE: (530) 887-1574
EMAIL: SHEIL@HUGHES.NET
CONTACT: TIM SHEIL

GEOTECHNICAL ENGINEER:
NV5
792 SEARLS AVENUE
NEVADA CITY, CA 95959
PHONE: (530) 478-1305
EMAIL: CHUCK.KULL@NV5.COM
CONTACT: CHUCK KULL

LANDSCAPE ARCHITECT:
FUHRMAN LEAMY LAND GROUP
2140 PROFESSIONAL DR. SUITE 115
ROSEVILLE, CA 95661
PHONE: (916) 783-5263
EMAIL: KEVINL@FLLANDGROUP.COM
CONTACT: KEVIN LEAMY

DRY UTILITY DESIGNER:
APEX UTILITY CONSULTANTS LLC
8022 LINDA ISLE LANE
SACRAMENTO, CA 95831
PHONE: (916) 417-7062
EMAIL: DAVE@APEXUTILITYCONSULTANTS.COM
CONTACT: DAVID GREEN

PROPERTY INFORMATION:

APN: 057-260-024-000

ADDRESS: 10004 WOODRIDGE DRIVE, AUBURN, CA. 95602

ZONING: C2-SC-D-SP

TOTAL ACREAGE: 5.52± ACRES

BASIS OF BEARING
THE BASIS OF BEARINGS FOR THIS SURVEY IS BETWEEN THE TWO FOUND MONUMENTS AS SHOWN ON PARCEL MAP NO. 79-89, FILED IN BOOK 14 OF PARCEL MAPS, AT PAGE 158, OFFICIAL RECORDS OF NEVADA COUNTY SHOWN HEREON AS NORTH 88°21'19" EAST.

HORIZONTAL DATUM:
LOCAL GROUND COODINATES

VERTICAL DATUM:
NGVD29 BASED ON BENCH MARKS
TOPOGRAPHY SHOWN IS COMPILED FROM AERIAL SURVEY DATED 11/06/96 WITH BENCHMARK ELEVATION BASED ON U.S.G.S. BRASS DISK STAMPED W16 ON HEADWALL OF CULVERT, EAST SIDE OF STATE ROUTE 49. ELEV=1415.00' THIS BENCH MARK HAS SINCE BEEN DESTROYED WITH CONSTRUCTION.

THE ELEVATION WAS RELOCATED TO NGS POINT "HPGN D CA 03 GK" NGVD 29 ELEV=1432.288 .

"HPGN D CA 03 GK" CAN BE LOCATED FROM THE INTERSECTION WITH CA 49 ON COMBIE ROAD ON THE LEFT. GO EAST ON COMBIE ROAD FOR ABOUT 50 FT TO THE ENTRANCE OF THE FIRE STATION ON THE LEFT. TURN LEFT AND GO NORTH ON THE DRIVEWAY (PARALLEL WITH HIGHWAY 49) FOR ABOUT 250 FT TO TWO FLAG POLES ON THE RIGHT AND THE STATION ON THE LEFT. FOR INFORMATIONAL PURPOSES ONLY (APPROXIMATE CONVERSION FROM NGVD29 TO NAVD88 +2.71 FEET).

SITE SURFACING:

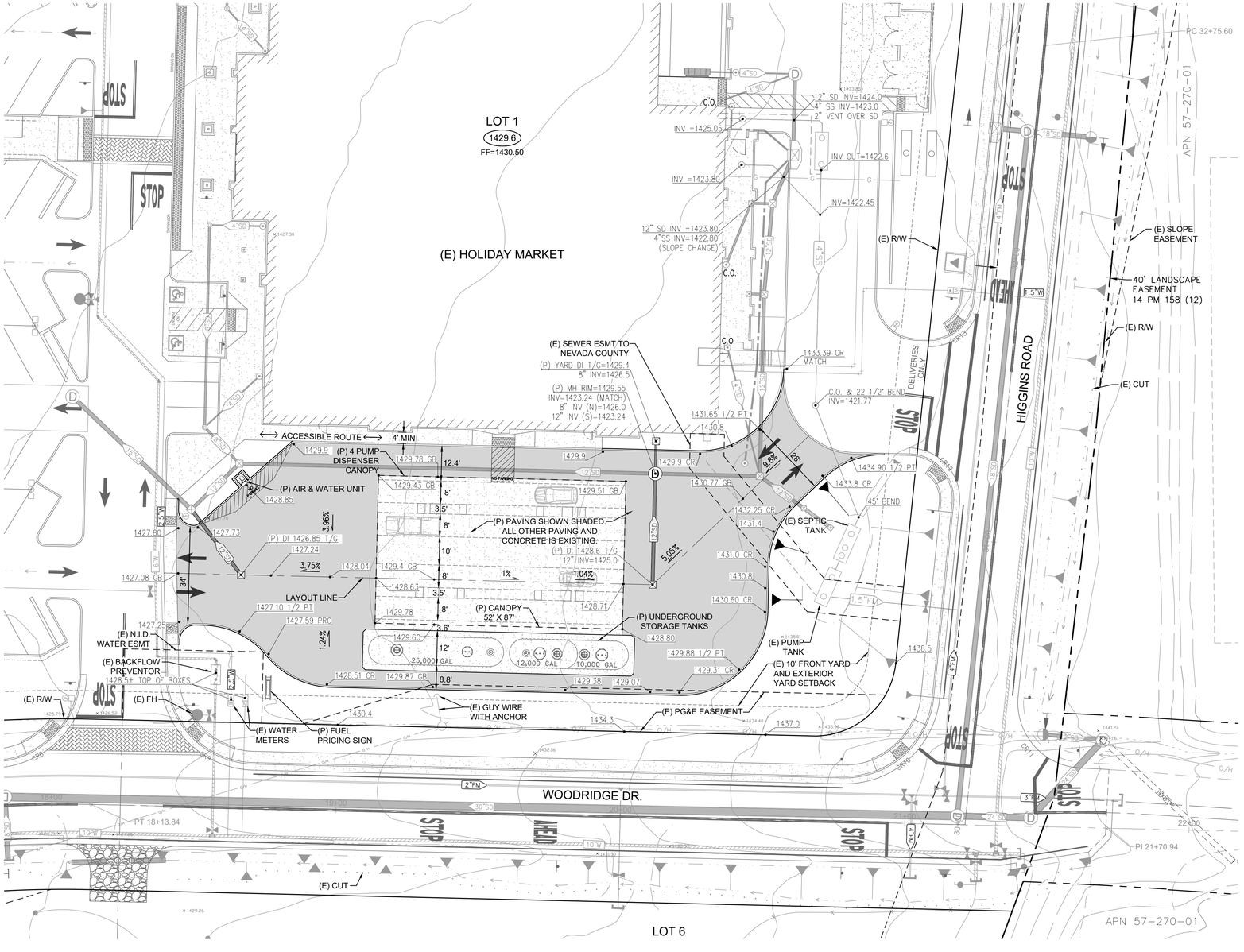
A. LOT 1 PERVIOUS AREA	40,550 SF	17%
B. LOT 1 IMPERVIOUS AREA	199,930 SF	83%
TOTALS:	240,480 SF	100%

KING ENGINEERING
200 Auburn Folsom Road, Ste. 201
Auburn, California 95603
T: (530) 272-8328
E: Info@King-Engineering-Inc.com

PRELIMINARY GRADING, DRAINAGE AND UTILITY PLAN

HIGGINS FUEL STATION

NEVADA COUNTY **OCTOBER 26, 2020** STATE OF CALIFORNIA



20 10 0 20

SCALE: 1" = 20'

LEGEND:

PROPOSED

12+00 — 13+00	CENTERLINE (C/L) & STATION
2% 123.45 FG	DIRECTION OF FLOW AND SLOPE
	SPOT ELEVATION
120	CONTOURS
	RIP RAP
	STREET LIGHT
	WATER FIRE HYDRANT ASSEMBLY (FH)
	WATER GATE VALVE
8"W	WATER LINE (W)
6"SS	SANITARY SEWER LINE (SS)
S	SANITARY SEWER MANHOLE (SMH)
8"SD	STORM DRAIN LINE
D	STORM DRAIN MANHOLE (DMH)
	STORM DRAIN DROP INLET
	BOUNDARY LINE
	CENTERLINE
	EASEMENT LINE
	PROPOSED LOT LINE

EXISTING

12+00 — 13+00	CENTERLINE (C/L) & STATION
x 123.45	SPOT ELEVATION
120	CONTOURS
	RIP RAP
	STREET LIGHT
	WATER FIRE HYDRANT ASSEMBLY (FH)
	WATER GATE VALVE
10"W	WATER LINE (W)
6"SS	SANITARY SEWER LINE (SS)
S	SANITARY SEWER MANHOLE (SMH)
18"SD	STORM DRAIN LINE
D	STORM DRAIN MANHOLE (DMH)
	STORM DRAIN DROP INLET

ESTIMATED EARTHWORK QUANTITIES:

0 CY EXCAVATION

0 CY IMPORT/SURPLUS
(EARTHWORK IS BALANCED)

SITE SURFACING:

A. BUILDING COVERAGE (CANOPY)	4,295 SF	15%
B. SURFACED AREA	12,560 SF	43%
C. LANDSCAPED AREA	12,237 SF	42%
D. NATURAL AREA/OPEN SPACE	0 SF	
TOTALS:	29,092 SF	100%

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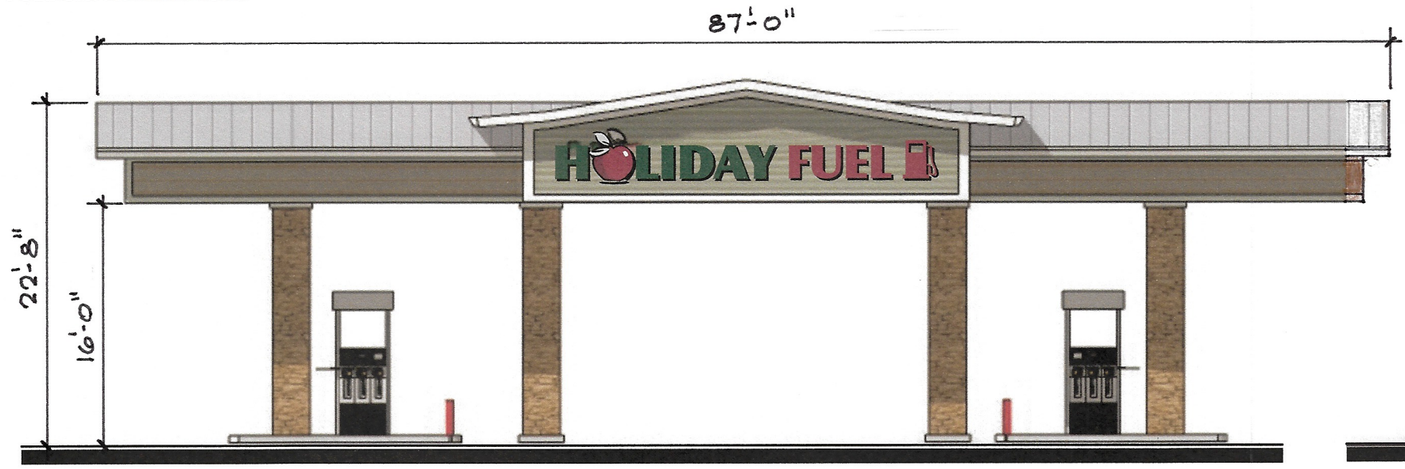
Auburn, California 95603
T: (530) 272-8328
E: Info@King-Engineering-Inc.com

NORTH STATE GROCERY, INC.

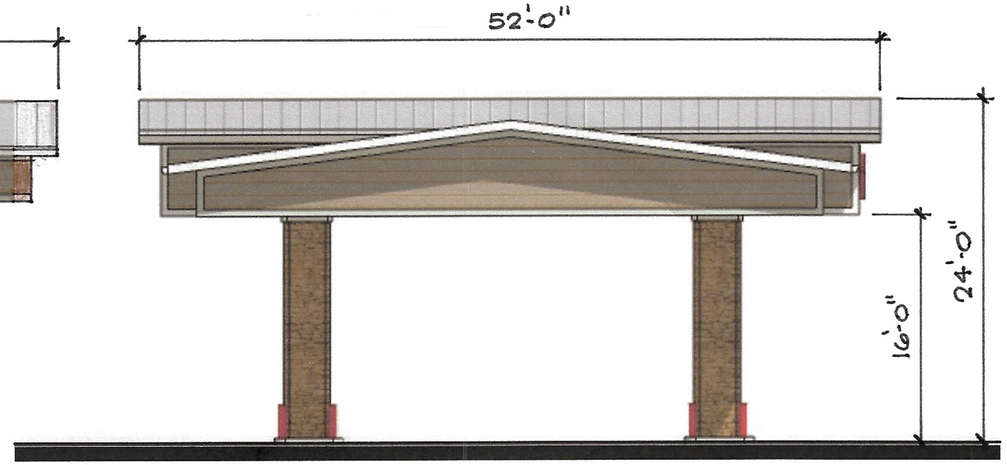
HIGGINS MARKETPLACE
LAKE OF THE PINES, CA

FUEL CENTER ELEVATION

FUEL CENTER CANOPY ELEVATION



STREET FACING ELEVATION



SIDE ELEVATION

FIELD SURVEY REQUIRED PRIOR TO FABRICATION

ATTACHMENT SPECIFICATIONS	FASTENER	BUILDING CONSTRUCTION TYPE
	#10 x 3" HEX WASHERHEAD STEEL ANCHOR SCREW	METAL, WOOD
	#10 x 3" HEX WASHERHEAD STEEL ANCHOR SCREW W/ ¼" PLASTIC SHIELDS	CONCRETE, BLOCK
	¼" REDHEADS/WEDGE ANCHORS	FIRED CLAY BRICK, MASONRY

ALL FASTENERS TO PENETRATE THROUGH ANY COATINGS OR STUCCO AND ATTACH TO BUILDING STRUCTURE

SOUTH (RIGHT) FUEL PUMP AND MARKET ELEVATION FROM STREET

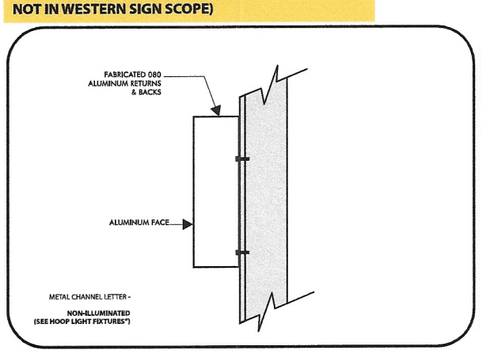
MANUFACTURE AND INSTALL ONE SET OF NON-ILLUMINATED LETTERS - (INDIRECT GOOSENECK LAMP LIGHTING BY OTHERS - NOT IN WESTERN SIGN SCOPE)

HOLIDAY FUEL:
"HOLIDAY": 5" DEEP DARK GREEN RETURNS
FACES PAINTED DARK GREEN (COLOR TBD BY HOLIDAY MARKET)
VINYL COPY ON "APPLE" LOGO (COLOR TBD BY HOLIDAY MARKET)
"FUEL": RED FACES

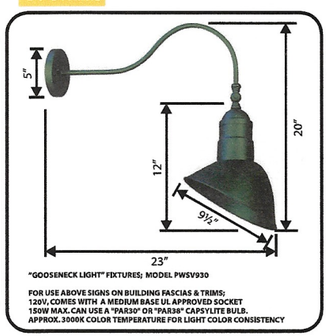
SCALE 1/8" = 1' - 0"

83.3sf

NON-ILLUMINATED LETTERS (INDIRECT GOOSENECK LAMP LIGHTING BY OTHERS - NOT IN WESTERN SIGN SCOPE)



BY OTHERS



"GOOSENECK LIGHT" FIXTURES; MODEL PWSV930

FOR USE ABOVE SIGNS ON BUILDING FASCIAS & TRIMS;
120V, COMES WITH A MEDIUM BASE UL APPROVED SOCKET
150W MAX. CAN USE A "PAR30" OR "PAR38" CAPSYLITE BULB.
APPROX. 3000K COLOR TEMPERATURE FOR LIGHT COLOR CONSISTENCY

WESTERN SIGN COMPANY
SINCE 1959
6221 ENTERPRISE DRIVE, DIAMOND SPRINGS, CA 95619
Phone 916.933-3765 • 530.622-1420 **Fax** 530.622-9367
E-Mail design@westernsign.com **Website** www.westernsign.com

SALESPERSON	Keith Wills
ILLUSTRATION	Perry Wilson
LOCATION	Lake of The Pines, CA
DATE	09/26/19
REVISED	10/29/19
	11/01/19
	12/27/19
	12/30/19
	01/06/20
	01/07/20
	01/13/20
	01/20/20
	02/11/20

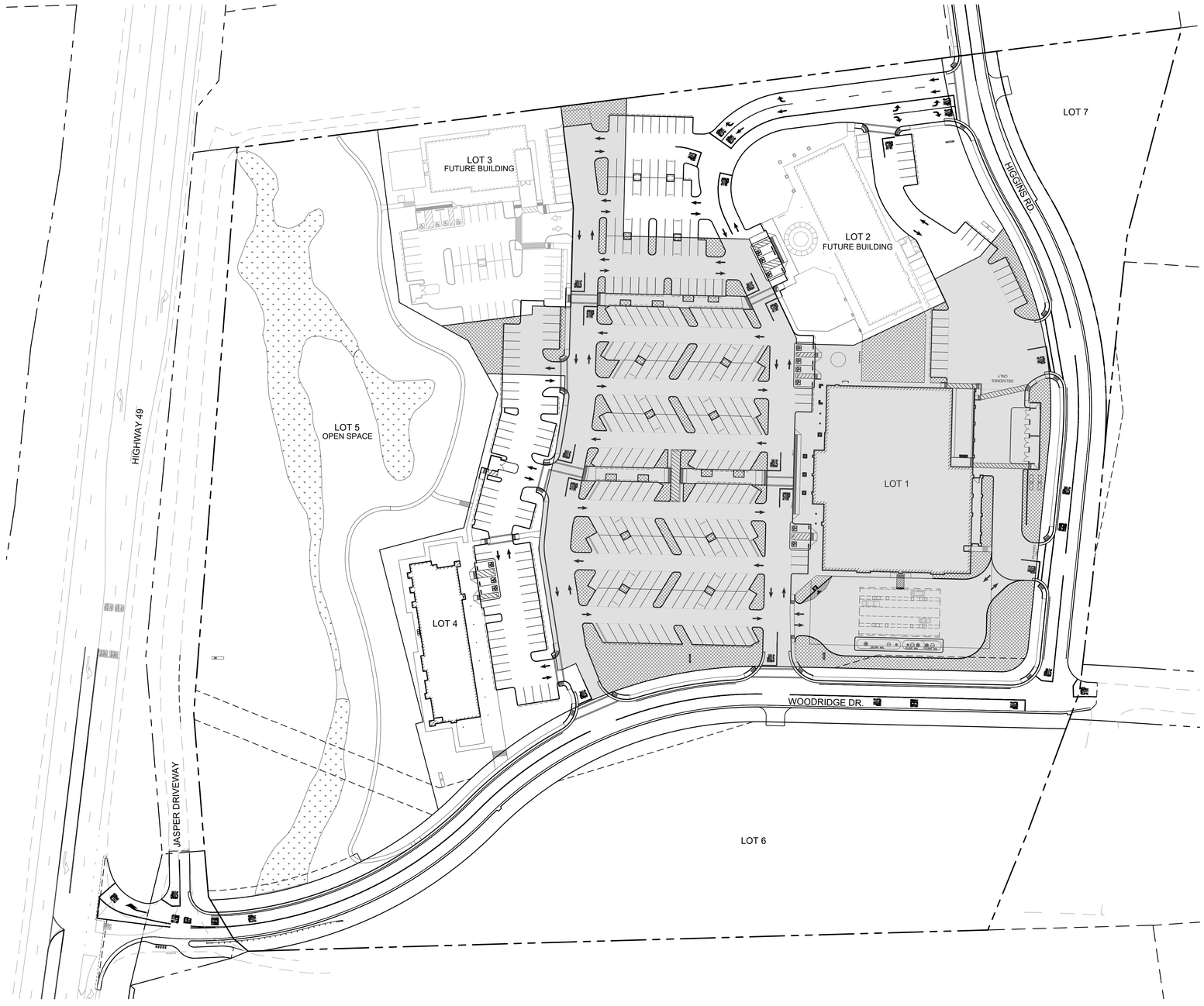
CUSTOMER APPROVAL _____ **DATE**_____

LANDLORD APPROVAL _____ DATE_____

SALESPERSON SIGNOFF _____ DATE_____

MEMBER OF THE INTERNATIONAL SIGN ASSOCIATION

CALIFORNIA SIGN ASSOCIATION



N

60 30 0 60

SCALE: 1" = 60'

LEGEND:

LOT 1 PERVIOUS AREA
17% 40,550 SF

LOT 1 IMPERVIOUS AREA
83% 199,930 SF

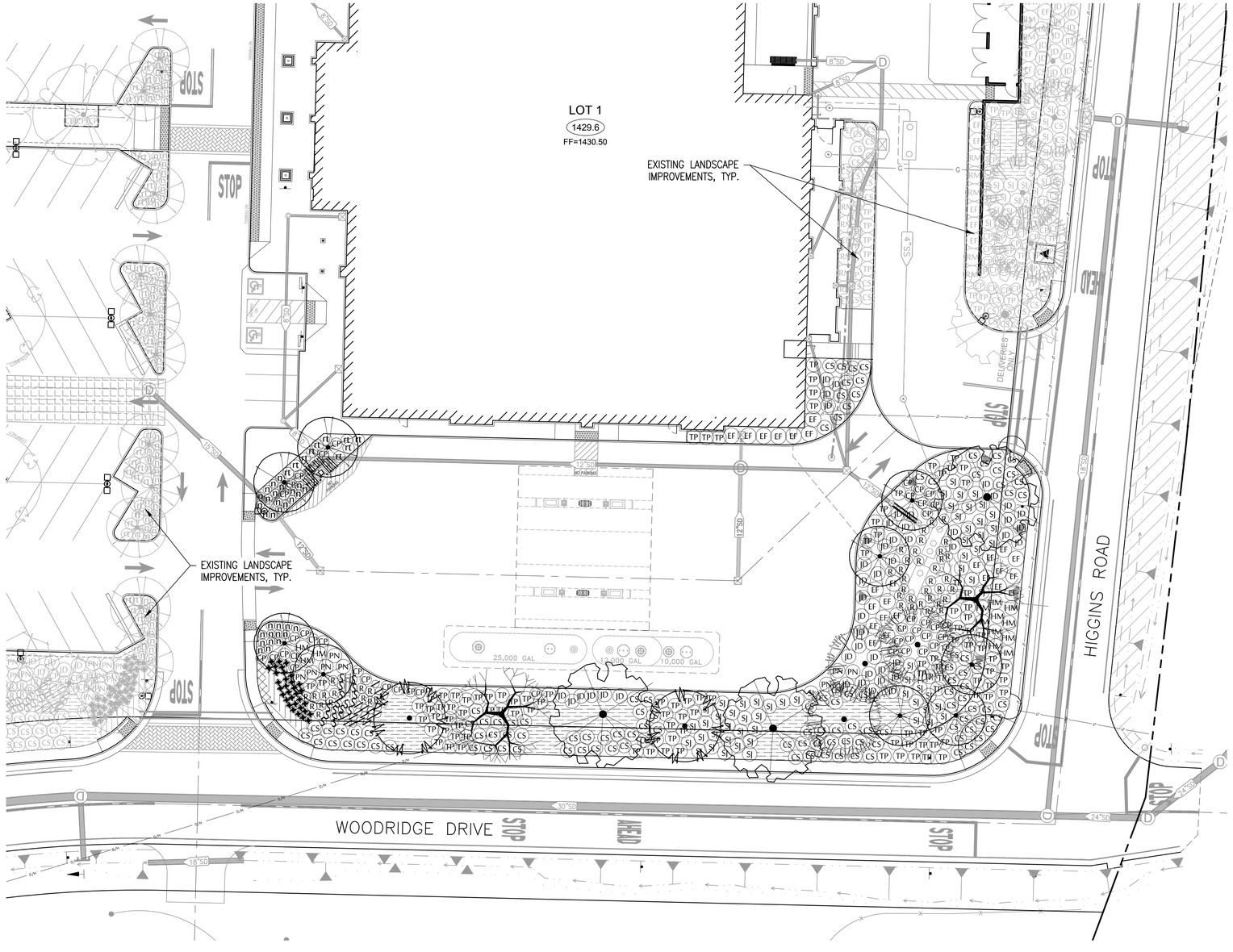
KING ENGINEERING
200 Auburn Folsom Road, Ste. 201 Telephone: (530) 272-8328
Auburn, California 95603 Email: King-Engineering-Inc.com

H:\1PROJ\18-02 HIGGINS MARKETPLACE\CAD\SHEET SETS\SERVICE STATION\PLANS\EXHIBITS\18-02 - IMPERVIOUS EXHIBIT.DWG 5/27/2020 9:56 AM

HIGGINS FUEL STATION

IMPERVIOUS AREA EXHIBIT

NEVADA COUNTY, CALIFORNIA
APRIL 2020



SYMB	INIT.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY.	COMMENTS
TREES							
	ACE BUE	*ACER BUERGERANUM*	TRIDENT MAPLE	15 GAL.	AS SHOWN	9	STANDARD
	CAL DEC	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	15 GAL.	AS SHOWN	3	NATURAL BRANCHED
	PIN PON	*PINUS PONDEROSA*	PONDEROSA PINE	15 GAL.	AS SHOWN	2	NATURAL BRANCHED
	QUE LOB	*QUERCUS LOBATA*	VALLEY OAK	15 GAL.	AS SHOWN	3	STANDARD
	QUE WIS	*QUERCUS WISLIZENII*	INTERIOR LIVE OAK	15 GAL.	AS SHOWN	2	STANDARD

SYMB	INIT	BOTANICAL NAME	COMMON NAME	SIZE	QTY	W/R	COMMENTS
SHRUBS							
HM	ARC HM	*ARCTOSTAPHYLLOS DENSIFLORA "HOWARD MCMINN"*	MANZANITA	5 GAL.	13	L	5.0' SPR., 5' HT.
JD	ARC JD	*ARCTOSTAPHYLLOS X. "JOHN DOURLEY"*	MANZANITA	5 GAL.	46	L	5.0' SPR., 3' HT.
TP	BAC TP	*BACCHARIS P. "TWIN PEAKS"*	DWF. COYOTE BRUSH	1 GAL.	109	L	4.0' SPR.; 2.5' HT.
CP	CIS PUR	*CISTUS PURPUREUS*	PURPLE ROCKROSE	5 GAL.	42	L	3.5' SPR., 3.5' HT.
EF	ELI FRU	*ELAEAGNUS PUNGENS "FRUITLANDII"*	SILVERBERRY	5 GAL.	25	L	5.5' SPR., 8' HT.
SJ	JUN SJ	*JUNIPERUS CHINENSIS "SAN JOSE"*	SAN JOSE JUNIPER	1 GAL.	58	L	5.0' SPR., 2' HT.
R	MUH RIG	*MUHLENBERGIA RIGENS*	DEER GRASS	1 GAL.	46	L	3.5' SPR., 3.5' HT.
PN	PUN NAN	*PUNICA GRANATUM "NANA"*	DWARF POMEGRANATE	5 GAL.	8	L	5.0' SPR., 3' HT.

SYMB	INIT	BOTANICAL NAME	COMMON NAME	SIZE	QTY	W/R	COMMENTS
GROUND COVER							
CS	CIS SASL	*CISTUS SALVIFOLIS*	SAGE LEAF ROCK ROSE	1 GAL.	115	L	5' SPR., 2' HT.
	LAV ANG	*LAVENDULIA ANGUSTIFOLIA 'BLUE CUSHION'*	ENGLISH LAVENDER	1 GAL.	12	L	2' SPR., 1.5' HT.
S	NAS TES	*NASSELA TENUSSIMA*	MEXICAN FEATHER GRASS	1 GAL.	18	L	2.5' SPR. 2' HT.
	PEN ORI	*PENNISETUM ORIENTALE*	FOUNTAIN GRASS	1 GAL.	18	L	2.5' SPR., 2' HT.
n	ROS FCR	*ROSA X NOARE "FLOWER CARPET RED"*	RED LANDSCAPE ROSE	1 GAL.	32	M	3.0' SPR., 2.5' HT.
rt	ROS KT	*ROSMARINAUS OFFICINALIS 'KEN TAYLOR'*	BUSH ROSEMARY	5 GAL.	10	L	4' SPR., 2.5' HT.
	LIR GIG	*LIRIOPE GIGANTEA*	GIANT LIRIOPE	1 GAL.	33	L	2' SPR., ±2.5' HT.

GENERAL PLANTING NOTES

1. ALL PLANTING AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM THAT WILL BE COMPLIANT WITH THE STATE'S WATER EFFICIENT LANDSCAPE ORDINANCE.
2. ALL SHRUB AND GROUNDCOVER AREAS SHALL RECEIVE A 3" LAYER OF BARK CHIP MULCH TOP DRESSING.
3. ALL GROUND MOUNTED HVAC UNITS, GAS & ELECTRICAL METERS, AND EQUIPMENT ETC. SHALL RECEIVE SHRUB SCREENING IN SHRUB AND GROUNDCOVER AREAS AROUND BUILDINGS.

PARKING LOT ANALYSIS - LOT 1

1. THE APPROVED HIGGINS MARKETPLACE SHOPPING CENTER PLANS MEET THE REQUIREMENTS THAT 40% OF THE PARKING AREA WILL BE COVERED WITH TREE CANOPY WITHIN 15 YEARS.
2. THE APPROVED HIGGINS MARKETPLACE SHOPPING CENTER PLANS MEET THE REQUIREMENTS FOR INTERIOR PARKING LOT LANDSCAPING OF 45 S.F. OF LANDSCAPE AREA FOR EACH PROVIDED PARKING STALL.
   REQUIRED: 215 STALLS X 45 S.F. = 9,675 S.F. PROVIDED: 20,995 S.F.

LANDSCAPE ANALYSIS

1. THERE IS A PROPOSED 23' LANDSCAPE BUFFER ALONG WOODRIDGE DRIVE.
2. THE APPROVED HIGGINS MARKETPLACE SHOPPING CENTER PLANS HAD 13,972 S.F. OF LANDSCAPE AREA.
3. THE PROPOSED FUEL STATION HAS 12,167 S.F. OF LANDSCAPE AREA.
4. THIS DESIGN HAS 1,805 S.F. LESS OF LANDSCAPE AREA, BUT LOT 1 STILL MEETS THE REQUIREMENTS FOR PARKING LOT LANDSCAPING.

FUHRMAN LEAMY
LAND GROUP
DESIGN • SERVICE • SOLUTIONS
2140 PROFESSIONAL DRIVE, SUITE 115
ROSEVILLE, CALIFORNIA 95661
916.783.5263 • FLLANDGROUP.COM

JOB NO. : KEI:20014

CONSULTANT

PROJECT:

HIGGINS FUEL STATION

WOODRIDGE CT
NEVADA COUNTY, CA

CLIENT:

KATZ KIRKPATRICK PROPERTIES

REVISIONS	DATE
△	
△	
△	
△	

ISSUE		DATE
1	1ST SUBMITTAL	04.13.2020
2	2ND SUBMITTAL	07.03.2020
3		
4		
5		

REGISTERED LANDSCAPE ARCHITECT
KEVIN C. LEAMY
No. 4985
12-31-20
Renewal Date
STATE OF CALIFORNIA

DRAWN : KCL
CHECKED : KCL
SCALE: : 1"=20'-0"

SHEET TITLE:

PRELIMINARY LANDSCAPE PLAN

SHEET

PL-1

1 OF 1 SHEETS

NORTH STATE GROCERY, INC.

HIGGINS MARKETPLACE
LAKE OF THE PINES, CA

MONUMENT SIGNS

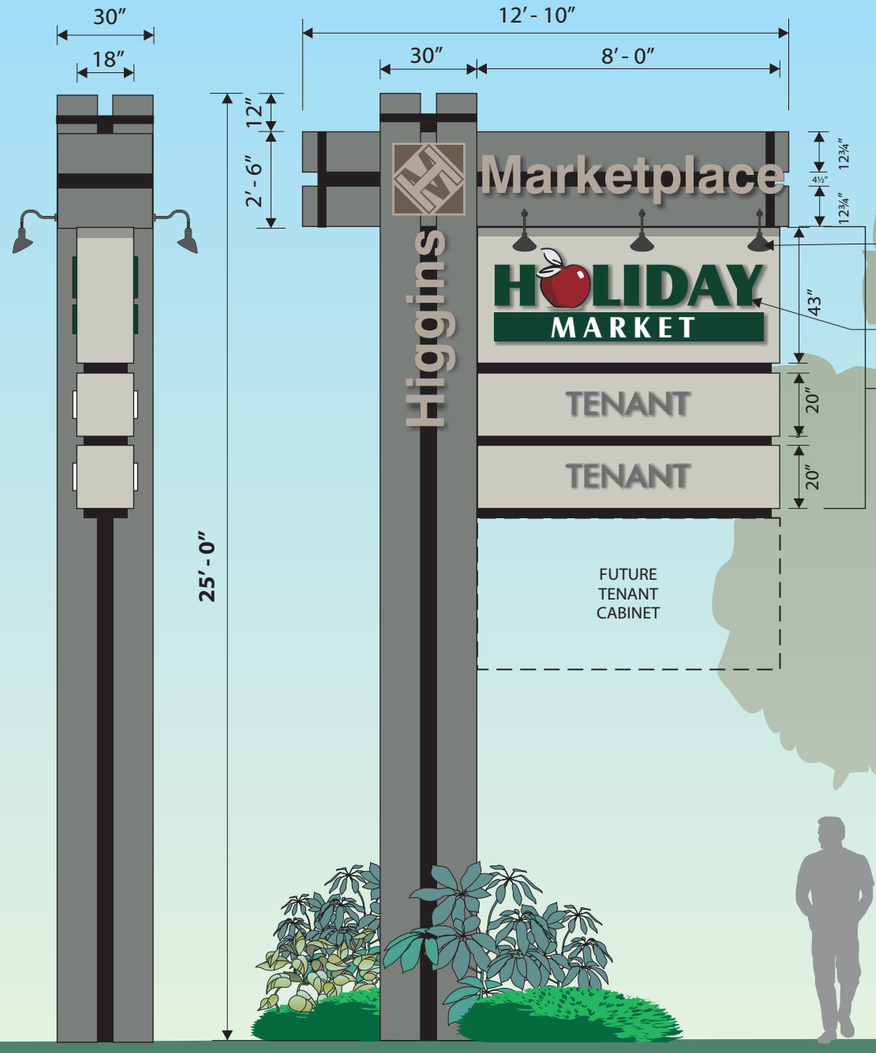
A

MANUFACTURE & INSTALL ONE D/F NON-ILLUMINATED DIRECTORY SIGN

CONSTRUCTION
- ALUMINUM POSTS & CROSSBARS: COLOR: ICI "ARROW WOOD"
- TENANT PANELS COLOR: ICI "SOAPSTONE"
- REVEALS AND HARDWARE BLACK
- CENTER I.D.: F.C.O. LETTERS COLOR: ICI "SOAPSTONE"

TENANT CABINETS
- ALUMINUM FACES WITH F.C.O. TENANT COPY W/ VINYL OVERLAYS

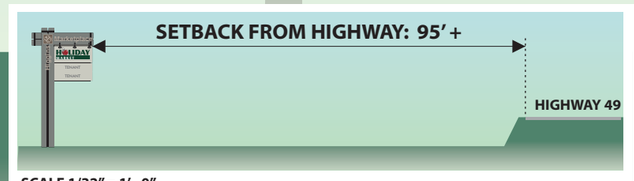
GOOSENECK HOOP LIGHT EXTERIOR ILLUMINATION



SETBACK FROM HIGHWAY: 90′ + (NTS)

OVERALL SIGN PANEL SQUARE FOOTAGE: 55.328 SF

SCALE ¼″ = 1′ - 0″



SCALE 1/32″ = 1′ - 0″

WESTERN SIGN COMPANY
SINCE 1959

6221 ENTERPRISE DRIVE, DIAMOND SPRINGS, CA 95619

Phone 916.933-3765 • 530.622-1420 **Fax** 530.622-9367
E-Mail design@westernsign.com **Website** www.westernsign.com

SALESPERSON	Keith Wills		
ILLUSTRATION	Perry Wilson		
LOCATION	Lake of The Pines, CA		
DATE	02/15/10	11/01/19	06/02/20
REVISED	02/20/10	12/27/19	06/10/20
	03/27/18	12/30/19	06/22/20
	10/24/18	01/06/20	06/23/20
	10/25/18	01/07/20	08/03/20
	11/08/18	01/13/20	08/05/20
	09/26/19	01/20/20	**08/12/20**
	10/29/19	02/11/20	

CUSTOMER APPROVAL _____ **DATE**_____

LANDLORD APPROVAL _____ DATE_____

SALESPERSON SIGNOFF _____ DATE_____

MEMBER OF THE INTERNATIONAL SIGN ASSOCIATION

CALIFORNIA SIGN ASSOCIATION

NORTH STATE GROCERY, INC.

HIGGINS MARKETPLACE
LAKE OF THE PINES, CA

MONUMENT SIGNS

SETBACK FROM HIGHWAY: 95’ +

HIGHWAY 49

SCALE 1/8” = 1’ - 0”

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SALESPERSON SIGNOFF _____ DATE_____

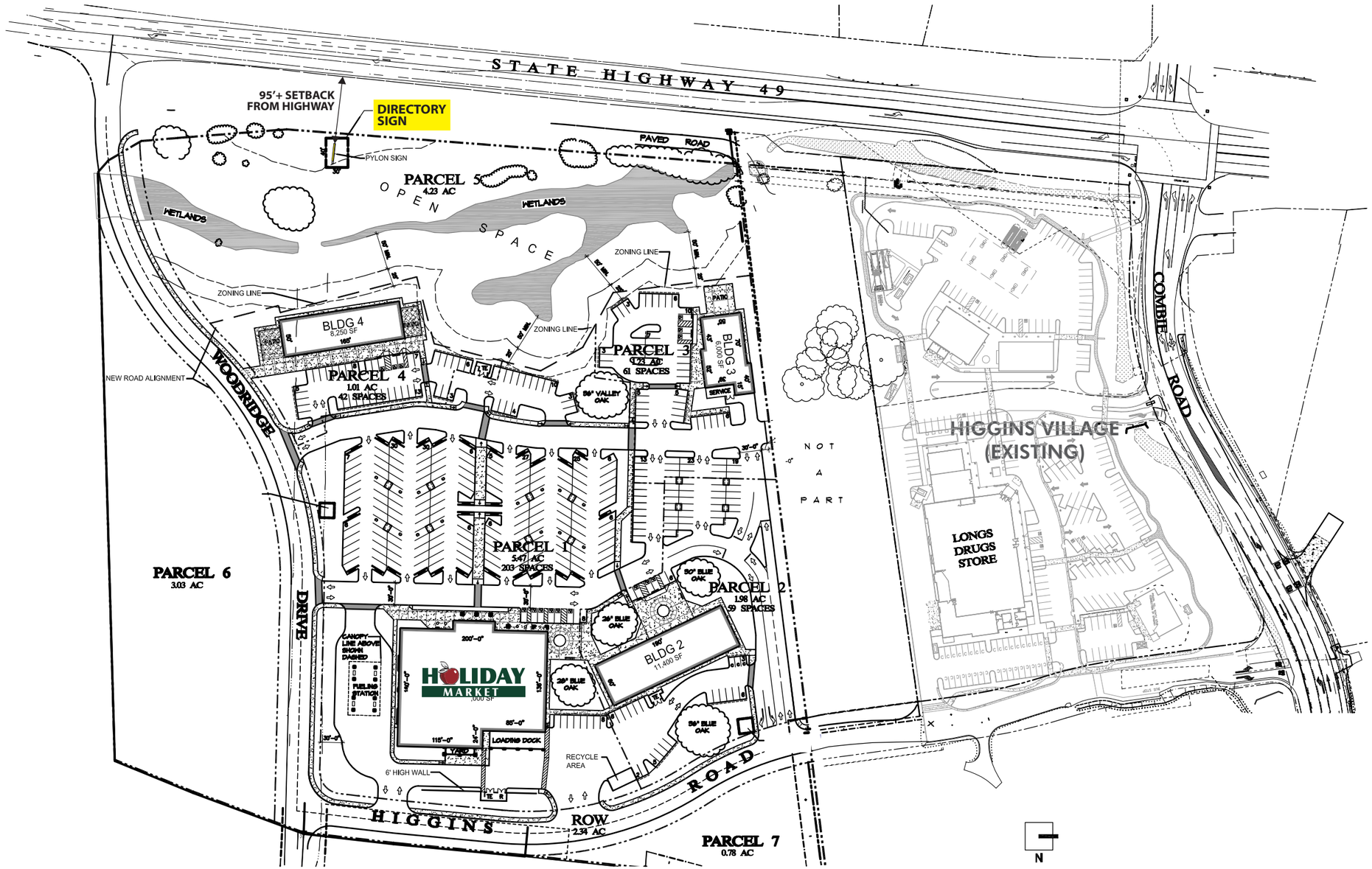
MEMBER OF THE ISA INTERNATIONAL SIGN ASSOCIATION

CSA CaliforniaSignAssociation

NORTH STATE GROCERY, INC.

HIGGINS MARKETPLACE
LAKE OF THE PINES, CA

SITE PLAN



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LANDLORD APPROVAL _____ DATE_____

SALESPERSON SIGNOFF _____ DATE_____

NORTH STATE GROCERY, INC.

HIGGINS MARKETPLACE
LAKE OF THE PINES, CA

D

AREA MAP

WESTERN SIGN COMPANY
SINCE 1959

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