COUNTY OF SANTA BARBARA
Planning and Development
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Attachment 2

Revised Final Mitigated Negative Declaration
15NGD-00000-00002
Sierra Grande Rural Recreation Project
13CUP-00000-00012

June 27, 2016

Owner/Applicant
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1.0 REQUEST/PROJECT DESCRIPTION

A request of Stuart Gildred for approval of a Major Conditional Use Permit on property zoned Agriculture (AG-II-100) in compliance with Section 35.82.060 of the County Land Use and Development Code, to allow for a Zip Line Tour and Ropes Course (see Attachment 2).

The project also includes a request to change the use of an existing 4,477 sq. ft. warehouse (including 395 sq. ft. of restroom facilities) to be used as the orientation center for the operations of the proposed ropes course and zip line. The existing restroom located inside the warehouse would be renovated and two new restroom facilities will be created within the existing restroom area. The overall footprint for the orientation center would not change. In addition, the project includes removing an existing, permitted mobile home used as an employee dwelling from the project site and converting an existing storage building (that was previously used as agricultural employee dwelling) back to an agricultural employee dwelling.

Access. The primary access for the project would be via an existing 20-foot wide ~~paved~~ private driveway that extends southward from Highway 246. The driveway is mostly paved and has an all-weather surface where it crosses the Santa Ynez River. The driveway is located within an existing non-exclusive 60-foot wide easement for ingress and egress purposes. The applicant is proposing to flare the existing driveway ~~entrance~~ edges to allow eastbound vehicle traffic to decelerate and make a safe turning movement into the project site, and to allow eastbound traffic leaving the project site and turning right onto Highway 246 to accelerate without affecting existing Highway 246 traffic flow. The proposed driveway flares would require Caltrans approval of an encroachment permit and must be completed and accepted by Caltrans prior to the start of project operation. Secondary emergency access would be provided via an exclusive 17- to 20-foot wide paved road and at-grade connection to U.S. Highway 101 located south of the Santa Rosa Road interchange.

There are existing all-weather surface trails throughout the subject properties. The all-weather surfaced trails would be utilized for maintenance of the zipline course. Emergency vehicles would access areas of the zip line course via the existing all-weather surface trails.

Parking. Parking for both the ropes course and zip line operations would be provided ~~by an existing~~ in an existing cleared area located adjacent to the existing access road. A total of 45 parking spaces would be provided on the Sierra Grande Ranch property, (APN 137-270-033). Parking spaces would be a minimum of 9 feet by 16.5 feet.

Operational Information. After parking, signage will direct visitors to the orientation center to be housed in an existing 4,477 sq. ft. warehouse structure with restrooms on the site. The project proposes a change of use for this structure from the existing warehouse use to the project's orientation center and restroom facilities. The project proposes to renovate the existing 395 sq. ft. restroom area, which is connected to the warehouse and create 2 restroom facilities totally within the same 395 sq. ft. footprint. Picnic tables would be provided in the vicinity of the orientation center and would be available for use by persons that have made zipline and ropes course reservations.

The zip line and ropes course would operate 7-days a week between the hours of 8:00 a.m. and 6:00 p.m. during the summer months (i.e., June to September) and 8:00 a.m. and 5:00 p.m. during the remaining part of the year. The project would not operate during or immediately after periods of inclement weather. It is anticipated that the project would host approximately 40-50 visitors per day in the non-peak season (October to May) and up to 80 visitors per day in the peak summer season. It is also anticipated that there would be overlap between the visitors for the zip line and the ropes course. The zip line tour lasts approximately 90 minutes and the ropes course lasts about 60 minutes. All zipline and ropes course participants will be required to make an advance reservation for facility use. It is anticipated that after completing the zipline or ropes course tours, some participants may wish to "crossover" from the zipline or ropes course and use the other facility if space is available.

With the anticipated rates of facility crossover, it is estimated that approximately 90 percent of Zip line tours would be arranged by appointment and 70 percent of the ropes course visitors would have reservations. The zipline would have a maximum attendance of 20 people at a time. ~~Visitors would be allowed to use both the zip line and ropes courses.~~ While no food preparation is proposed onsite, bottled water and pre-packaged food (i.e., energy bars, etc.) would be available for purchase at the orientation center.

An objective of the Project is to connect young people and their families to the outdoors. It is also an objective of the Project to cooperate with local youth organizations by periodically offering no- and low-cost use of the zipline and ropes course facilities. Attendance at the project site by members of youth organizations would occur during non-peak operating times, such as weekdays and/or during non-summer months, and would be consistent with the Project's maximum daily attendance limit of 80 persons per day.

Employees. The zip line and rope course operation would employ a total of 7 to 10 people with a maximum of 5 employees on site at any given time.

Zip line. The zip line course consists of ~~seven~~ 20 poles. ~~18~~ All of the zipline poles would be located on the High Lonesome Ranch (APNs 137-270-031 and 137-280-017). ~~and the remaining 2 poles would be located on the Sierra Grande Ranch property (APN 137-270-033).~~ Each pole would be approximately 20 feet in height and 12 inches-18 inches in diameter. The poles are 30 feet in length, with approximately 10 feet buried, leaving 20 feet of pole height exposed. Zipline cables would be transported and installed between the support poles using a variety of methods, including: the use of small temporary poles and pulleys in areas where topography is relatively level and vegetation is sparse; using a "bean bag canon" that shoots a bean bag and an attached line approximately 500 feet and that line is used to pull a rope that is then used to pull the zipline cable; or transporting the cable by helicopter in areas with steep topography or dense vegetation. Visitors to the zip line course would be shuttled to the first zip line (Zip line 0) by shuttle van via an existing 16-foot wide paved private driveway. An existing 20-foot wide all weather surface access road, approximately one eighth of a mile in length would provide access to the first zip line. The drop off point for the zip line 0 provides sufficient area for emergency vehicle turn around and would be utilized by emergency vehicles, if necessary.

The road to the first zip line is the only portion of the project that would require the use of a vehicle, driven by the zip line operator. From the second to the fifth ~~fourth~~ zip line, visitors would walk via existing all-weather surface trails with a width of 12 feet – 16 feet. The termination point of the fifth ~~fourth~~ zip line would be a short walk from the orientation center.

Zip line 0 is an orientation zip line and is a shorter zip line (421 ft in length) than any of the other Zip lines. Zip line 0 is the first zip line visitors would encounter and is used to get the visitors acquainted with the feeling of being on a zip line. Visitors would be harnessed and receive explicit instruction about safe zip lining behavior. The next zip line (Zip line 1) would be located within walking distance of zip line 0.

All zip lines would be dual zip lines so that 2 people can zip at the same time. Each of the zip lines will have a platform for take-off and landing. The zip line platforms would be either 5 feet by 5 feet or 10 feet by 15 feet and would be made of wood. Each zip line pole would require a wood platform at grade level to allow users to access the zip line as well as minimize soil movement. Grading associated with installation of the zip line platforms would occur by hand.

The development footprint associated with the zip line course is approximately 847 sq. ft. (14 sq. ft. of pole area and 833.3 sq. ft. of zip line guide wires).

Ropes Course. The ropes course would be located a short distance from the orientation center on the Sierra Grande Ranch (APN 137-270-033) and accessed via an existing paved driveway. The area designated for the ropes course would be approximately 2,000' long by 50-200' wide. The ropes course would include a high and low element with a maximum of three levels utilizing approximately 50 poles. The poles are 60', with approximately 10' buried, leaving 50' height exposed. The high elements would be constructed either in trees or utilize utility-type poles. The elements range in height from 12' off the ground to approximately 42' off the ground. The ropes course would be designed and constructed through the crowns of mature oaks. The ropes course would consist of a high and low element. Participants in the ropes course canopy tour would be harnessed with a belay at all times and guides would be present in both the low and higher elements to ensure complete safety and appropriate navigation of the course itself. Any poles installed within the ropes course would be independent of trees and used for attaching cables, platforms, ladders and other ropes course equipment. Platforms and cables would be attached to trees without invasive hardware in order to preserve the health and structure of trees. The preliminary tree protection measures contained in the Arborist Oak Tree Assessment (December 2013) would be adhered to. While at the project site, zipline and ropes course participants may observe the ropes course by hiking around the perimeter of the course, primarily along its north side along an existing roadway.

Interpretive Materials. To facilitate and enhance educational opportunities, the Project would provide interpretive signs that would include features such as information boards, photographs and pictures, maps or plans, display cases and models, slides, sound or multimedia devices. All interpretative materials would be located in and around the orientation center building and the ropes course area.

Lighting. There will be no additional lighting for either the zip line or the ropes course. There is one outdoor light on the warehouse which would remain.

Grading. Construction of the proposed zipline and ropes course would require less than one cubic yard of grading. The proposed driveway flares along Highway 246 would require minimal ground disturbance and would result in the installation of approximately ~~1,000~~ 2,000 square feet of asphalt paving. Construction of the driveway ~~taper~~ deceleration flare would require the removal of one 26-inch diameter oak tree, and construction activities within the dripline of another 26-inch diameter oak tree. The construction of the driveway acceleration flare would have the potential to impact approximately two large landscape trees that are in poor to fair condition, and one small oak tree that has a trunk diameter of less than six inches measured at a location 4.5 feet above ground level.

Services. Water service would be provided by an existing water well. Wastewater disposal would use a proposed new septic system that would replace an existing system. No additional utilities besides what already exist on the project site would be needed for the proposed project. Trash and recycling receptacles would be placed alongside the proposed orientation center and in the parking lots. Restroom facilities would be located within the proposed Orientation center.

2.0 PROJECT LOCATION

The proposed project is located on the Sierra Grande and Lonesome Ranch properties identified as Assessor's Parcel Numbers 137-270-033, -031, and 137-280-017 located approximately one half mile east of Highway 101 and approximately 1,000 feet southwest of the City of Solvang limit line and lies within the Third Supervisorial District. The properties total approximately 1,186 acres. Each ranch property has its own Agricultural Preserve Contract. See Attachment 1 and similar aerial photo on cover.

2.1 Site Information	
Comprehensive Plan Designation	Rural Area, Commercial Agriculture (AC), One dwelling unit per legal lot. Located within a portion of the Santa Ynez Community Plan area.
Zoning District, Ordinance	Land Use Development Code, AG-II-100, Agriculture, 100 acre minimum parcel size, High Fire Hazard Area
Site Size	1,188.82 acres gross/net
Present Use & Development	13 Existing Structures (6 Residential, 7 Agricultural) Total Square Footage: 29,060 square feet
Surrounding Uses/Zoning	*North:* Santa Ynez River, Mining, AG-II-100; 100-AG *South*: Cattle Grazing, AG-II-100 *East:* Cultivated Agriculture and Cattle Grazing, AG-II-100 *West:* Cattle Grazing and Mining, AG-II-100
Access	Direct Access off of Highway 101
Public Services	*Water Supply:* Private Well(s), 2 domestic *Sewage:* Septic System *Fire:* Santa Barbara County Fire Protection, Station: 31 *Schools:* Solvang Elementary, Santa Ynez Valley High School District

3.0 ENVIRONMENTAL SETTING

3.1 PHYSICAL SETTING

The project site slopes gently downward from the south to the north. The Santa Ynez River traverses the northern edge of the site. The project site ranges from a low elevation of 350 feet above mean sea level to 550 feet above mean sea level. The western portion of the site contains dense oak woodland while the eastern portion of the site contains a sporadic dispersion of oaks surrounded by non-native grassland. Soils onsite consist primarily of clay loams to the south and transition to sandy loams to the north. There is one known archaeological site near the subject property. The surrounding land uses include mining operations and residential ranchette development to the north, cultivated agriculture to the east, and cattle grazing to the south and west. The project site contains 13 existing structures (6 residential, 7 agricultural) with a total development area of 29,060 square feet.

3.2 ENVIRONMENTAL BASELINE

The environmental baseline from which the project's impacts are measured consists of the physical environmental conditions in the vicinity of the project, as described above.

4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is defined as follows:

Potentially Significant Impact: A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

Less Than Significant Impact with Mitigation: Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to a Less Than Significant Impact.

Less Than Significant Impact: An impact is considered adverse but does not trigger a significance threshold.

No Impact: There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

Reviewed Under Previous Document: The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case and is summarized in the discussion below. The discussion should include reference to the previous documents, a citation of the page(s) where the information is found, and identification of mitigation measures incorporated from the previous documents.

4.1 AESTHETICS/VISUAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view?			X		
b. Change to the visual character of an area?			X		
c. Glare or night lighting which may affect adjoining areas?				X	
d. Visually incompatible structures?			X		

Setting:

Physical:

The proposed project site is located immediately south of the Santa Ynez River, approximately one half mile east of Highway 101 and 1,000 feet southwest of the City of Solvang. Portions of the project site are visible from Highway 246. Public views in this area are predominantly from Highway 246 and are mixed with the Santa Ynez River and the Santa Ynez Mountain range to the south and the City of Buellton to the east and west. The primary public viewshed from the project site is rural to the south, urban to the east and west and semi rural to the north.

Regulatory:

County Environmental Thresholds. The County's Visual Aesthetics Impact Guidelines classify coastal and mountainous areas, the urban fringe, and travel corridors as "especially important" visual resources. A project may have the potential to create a significantly adverse aesthetic impact if (among other potential effects) it would impact important visual resources, obstruct public views, remove significant amounts of vegetation, substantially alter the natural character of the landscape, or involve extensive grading visible from public areas. The guidelines address public, not private views.

Impact Discussion*:*

(a, b, d) Less than significant. The proposed project is a request for a Conditional Use Permit for construction and operation of a zipline and ropes course that would be open to the public. The zip line tour consists of five ~~four~~ separate aerial guy wire segments that traverse the north side of a portion of the Santa Ynez Mountains. The project would be located approximately one mile south of Highway 246. The zipline course consists of 20 ~~10~~ wooden poles approximately 12-18 inches in diameter and 30 feet long with approximately 10 feet buried, leaving a 20-foot height exposed. None of the poles would project above the ridgeline. The zipline guy wires would be made of steel and would be gray in color. Most of

the zipline infrastructure (i.e. lower sections of the support poles, landing platforms) would be nestled within the existing oak woodland canopy and would not be visible from public view with the exception of the top portion of the support poles and guy wires which would be above the oak woodland canopy. Although the top portion of the support poles and guy wires would be partially visible from Highway 246, the dark color of the support poles and guy wires would be subordinate in appearance to the surrounding geography. Additionally, both the guy wires and the support poles are relatively small features that would not be readily visible from a distance.

~~As a result,~~ The distance of the zipline project from public views, and the small nature and appearance of the support poles and guy wires would have a minimal effect on the quality of view to the Santa Ynez Mountains. Further, adherence to the Land Use & Development Code Hillside and Ridgeline Development provisions which require the project to obtain approval by the Board of Architectural Review would further ensure that impacts would remain less than significant. These County regulations would ensure that specific size and site design of the zipline would be compatible with the surrounding community. Therefore, the proposed zipline course would be compatible with the character of the surrounding natural environment and would not cause an obstruction of any scenic vista or views open to the public or create an aesthetically offensive site open to public views.

The proposed ropes course would occupy an area approximately 2,000' long by 50-200' wide at the foot of the Santa Ynez Mountains. The ropes course would be located a short distance from the orientation center, within oak woodland adjacent to a paved access road and a number of agricultural structures. The support poles for the ropes course would be 60' long with approximately 10' buried, leaving a 50 foot height exposed. The ropes course would be designed and constructed through the crowns of mature oaks and would not be visible from Highway 246. As a result, the ropes course would not be visually prominent from the perspective of travelers on Highway 246, and would not substantially alter this area's semi-rural visual character. Therefore, the project course would be compatible with the character of the surrounding natural environment and would not cause an obstruction of any scenic vista or views open to the public or create an aesthetically offensive site open to public views.

<u>The construction of both the proposed deceleration driveway flare and the required acceleration flare have been requested by Caltrans to improve traffic safety conditions at the project site access driveway intersection with SR 246. The construction of the proposed deceleration flare would result in the removal of one 26-inch oak tree, and would impact but not remove another oak tree. Recommended mitigation measure/condition of approval (condition of approval No. 3j) requires that the removed and impacted oak trees be replaced at a 10:1 ratio. The required acceleration flare could result in impacts to two large non-native landscape trees that are in poor to fair condition, and impacts to one small oak tree that has a trunk diameter of less than six inches at a height of 4.5 feet above the ground. Impacts to these trees resulting from the construction of the acceleration taper may result from construction activities that occur adjacent to the trees. The two landscape trees and the small oak tree are not protected trees and no replacement trees are required as mitigation for impacts to those trees. Overall, the removal of one oak tree and impacts to four other trees (depending upon the final design of the required acceleration flare) adjacent to the project site access driveway would not remove a substantial amount of vegetation and would not adversely change the existing visual conditions in the project area that can be seen by the public while traveling along SR 246. Therefore, impacts to trees located adjacent to the project site access driveway would not result in a significant environmental impact related to scenic resources.</u>

(c) ***No Impact.*** The project does not include any proposed lighting. Therefore, there would be no impacts associated with glare or night lighting.

Cumulative Impacts: The implementation of the project is not anticipated to result in any substantial change in the aesthetic character of the area since views of the project would be limited and the proposed zipline and ropes course would be subordinate in appearance with the surround geography. Thus, the project would not cause a cumulatively considerable effect on aesthetics.

4.2 AGRICULTURAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?			X		
b. An effect upon any unique or other farmland of State or Local Importance?			X		

Setting:

Background

Agricultural lands play a critical economic and environmental role in Santa Barbara County. Agriculture continues to be Santa Barbara County's major producing industry with a gross production value of over $1 billion (Santa Barbara County 2007 Crop Production Report). In addition to the creation of food, jobs, and economic value, farmland provides valuable open space and maintains the County's rural character.

Physical:

Historical land use activities on the 1,188 acre site include horse boarding, dry farming of forage crops and seasonal cattle grazing. The parcel was once part of a large wild horse ranch known as the Gardner Ranch. Agricultural production totals approximately 150 acres including 120 acres of dry farmed forage such as oat hay and 30 acres of irrigated flowers grown for seed. The flower operation is leased to another grower as is a portion of the dry farming area. The remaining dry farmed acreage is sharecropped between a lease holder and the owner. Forage cropland is leased to a cattle operation for a few months every year following harvest to graze on the stubble. Water for cattle and crops is obtained from an on-site agricultural well and series of irrigation pipes. Slopes onsite range from 2% to 15% and soils consist primarily of clay loams to the south and transition to sandy loams to the north. The site contains approximately 86 acres of prime soils (Irrigated Capability Class I and II) including 56 acres of Ballard Fine Sandy loam (Class II) soils with 2% to 9% slopes, 15.3 acres of Sorrento loam (Class II) soils with 2% to 9% slopes, and 14.8 acres of Mocho loam soils that are nearly level. The majority of prime soils is already under agricultural production and located on the eastern half of the project site, primarily in the area designated as proposed Parcel 2. Important Farmland Maps (2006) designated the 160 acres of agriculture as Farmlands of Local Importance. The remaining land is designated as Grazing land or "Other". In Santa Barbara County, Farmland of Local Importance is land which is important to the local economy such as permanent pasture and dry land farming crops such as cereal grains (wheat, barley or oats), sudan grass, and beans. Neither the proposed zip line or ropes course would be located within areas identified as prime soils.

***Regulatory*:**

State Regulations

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive reduced property tax assessments because they are based upon actual land use (i.e., farming and open space uses) as opposed to full market value of the property (California Department of Conservation 2011a). According to the California Department of Conservation, Division of Land Resource Protection, as of July 2005, all

counties within the State offer Williamson Act contracts except Del Norte, Los Angeles, San Francisco,Inyo, and Yuba Counties (California Department of Conservation 2011a).

***County Thresholds Manual*:**

The County's Agricultural Resources Guidelines (approved by the Board of Supervisors, August 1993) provide a methodology for evaluating agricultural resources. These guidelines utilize a weighted point system to serve as a preliminary screening tool for determining significance. The tool assists planners in identifying whether a previously viable agricultural parcel could potentially be subdivided into parcels that are not considered viable after division. A project which would result in the loss or impairment of agricultural resources would create a potentially significant impact. The Point System is intended to measure the productive ability of an existing parcel as compared to proposed parcels. The tool compares availability of resources and prevalent uses that benefit agricultural potential but does not quantifiably measure a parcel's actual agricultural production.

Initial Studies are to use this Point System in conjunction with any additional information regarding agricultural resources. The Initial Study assigns values to nine particular characteristics of agricultural productivity of a site. These factors include parcel size, soil classification, water availability, agricultural suitability, existing and historic land use, comprehensive plan designation, adjacent land uses, agricultural preserve potential, and combined farming operations. If the tabulated points total 60 or more, that parcel is considered viable for the purposes of analysis. The project would be considered to have a potentially significant impact if the division of land of a viable parcel would result in parcels that did not either score over 60 in themselves or resulted in a score with a significantly lower score than the existing parcel. Any loss or impairment of agricultural resources identified using the Point System could constitute a potentially significant impact and warrants additional site specific analysis.

For properties enrolled in Land Conservation/Williamson Act contracts, the Agricultural Preserve Advisory Committee (APAC) provides a Determination of Consistency or Inconsistency with the Uniform Rules in an advisory capacity to the Board of Supervisors.

County Comprehensive Plan:

Goal I of the Santa Barbara County Comprehensive Plan Agricultural Element states: "Santa Barbara County shall assure and enhance the continuation of agriculture as a major viable production industry in Santa Barbara Country. Agriculture shall be encouraged. Where conditions allow, (taking into account environmental impacts) expansion and intensification shall be supported".

Impact Discussion:

(a-b) ***Less than significant Impacts:*** The proposed project does not involve a subdivision of land, nor would the project permanently convert the agricultural potential of the subject parcels. Therefore, the point analysis was not used to analyze the proposed project.

The project proposes the construction and operation of a zip line and ropes course. The zip line course would be located on a portion of the project site which is predominantly covered with existing chaparral and oak woodland vegetation on slopes exceeding 20%. The ropes course would be located in an area that is relatively flat in topography but would be placed within existing oak woodland vegetation. Due to the extensive vegetation and steep slopes, the areas identified for the zip line and ropes course are not currently used for agriculture.

The subject parcels are under agricultural preserve contracts. The Agricultural Preserve Advisory Committee reviewed the proposed project on October 4, 2013 and again on August 14, 2015 and found it to be compatible with the Uniform Rules for Agricultural Preserves. The proposed project would not

result in the conversion of highly productive agricultural lands. As a result, impacts to agricultural resources would be **less than significant**.

Cumulative Impacts:

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant issue constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for agricultural resources. Therefore, the project's contribution to the regionally significant loss of agricultural resources is not considerable, and its cumulative effect on regional agriculture is less than significant.

Mitigation and Residual Impact: No mitigation is required. Residual impacts would be less than significant.

4.3 AIR QUALITY

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?			X		
b. The creation of objectionable smoke, ash or odors?			X		
c. Extensive dust generation?			X		
Greenhouse Gas Emissions	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
d. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
e. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X		

County Environmental Threshold:

Chapter 5 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (as amended in 2006) addresses the subject of air quality. The thresholds provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- emit (from all project sources, mobile and stationary), less than the daily trigger for offsets for any pollutant (currently 55 pounds per day for NOx and ROC, and 80 pounds per day for PM_{10});
- emit less than 25 pounds per day of oxides of nitrogen (NOx) or reactive organic compounds (ROC) from motor vehicle trips only;
- not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and
- be consistent with the adopted federal and state Air Quality Plans.

No thresholds have been established for short-term impacts associated with construction activities. However, the County's Grading Ordinance requires standard dust control conditions for all projects involving grading activities. Long-term/operational emissions thresholds have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary source emissions (i.e., stationary boilers, engines, paints, solvents, and chemical or industrial processing operations that release pollutants).

Impact Discussion:

(a, c) ***Less than significant.*** Short-Term Construction Impacts. The proposed project would require less than one cubic yard of earthwork in less than a one month period. Short term construction impacts resulting from the proposed project would occur during grading and site preparation ~~for installation of the proposed agricultural employee dwellings, and trenching for installation of water lines~~. Minimal hand grading is proposed in the areas around the zip line poles, and minimal grading would be required to construct the proposed driveway tapers at Highway 246. No other grading is proposed as part of the project.

The CalEEMod program calculated the worst case scenario short-term construction emissions of 1.65 ~~0.1~~ pounds per day of PM_{10} (Attachment 4 ~~3~~). With the implementation of standard dust control measures that are required for all new development in the County, earth-moving operations at the project site would result in **less than significant** project-specific short-term emissions of fugitive dust and $PM_{10.}$

Emissions of ozone precursors (NO_x and ROC) during project construction activities would result primarily from the on-site use of heavy earthmoving equipment. Using default values, the CalEEMod program calculated worst case short-term construction emissions of 13.8 ~~11.23~~ pounds per day of NO_x and 1.4 ~~1.31~~ pounds per day of ROC (Attachment 4 ~~3~~). Due to the limited period of time that grading activities would occur on the project site, construction-related emissions of NO_x and ROC would not be significant on a project-specific or cumulative basis. However, due to the non-attainment status of the air basin for ozone, the project would be required to implement measures described by the APCD to reduce construction-related emissions of ozone precursors to the extent feasible. The application of standard dust control measures by the Air Pollution Control District under the County Air Quality Management Plan would ensure potential nuisance dust impacts are reduced to **less than significant** levels.

Long-Term Operational Impacts. Long-term emissions of criteria pollutants would result from mobile emissions sources (vehicle trips by residents). Using default values, the CalEEMod program calculated the worst case long-term operational emissions of 1.2 pounds per day of NO_x and 0.52 pounds per day of ROC (Attachment 4~~3~~). The long-term operational emissions are summarized in Table 4.3-1 below.

Table 4.3-1 Summary of Long-Term (Operational) Emissions

Emission Source	**Criteria Pollutants (lb/day)**		
	NOx	**ROC**	**PM10**
Mobile Sources (Vehicles) (CalEEMod)	1.2	0..52	0.63
Greater than 25 lbs/day?	***No***	***No***	***N/A***
Area Sources (Energy/Natural Gas, Consumer Products) (CalEEMod)	0.12 lbs/day ~~n/a~~	0.00 lbs/day ~~n/a~~	0.00 lbs/day ~~n/a~~
Totals	***1.2***	***0.65*** ~~***0.52***~~	***0..63***
Threshold	55 lb/day	55 lb/day	80 lb/day

Summary of long-term operational impacts. As shown in Table 4.3-1, the total criteria pollutants generated by mobile and area sources would be 1.2 lb/day NOx, 0.65 ~~0.52~~ lb/day ROC, and 0.63 lb/day PM10. These amounts are less than the daily trigger for offsets of 55 pounds per day for NOx and ROC and 80 pounds per day of PM10. In addition, the project would emit less than 25 pounds per day of NOx or ROC from mobile sources only. Therefore, the proposed project would not violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. Impacts would be **less than significant**.

(b*) Less than Significant Impact:* The uses associated with the proposed project are recreational, and would not be expected to generate smoke, ash, or odors. As a result, impacts would be **less than significant**.

Greenhouse Gas Emissions / Global Climate Change

Background:

Greenhouse gases (GHGs) include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). Combustion of fossil fuels constitutes the primary source of GHGs. GHG emissions have the potential to adversely affect the environment because they contribute, on a cumulative basis, to global climate change. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it is clear that the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climate. Therefore, from the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative. Potential effects include reduced water supplies in some areas, ecological changes that threaten some species, reduced agricultural productivity in some areas, increased coastal flooding, and other effects.

Methodology:

The County's methodology to address Global Climate Change in CEQA documents is evolving. The County is currently working to develop a Climate Action Plan consistent with CEQA Guidelines Section 15183.5 (Tiering and Streamlining the Analysis of Greenhouse Gas Emissions). Until the Climate Action Plan is formally adopted, the County will follow an interim approach to evaluating GHG emissions. This interim approach will look to criteria adopted by the San Luis Obispo County Air Pollution Control District (SLOAPCD) for land use development projects, summarized below, for guidance on determining significance of GHG emissions.

Table 4.3-2 Significance Determination Criteria	
GHG Emission Source Category	**Operational Emissions**
Other than Stationary Sources	1,100 MT of CO_2e/yr OR 4.6 MT CO_2e/SP/yr (residents + employees)
Stationary Sources (sources that require an APCD Permit)	10,000 MT/yr
Plans	6.6 MT CO_2e/SP/yr (residents + employees)

Impact Discussion:

(d, e) ***Less than significant impact.*** The proposed project would generate GHG's from mobile emissions (vehicle trips) and area emissions (energy, consumer products, solid waste, water conveyance). Project-related construction emissions, primarily for the installation of proposed poles and construction of the proposed driveway tapers, would occur over a very short period of time and would be very minor. Analysis

of the project concludes that total annual GHG emissions for the project would be 134.50 metric tons of CO_2e/year. Attachment 4 ~~3~~ shows the complete GHG calculations for the project. Total project GHG emissions would be less than the significance criteria and therefore found to be cumulatively **less than significant**.

Mitigation and Residual Impact: No mitigation is required. Residual impacts would be less than significant.

4.4 BIOLOGICAL RESOURCES

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
Flora					
a. A loss or disturbance to a unique, rare or threatened plant community?			X		
b. A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants?			X		
c. A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)?			X		
d. An impact on non-native vegetation whether naturalized or horticultural if of habitat value?			X		
e. The loss of healthy native specimen trees?		X			
f. Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat?			X		
Fauna					
g. A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals?		X			
h. A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)?		X			
i. A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)?		X			
j. Introduction of barriers to movement of any resident or migratory fish or wildlife species?			X		
k. Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?			X		

Setting:

Physical:

Existing Plant and Animal Communities/Conditions:

Currently, the northern fringes of the project site, which are traversed by the Santa Ynez River, contain a mix of riparian vegetation and oak woodland. This vegetation is located within either floodway or floodplain easements for the Santa Ynez River and as such would not be disturbed by future construction. A majority of

the project site (approximately 163 acres) contains areas of dry farming with single specimen oak trees spread at wide intervals. Patches of denser oak woodland traverse the project site from east to west. Fauna inhabiting the project site are typical for the Santa Ynez Valley and may include small mammals such as raccoons, fox, coyote, deer, and skunk, and common birds and raptors. Additionally, the Santa Ynez River riparian corridor which traverses the northern edge of the project site contains Southwestern Cottonwood Willow Forest and habitat for Southern Steelhead. Analysis of biological resources on the project site is based upon review of County land use maps, aerial photographs, and observations made during a site visit conducted on June 17, 2014.

Regulatory:

Thresholds:
Santa Barbara County's Environmental Thresholds and Guidelines Manual (2008) includes guidelines for the assessment of biological resource impacts. The following thresholds are applicable to this project:

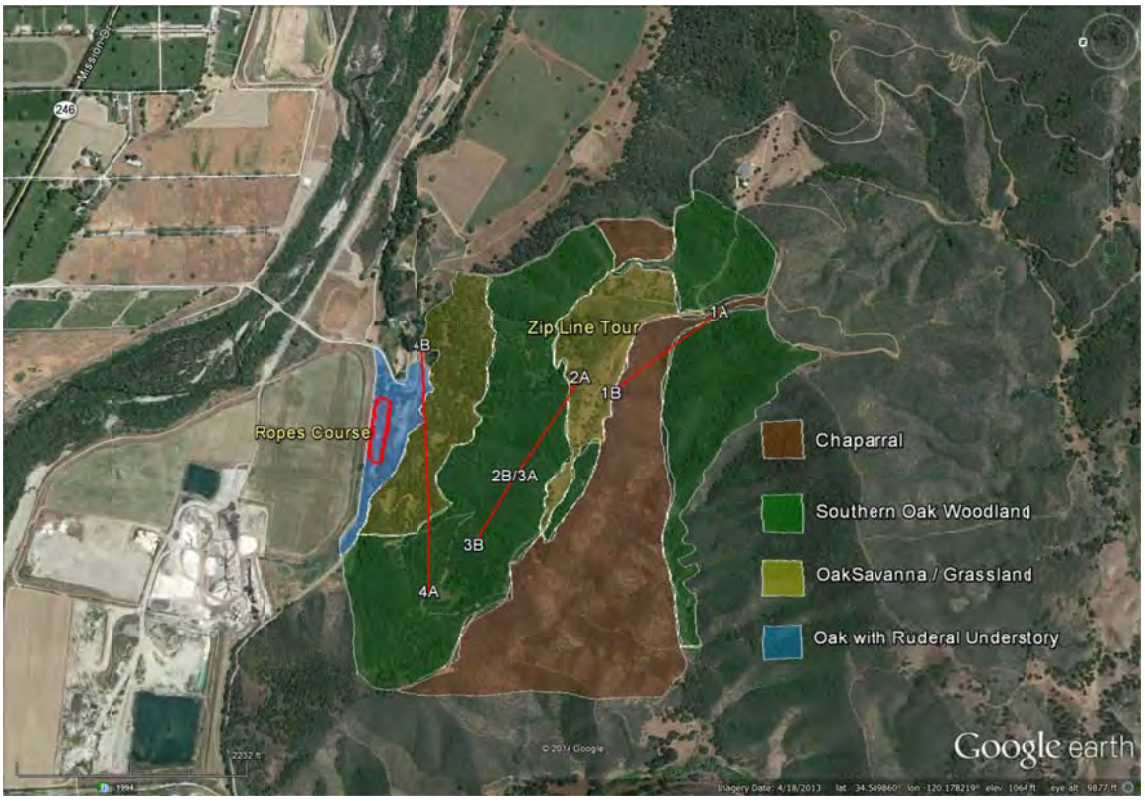
Native Grasslands: In general, project created impacts to native grasslands may be considered significant if they involve removal of or severe disturbance to a patch or a combined patch area of native grasses that is greater than one-quarter (1/4) acre in size. The grassland must contain at least 10 percent relative cover of native grassland species (based on a sample unit). Impacts to patch areas less than one-quarter acre in size that are clearly isolated and not part of a significant native grassland or an integral component of a larger ecosystem are usually considered insignificant.

Oak Woodlands and Forests: Project created impacts may be considered significant due to habitat fragmentation, removal of understory, alteration to drainage patterns, disruption of the canopy, removal of a significant number of trees that would cause a break in the canopy, or disruption in animal movement in and through the woodland.

Individual Native Trees: Project created impacts may be considered significant due to the loss of 10% or more of the trees of biological value on a project site.

Other Rare Habitat Types: The Manual recognizes that not all habitat-types found in Santa Barbara County are addressed by the habitat-specific guidelines. Impacts to other habitat types or species may be considered significant, based on substantial evidence in the record, if they substantially: (1) reduce or eliminate species diversity or abundance; (2) reduce or eliminate the quality of nesting areas; (3) limit reproductive capacity through losses of individuals or habitat; (4) fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources; (5) limit or fragment range and movement; or (6) interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Figure 1 Generalized Vegetation Map of Project



Impact Discussion:

(a-d) ***Less than significant impacts.*** Vegetation on the subject parcel was assessed in the following reports: Sierra Grande Rural Recreation Project Biological Assessment (Pandion Environmental, July 21, 2014) and Bill Spiewak, Oak Tree Assessment December 13, 2013. According to the reports, all proposed installation sites within the zipline course area are confined to small footprints located on the shoulder of an existing paved or dirt road, where vegetation is largely weedy and listed sensitive native plants are unlikely to be found. The zipline cables would be suspended between the support poles, and it may be possible that the installation of the cables could result in the disturbance of the ground surface located between the support poles. Such ground disturbance could result in short- and long-term impacts to sensitive habitat supported by ephemeral streams.

The project applicant has indicated that zipline cables could be installed using a variety of methods, including: the use of temporary poles and pulleys in areas where topography is relatively level and vegetation is sparse; using a "bean bag canon" that shoots a bean bag and an attached line approximately 500 feet and that line is used to pull a rope that is then used to pull the zipline cable; or transporting the cable by helicopter in areas with steep topography or dense vegetation. The proposed cable installation techniques would result in minimal or no ground disturbance, which would substantially reduce the potential for impacts to ephemeral streams or other sensitive habitat that may be located along a zipline cable installation route.

To determine if any ephemeral streams under the jurisdiction of the CDFW exist in the proposed zipline area, the project biologist, (Reitherman, 2016) conducted an evaluation of the proposed zipline cable routes (see Attachment 7). That evaluation considered a variety of factors that could result in the presence of ephemeral streams on the project site, including: precipitation characteristics, topography,

hydrology, soil types and biotic indicators (i.e., wetland or riparian vegetation). In addition, each of the proposed cable installation routes was walked to the extent possible. The evaluation concluded that the existing site conditions "*strongly indicates that none of the potential drainages within the Project site rise to the level where they could reasonably be designated as a watercourse qualifying for further review under this* (CDFW Code 1602) *regulation.*"

The apparent absence of ephemeral streams in areas that would be crossed by zipline cables, and the proposed cable installation methods would result in little or no ground disturbance. As a result, project-related impacts to ephemeral streams, or other resources under the jurisdiction of the CDFW resulting from the construction or use of the proposed ziplines **would be less than significant**.

With regards to the ropes course, the course would be designed and constructed through the crowns of mature oaks. Poles may be installed near trees, but would be located out of the drip line, and would be installed so as to avoid significant tree root damage. Any poles installed within the Ropes Course would be independent of trees. Where attachment to oaks would be necessary, platforms and cables would be installed without invasive hardware in order to preserve the health and structure of trees. (which are discussed below in Section E below). Results of the botanical assessment conclude that the proposed project would not result in a loss or disturbance to a unique, rare or threatened plant community, a reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants. Impacts would be **less than significant**.

(e)Native Specimen Trees. Less than significant impact with mitigation. Numerous coast live oak trees or copses (groupings) of live oak trees exist within the area proposed for zipline and ropes courses. Although neither of the Biological Assessments prepared for the project identified the removal or oak trees, it is possible that construction and or operation activity associated with the zipline and ropes courses could inadvertently damage or destroy these aforementioned oaks.

In addition, the Oak Tree Assessment prepared for ropes course component of the project includes a list of recommended measures for protection of oak trees. Specifically, the Assessment includes provisions for protection of soils and roots, tree pruning, ongoing maintenance, long-term tree preservation and provisions for installation of tree hardware. Adherence to the recommendations of the Oak Tree Assessment (Mitigation Measure 4) would ensure that impacts to oak trees remain less than significant. With implementation of these measures, the project's potential impacts to biological resources would be reduced to a level below significance.

The construction of the proposed driveway deceleration taper at Highway 246 would require the removal of one 26-inch dbh[1] oak tree and would result in the installation of paving within the dripline of another 26-inch dbh oak tree. The removal of one oak tree and construction within the dripline of another would result in a significant impact. Therefore, the County's standard oak tree protection mitigation measure (Mitigation Measure 1) is applicable to the project. Proposed mitigation measure 1(k) would require that the applicant plant and nurture 20 coast live oak trees. The implementation of this mitigation measure would reduce project-related impacts to native oak trees to a less than significant level. The construction of the required driveway acceleration flare could result in impacts to two large non-native landscape trees that are in poor to fair condition, and impacts to one small coast live oak tree that has a trunk diameter of less than six inches at a height of 4.5 feet above the ground. Impacts to these trees may result from construction activities that occur adjacent to the trees. The two landscape trees and the small oak tree are not protected trees and impacts to those trees would not result in a significant impact and no replacement trees are required as mitigation.

[1] Diameter measured at breast height

(f) Less than significant impacts. The ongoing agricultural use of the site may involve or result in the introduction of herbicides, pesticides, and non-native plants which could disturb existing habitats located onsite. However, such agricultural activities are already a permitted use within the AG-II-100 zone district and can occur regardless of the approval of this project. Additional activities resulting from human habitation of the site could occur within the onsite native habitats, but this is not likely to be greater than what may currently occur on the existing parcel. The project does not propose the introduction of herbicides, pesticides. Therefore, these potential impacts are not considered a direct result of the proposed project or conditional use permit.

(g, h) Less than significant impacts with mitigation. The Santa Ynez River traverses the northern fringes of the project site. This riparian corridor is known to contain numerous sensitive animal species such as the Southwestern Pond Turtle, Southern Steelhead, and various raptor species. According to the Pandine Environmental Biological Assessment the silvery legless lizard (Anniella pulchra) could occur on the project site, but is not likely to be encountered either during construction or operation as it prefers sandy soils, which are uncommon on the steep terrain where most of the project would be located, and in/under thick leaf litter. With the incorporation of mitigation requiring pre-construction surveys (Mitigation Measure 5), impacts to special status species would be reduced to **less than significant** levels.

The private driveway that provides access to the project site crosses the Santa Ynez River via an "Arizona" crossing. A Streambed Alteration Agreement that authorized the construction of improvements to the crossing was approved by the California Department of Fish and Game (CDFG) in 2007. The 2007 Agreement indicates that the construction of river crossing improvements would have the potential to impact a variety of plant and animal species, including steelhead trout, and includes 48 mitigation measures and conditions of approval to reduce short-term construction-related impacts and long-term habitat removal impacts. The 2007 Agreement was valid for five years and was renewed in 2012. Another renewal of the Agreement will be required in 2017. In addition to the original and renewal Agreements, a request to modify the river crossing was made by the Project applicant in 2010. That request proposed to increase the number of culverts in the crossing from three to 10, and was approved by CDFG in 2010.

The mitigation measures and conditions of approval included in the 2007 Streambed Alteration Agreement minimize the potential for the crossing to result in short- and long-term impacts to potentially affected species. The Agreement does not limit the long-term use of the crossing. The Project would increase the use of the river crossing by up to 84 vehicle trips per day, which would not substantially alter the environmental conditions evaluated by CDFG when the original 2007 Agreement, subsequent 2012 Agreement renewal, and 2010 modification were approved. In addition, the potential for increased vehicle-related pollution at the river crossing would not be cumulatively considerable in terms of pollutant loading that occurs upstream of the project site in the Santa Ynez River watershed. The requirement to extend the Agreement every five years provides the California Department of Fish and Wildlife the opportunity to address any Project-related impacts that may be identified in the future. Therefore, the Project would result in less than significant impacts to sensitive species in the Santa Ynez River, including steelhead trout.

(i) Less than Significant with mitigation. Operations within the Zip Lines and Rope Course include year round maintenance activities around poles and cables, vehicular traffic on roads and pedestrian traffic on trails. Along portions of the Zip Lines and especially within the Ropes Course, dozens of people would potentially be moving over or through the woodland canopy on any given day of the year, including those times when a variety of birds may be inclined to nest within the activity impact zone. Nesting in the area could temporarily decrease or be disrupted due to increased human activity, noise, and construction activity from future development. This could result in slightly reduced numbers of animal species in the short-term. Short-term, impacts to nesting birds could result from construction activities required to construct required driveway deceleration and acceleration flares. Impacts to nesting birds would be potentially significant. Pre-construction surveys for nesting birds (Mitigation Measure 2) and limiting the

time of maintenance activities (Mitigation Measure 3) would reduce these impacts to **less than significant** levels.

(j, k) Less than significant impacts. Implementation of the proposed project would incrementally increase the human presence in the project area over the short- and long-term. Construction noise would displace wildlife temporarily causing short-term impacts to wildlife species present on the Project site. Long-term project-related impacts to wildlife species would occur as a result of increase human utilization, particularly associated with the zipline course. Although a portion of the oak woodland habitat within the project boundary would be affected by project development, this type of habitat is relatively abundant in the surrounding area. Habitat species likely to occur on the project site (ground squirrels, skunks, coyotes, raccoons, etc.) are common species, some of which are accustomed to various levels of human disturbance and may return to the area after the initial disturbance to the site. Therefore, impacts on common wildlife populations would be **less than significant**.

Cumulative Impacts:

With incorporation of the mitigations, the proposed project would result in project-specific impacts, including impacts to Oak Woodland, two individual oak trees, and potential impacts to silvery legless lizard and nesting areas.

The above-identified project-specific impacts, when combined with the effects of past, present, and likely future agricultural activity in the vicinity, would contribute to cumulative impacts to biological resources in the vicinity. However, due to the small scale of the project, this contribution would not be significant.

Mitigation and Residual Impact:

The following mitigation measures would reduce the project's biological resource impacts to a less than significant level

1. **Bio-01: Oak Tree Protection:** In order to protect existing native oak trees and minimize adverse effects of grading and construction onsite, the applicant shall implement a Tree Protection and Replacement Plan. No ground disturbance including grading for buildings, access ways, easements, subsurface grading, sewage disposal, and well placement shall occur within 6 feet outside the dripline of any native tree unless specifically authorized by the approved tree protection and replacement plan. The tree protection and replacement plan shall include the following:

    a. An exhibit showing the location, diameter and dripline of all native oak trees located within 25 feet of grading and/or construction activities.
    b. Fencing of all trees within 25 feet of grading and/or construction activities to be protected 6 feet outside of the dripline. Fencing shall be at least three feet in height of chain link or other material acceptable to P&D and shall be staked every 6 feet. The applicant shall place signs stating "tree protection area" at 15 foot intervals on the fence. Said fencing and signs shall be shown on the tree protection exhibit, shall be installed prior to land use permit approval and shall remain in place throughout all grading and construction activities.
    c. The tree protection plan shall clearly identify any areas where landscaping, grading, trenching, or construction activities would encroach within the dripline of any native or specimen tree. All encroachment is subject to review and approval by P&D.
    d. Construction equipment staging and storage areas shall be located outside of the protected area and shall be depicted on project plans submitted for land use clearance. No construction equipment shall be parked, stored or operated within the protected area. No fill soil, rocks or construction materials shall be stored or placed within the protected area.
    e. All proposed utility corridors and irrigation lines shall be shown on the tree protection exhibit. New utilities shall be located within roadways, driveways or a designated utility corridor such that impacts to trees are minimized.

f. Any proposed tree wells or retaining walls shall be shown on the tree protection plan exhibit as well as grading and construction plans and shall be located outside of the critical root zone of all protected trees unless specifically authorized.
g. Any encroachment within the dripline of native trees shall adhere to the following standards:
   i. Any paving shall be of pervious material (gravel, brick without mortar or turf block).
   ii. Any trenching required within the dripline of a protected tree shall be done by hand.
   iii. Any roots one inch in diameter or greater encountered during grading or trenching shall be cleanly cut and sealed.
h. All trees located within 25 feet of buildings shall be protected from stucco and/or paint during construction.
i. No permanent irrigation shall occur within the dripline of any native or oak tree. Drainage plans shall be designed so that tree trunk areas are properly drained to avoid ponding.
j. Only trees designated for removal on the approved tree protection plan shall be removed.
k Any protected trees which are removed, relocated and/or damaged (more than 20% encroachment into the critical root zone) shall be replaced on a 10:1 (coast live oak) or 15:1 (valley oak) basis with 1 gallon size saplings grown from seed obtained from the same watershed as the project site. Where necessary to remove a tree and feasible to replant, trees shall be boxed and replanted. A drip irrigation system with a timer shall be installed. Trees shall be planted prior to occupancy clearance and irrigated and maintained until established (five years). The plantings shall be protected from predation by wild and domestic animals, and from human interference by the use of staked, chain link fencing and gopher fencing during the maintenance period.
l. Any unanticipated damage that occurs to trees or sensitive habitats resulting from construction activities shall be mitigated in a manner approved by P&D. This mitigation may include but is not limited to posting of a performance security, tree replacement on a 10:1 (coast live oak) or 15:1 (valley oak) ratio and hiring of an outside consultant biologist to assess the damage and recommend mitigation. The required mitigation shall be done immediately under the direction of P&D prior to any further work occurring on site. Any performance securities required for installation and maintenance of replacement trees will be released by P&D after its inspection and approval of such installation.

PLAN REQUIREMENTS: The Owner/Applicant shall: (1) Submit the TPP; (2) Include all applicable components in the Tree Replacement; (3) include as notes or depictions all plan components listed above, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures. **TIMING:** The Owner/Applicant shall comply with this measure prior to LAND USE PERMIT. Plan components shall be included on all plans prior to the issuance of GRADING / BUILDING permits. The Owner/Applicant shall install tree protection measures onsite prior to issuance of GRADING / BUILDING permits and pre-construction meeting.

MONITORING: The Owner/Applicant shall demonstrate to P&D compliance monitoring staff that trees identified for protection were not damaged or removed or if damage, or removal occurred, that correction is completed as required by the TPP prior to Final Building Inspection Clearance.

2. **Special Condition: Pre-Construction Surveys for Nesting Birds**. If construction occurs during the bird breeding and nesting season (February 1 to August 15), the applicant shall hire a County-approved biologist to conduct a pre-project survey of all habitat areas within 100 feet of construction areas, including roadways.

PLAN REQUIREMENT AND TIMING: This survey shall be undertaken 10 days prior to construction of ~~future residences~~ proposed structures, to determine whether raptors or other special status species are nesting on site. A brief letter shall be prepared by the biologist and reviewed and approved by P&D before project activities are initiated. If raptors or other special status species are

found to be nesting, applicant shall avoid work in the area by providing a buffer from active nests until birds have fledged as determined by the qualified biologist.

MONITORING: P&D shall be given the name and contact information for the qualified biologist prior to initiation of the survey. Biologist shall contact P&D at the conclusion of the field survey to inform P&D in writing of the results of the surveys. If no sensitive species are found, P&D will allow grading activities to commence. All required mitigation shall be implemented prior to the start of proposed grading activities. Grading Inspectors shall inspect as needed.

3. **Special Bio 5 Protection of migratory bird nesting.** In order to minimize migratory bird nesting disruptions (including but not limited to: 1) elimination of and/or reduction in the quality or quantity bird nesting areas; and 2) abandonment or interruption of nesting by migratory birds as a result of the project), the Owners/Applicants shall conduct non-emergency maintenance activities involving roads/trails, cables and poles to the period between August and February.

PLAN REQUIREMENTS AND TIMING: The above measure shall be noted on all grading and construction plans measure prior to issuance of a Zoning Clearance.

MONITORING: P&D shall conduct periodic site inspections to ensure compliance.

4. **Special Condition: Adherence to Recommendations in the Oak Tree Assessment**. The project owner/applicant shall adhere to all of the recommendations listed in the Oak Tree Assessment prepared by Bill Spiewak dated December 13, 2013.

PLAN REQUIREMENTS: The Oak Tree Assessment recommendations shall be noted on all grading and construction plans. The applicant shall submit to P&D on an annual basis an Oak Tree Assessment Compliance Report prepared by a certified arborist. The purpose of the Compliance Report is to monitor the Project's compliance with the tree protection and maintenance recommendations included in the Oak Tree Assessment. The Compliance Report shall provide a description of the tree protection measures and recommendations that were implemented during the past year; ~~as well as~~specific tree protection and maintenance items to be completed in the upcoming year; and an evaluation of the Project's compliance with recommendations included in the December 13, 2013 Oak Tree Assessment under the following report headings:

- Construction & Attaching Minimally Invasive Structures
- Protection the Soil & Roots
- Tree Pruning
- Ongoing Maintenance
- Long Term Preservation
- Other Tree Management Issues
- Crown Cleaning
- Crown Thinning
- Root Crown Excavation and Fill Soil
- Cabling
- Preliminary Tree Protection Measures

TIMING: The Owner/Applicant shall comply with ~~this~~ the requirement to provide the Oak Tree Assessment recommendations on grading and construction plans ~~measure~~ prior to issuance of a Zoning Clearance. The Oak Tree Assessment Compliance Report shall be submitted to P&D Permit Compliance within 45 days of the end of every calendar year.

MONITORING: P&D processing planner shall ensure measure is printed on all grading and construction plans. P&D Permit Compliance shall spot check and ensure compliance onsite.

5. **Special Condition: Preconstruction Surveys for Silvery legless lizards.** Prior to the start of any grading or construction activities, the areas that would be shall be marked in the field and surveyed by a qualified biologist for the presence of silvery legless lizard. If detected, carefully move the legless lizard to similar habitat at least 300 feet from any proposed construction area, including vehicle access routes and parking areas. The legless lizard should be placed near the base of a large shrub.

   PLAN REQUIREMENT AND TIMING: The survey shall be performed no more than two weeks before conducting any project-related ground disturbing activity. A report describing the survey results shall be submitted to Planning & Development prior to the start of grading activities. Specified areas shall be marked in the field and surveyed by a qualified biologist for the presence of silvery legless lizards. If silvery legless lizards are found, they shall be relocated to similar undisturbed habitat to the west.

   MONITORING: P&D shall be given the name and contact information for the qualified biologist prior to initiation of the survey. Biologist shall contact P&D at the conclusion of the field survey to inform P&D in writing of the results of the surveys. If no sensitive species are found, P&D will allow grading activities to commence. All required mitigation shall be implemented prior to the start of proposed grading activities. Grading Inspectors shall inspect as needed.

With the incorporation of these measures, residual impacts would be less than significant.

4.5 CULTURAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
Archaeological Resources					
a. Disruption, alteration, destruction, or adverse effect on a recorded prehistoric or historic archaeological site (note site number below)?			X		
b. Disruption or removal of human remains?			X		
c. Increased potential for trespassing, vandalizing, or sabotaging archaeological resources?			X		
d. Ground disturbances in an area with potential cultural resource sensitivity based on the location of known historic or prehistoric sites?			X		
Ethnic Resources					
e. Disruption of or adverse effects upon a prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethnic group?			X		
f. Increased potential for trespassing, vandalizing, or sabotaging ethnic, sacred, or ceremonial places?			X		
g. The potential to conflict with or restrict existing religious, sacred, or educational use of the area?			X		

Existing Setting:

For at least the past 10,000 years, the area that is now Santa Barbara County has been inhabited by Chumash Indians and their ancestors. A preliminary records search was conducted for the proposed project at the Central Coast Information Center, University of Santa Barbara, California (CCIC) on January 5, 2015. Based on records on file at the Central Coast Information Center (CCIC) the project area was not previously surveyed and no cultural resources are previously recorded within the area of the proposed project. Joyce Gerber, M.A., RPA, staff archeologist, conducted a Phase 1 Survey on June 11, 2014 and May 28, 2015. The surveys included examination of all areas of less than 20 percent slope where project components are proposed, including roads and zip line supports structures. It is considered extremely unlikely that resources are located on areas of greater than 20 percent slope. A survey was also conducted of the proposed ropes course and parking areas. Visibility was good and considered adequate for the purpose of the survey and therefore no subsurface testing was recommended. No artifacts, features, or other evidence of prehistoric or historical archaeological resources were observed during the survey

County Environmental Thresholds:

The County Environmental Thresholds and Guidelines Manual contains guidelines for identification, significance determination, and mitigation of impacts to important cultural resources. Chapter 8 of the Manual, the *Archaeological Resources Guidelines: Archaeological, Historic and Ethnic Element,* specifies that if a resource cannot be avoided, it must be evaluated for importance under CEQA. CEQA Section 15064.5 contains the criteria for evaluating the importance of archaeological and historical resources. For archaeological resources, the criterion usually applied is: (D), "Has yielded, or may be likely to yield, information important in prehistory or history. A project that may cause a substantial adverse effect on an archaeological resource may have a significant effect on the environment.

Impact Discussion:

(a,c,d,f) ***Less than significant impacts.*** There are no known religious, sacred, or educational sites on the subject parcel. Based on the results of the Phase 1 survey, the proposed project is not expected to adversely affect a prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethical group. Although considered unlikely, there is still the potential for unknown buried religious or sacred sites to exist. Therefore, the County's standard discovery clause which requires work to stop in the event cultural materials are discovered will be incorporated as a condition of approval. Impacts would be **less than significant**.

(b,e,g) ***Less than significant impacts.*** The project would require less than one c.y. of earthwork. Based on a review of maps and records and a Phase 1 surface survey, no cultural resources are located within the project area The proposed project would not be expected to disrupt, alter, destroy or adversely affect a recorded prehistoric or historic archaeological site, disrupt or remove human remains, or increase the potential for trespassing, vandalizing, or sabotaging archaeological resources. Although considered unlikely, there is still the potential for unknown buried religious or sacred sites to exist. Therefore, the County's standard discovery clause which requires work to stop in the event cultural materials are discovered will be incorporated as a condition of approval. Impacts would be reduced to **less than significant levels**.

Cumulative Impacts: The proposed project is limited to the scope of the project description, and is not part of any larger planned development. Any potential disturbance would be mitigated to less than significant levels and would not have any cumulatively considerable effect on the County's cultural resources.

Mitigation and Residual Impact: No mitigation is required. Residual impacts would be less than significant.

4.6 ENERGY

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Substantial increase in demand, especially during peak periods, upon existing sources of energy?			X		
b. Requirement for the development or extension of new sources of energy?			X		

Setting:

Physical:

The proposed project site contains 6 existing residential structures and 7 existing agricultural structures. The residential structures consist of one single-family residence, a guest house, and four agricultural employee dwellings. The existing development is approximately 29,060 square feet total.

Regulatory:

Electrical service currents exist on the project site and is provided by the Pacific Gas & Electric Company (PG&E).

Impact Discussion:

(a-b) ***Less than significant impacts.*** The proposed project would consist of day time uses consisting of a zipline and ropes course with no new lighting fixtures. The project also includes removing an existing, permitted mobile home used as an employee dwelling and converting a building used for storage, back to an agricultural employee dwelling. The proposed project would not result in a substantial increase in energy demand especially during peak periods and no development or extension of new energy sources would be required. In summary, the project would have minimal long term energy requirements, and no adverse impacts would result.

Cumulative Impacts:

The project's contribution to the regionally significant demand for energy is not considerable, and is therefore less than significant.

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be less than significant.

4.7 FIRE PROTECTION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Introduction of development into an existing high fire hazard area?			X		
b. Project-caused high fire hazard?			X		
c. Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for fire fighting?			X		

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
d. Introduction of development that will hamper fire prevention techniques such as controlled burns or backfiring in high fire hazard areas?			X		
e. Development of structures beyond safe Fire Dept. response time?			X		

Setting:

Physical:

The project site, due to its location in a rural area with significant amounts of open space and flammable vegetation, is designated a high fire hazard area. High fire hazard areas are those regions of the County which are exposed to significant fuel loads, such as large areas of undisturbed native/naturalized vegetation. The proposed project site falls within the jurisdiction of the Santa Barbara County Fire Department and is serviced by Fire Station number 31, which is located at 168 West Highway 246 in Buellton. Emergency access to the site will be provided via an existing private road that extends east from Highway 101.

Predictions about the long-term effects of global climate change in California include increased incidence of wildfires and a longer fire season, due to drier conditions and warmer temperatures. Any increase in the number or severity of wildfires has the potential to impact resources to fight fires when they occur, particularly when the state experiences several wildfires simultaneously. Such circumstances place greater risk on development in high fire hazard areas.

County Standards

The following County Fire Department standards are applied in evaluating impacts associated with the proposed development:

- The emergency response thresholds include Fire Department staff standards of one on-duty firefighter per 4000 persons (generally 1 engine company per 12,000 people, assuming three firefighters/station). The emergency response time standard is approximately 5-6 minutes.
- Water supply thresholds include a requirement for 750 gpm at 20 psi for all single family dwellings.
- The ability of the County's engine companies to extinguish fires (based on maximum flow rates through hand held line) meets state and national standards assuming a 5,000 square foot structure. Therefore, in any portion of the Fire Department's response area, all structures over 5,000 square feet are an unprotected risk (a significant impact) and therefore should have internal fire sprinklers.
- Access road standards include a minimum width (depending on number of units served and whether parking would be allowed on either side of the road), with some narrowing allowed for driveways. Cul-de-sac diameters, turning radii and road grade must meet minimum Fire Department standards based on project type.
- Two means of egress may be needed and access must not be impeded by fire, flood, or earthquake. A potentially significant impact could occur in the event any of these standards is not adequately met.

Impact Discussion:

(a, c) Less than significant impacts. New structural development would consist of support poles and guy wires for the zip line component and support poles and platforms for the ropes course facility. As a result, the proposed project would introduce a minimal amount of additional structural development within a high fire hazard area. The County of Santa Barbara's Fire Department has reviewed the proposed project and requested preparation of an Emergency Response Plan in the event of an emergency. Adherence to the County Fired Department condition letter dated June 18, 2015 ~~June 10, 2013~~ which requires incorporation of

the County Fire Department approved emergency response plan into the proposed zipeline and ropes course operations would reduce potential impacts from fire hazard to a level below significance.

(b, d, e) Less than significant impacts. The proposed project site falls within the jurisdiction of the Santa Barbara County Fire Department and is serviced by Fire Station number 31, which is located at 168 West Highway 246 in Buellton. The future construction of the zipline and ropes course would not be considered the introduction of a significant fire hazard. In addition, this future development would not hamper any proposed fire prevention techniques. Therefore, potential impacts would be **less than significant**.

Cumulative Impacts:

Since the project would not create significant fire hazards, it would not have a cumulatively considerable effect on fire safety within the County.

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be less than significant.

4.8 GEOLOGIC PROCESSES

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?			X		
b. Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?			X		
c. Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise?			X		
d. The destruction, covering or modification of any unique geologic, paleontologic or physical features?			X		
e. Any increase in wind or water erosion of soils, either on or off the site?		X			
f. Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake?		X			
g. The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent?			X		
h. Extraction of mineral or ore?				X	
i. Excessive grading on slopes of over 20%?			X		
j. Sand or gravel removal or loss of topsoil?			X		
k. Vibrations, from short-term construction or long-term operation, which may affect adjoining areas?			X		
l. Excessive spoils, tailings or over-burden?			X		

Setting:

Physical:

The project site is located in a vicinity of the County which has been given an overall Category III Moderate Problem Rating for geologic hazards by the County Comprehensive Plan Seismic Safety and Safety Element. Specifically, the proposed project site is located in an area identified as having a low potential for expansive soils, soil creep, and compressible/collapsible soils. The project site has a moderate potential for landslides and liquefaction. The project site has a high potential for seismic activity and high groundwater.

Regulatory:

Thresholds:

Pursuant to the County's Adopted Thresholds and Guidelines Manual, impacts related to geological resources may have the potential to be significant if the proposed project involves any of the following characteristics:

1. The project site or any part of the project is located on land having substantial geologic constraints, as determined by P&D or PWD. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. "Special Problems" areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.

2. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical.

3. The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.

4. The project is located on slopes exceeding 20% grade.

The Santa Barbara County Code, Chapter 14 Grading Ordinance (June 2003) is the governing document adopted by the Board of Supervisors, which contains the minimum standards and procedures, regarding earthwork, necessary to protect and preserve life, limb, health, property, and public welfare. It also addresses compliance with the National Pollutant Discharge Elimination System Phase II storm water regulations and sets forth local storm water requirements for the disturbance of less than 1 acre, to avoid pollution of water courses with sediments or other pollutants generated on or caused by surface runoff on or across the construction site.

The Seismic Safety and Safety Element describes and qualitatively addresses geological constraints. In addition, regulations regarding wastewater treatment are governed by regulations inclusive of the Regional Water Quality Control Board's Basin Plan Prohibitions, the California Plumbing Code, the County Code Septic System Ordinance (Article II of Chapter 29, 29-6 through 29-14), and Administrative Practices of Environmental Health Services.

Impact Discussion:

(a) Less than significant impact. The project site is not underlain by any known fault. Compliance with existing building regulations would reduce potential ground shaking impacts caused by movement along a distant fault to a less than significant level. Liquefaction potential in the area has been determined to be low. Any potential for expansive soils would be mitigated by the use of non-expansive engineered fill. All soils-related hazards would be reduced to a less than significant level through the normal building permit review and inspection process. Therefore, the proposed zip line and ropes course would not exposure residents or visitors to significant geologic hazards. Impacts would be **less than significant**.

(b-d, I, j, l) Less than significant impacts. The project would not result in exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise. The subject parcel does not contain any unique geologic, paleontologic or physical features. The project would not involve mining, the loss of topsoil, or construction-related vibrations. The extraction of ore and minerals would not occur. No grading on slopes over 20% is proposed. Therefore, impacts would **be less than significant**.

(e, f) Less than Significant with Mitigation. Grading operations that would occur on the project site would remove vegetative cover and disturb the ground surface, thereby increasing the potential for erosion and sedimentation impacts. Grading would be minimal (approximately 1 cubic yard) and would be limited to installation of support poles and placement of landing and take-off platforms. Application of standard County grading, erosion, control measure (Mitigation Measures # 6 below) would ensure that the potential for the project to cause substantial erosion and sediment transport would be reduced to **less than significant**.

(g) Less than significant impacts. The propose project would require the approval and construction of a new private sewage disposal system (septic) in conformance with the requirements set forth by Environmental Health Services and Planning and Development. EHS approval would be contingent upon soil percolation testing which clearly indicates that soils located within the project site are capable of supporting the proposed sewage disposal systems. Given the ample acreage on the project site (1,200 acres), for required leach field infrastructure, impacts from wastewater disposal systems would be less than significant.

(h) Less than significant impacts. No extraction of mineral or ore is proposed as part of the project scope.

Cumulative Impacts:

Since the project would not result in significant geologic impacts, it would not have a cumulatively considerable effect on geologic hazards within the County.

Mitigation and Residual Impact:

Adherence to the following measures, would reduce impacts to Geologic Processes to a less than significant level. Residual impacts would be less than significant.

6. The applicant shall limit excavation and grading to the dry season of the year (i.e. April 15 to November 1) unless a Building & Safety approved erosion control plan is in place and all measures therein are in effect. All exposed graded surfaces shall be reseeded with ground cover vegetation to minimize erosion. **Plan Requirements:** This requirement shall be noted on all grading and building plans. **Timing:** Graded surfaces shall be reseeded within 4 weeks of grading completion, with the exception of surfaces graded for the placement of structures. These surfaces shall be reseeded if construction of structures does not commence within 4 weeks of grading completion.

   MONITORING: P&D shall site inspect during grading to monitor dust generation and 4 weeks after grading to verify reseeding and to verify reseeding and to verify the construction has commenced in areas graded for placement of structures.

4.9 HAZARDOUS MATERIALS/RISK OF UPSET

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?			X		
b. The use, storage or distribution of hazardous or toxic materials?			X		
c. A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?			X		
d. Possible interference with an emergency response plan or an emergency evacuation plan?			X		
e. The creation of a potential public health hazard?			X		
f. Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)?			X		
g. Exposure to hazards from oil or gas pipelines or oil well facilities?			X		
h. The contamination of a public water supply?			X		

Setting:

Physical:

The proposed project site is located on a 1,188 acre agricultural property and does not contain any known hazardous material in quantities capable of posing a public health risk.

Regulatory:

For properties which are known, or discovered, to contain hazardous materials are subject to the removal and/or treatment requirements of the California Fire Code. Within the County, the Fire Department's Hazardous Materials Unit (HMU) must review and approve any proposed plan to decontaminate a site found to contain a hazardous material.

Impact Discussion:

(a-c, e, h) Less than significant impacts. The agricultural use of industrial chemicals, such as pesticides and fertilizers, could potentially result in the release of waterborne pollutants into the adjacent Santa Ynez River. However, this agricultural application is already allowed under the current zone district (AG-II-100) and is considered an existing condition of the subject property. Therefore, the presence and use of such chemicals on the project site is not considered an impact directly produced by the approval of the proposed project. Residential and recreational uses onsite would be expected to generate only minor amounts of household hazardous materials, such as cleansers, paint, and motor oil. Minor amounts of such household hazardous material would not present a significant potential for release or explosion of hazardous materials and would be highly unlikely to create a public health hazard.

Due to the proximity of agricultural operations to the project site the Project has the potential to be affected by pesticide drift impacts. The area closest to the project site that would have the highest potential to result in pesticide application-related impacts is located on Assessor Parcel 137-270-032, which is a minimum of approximately 250 feet north of the proposed orientation center building and ropes course area and is used to grow a variety of row crops.

The Agricultural Commissioner's office was contacted regarding this issue and it was indicated that a variety of temporal and physical factors should be considered when evaluating the potential for pesticide drift impacts to occur (Trupe, 2015). Temporal factors are related to the time of day when pesticides are applied. Pesticides are typically applied at night or early morning when there is there is usually little wind and there is a reduced potential for people to be located in or near the pesticide application area. The Project would only operate during daytime hours (8:00 am to 6:00 pm), which would minimize the potential for pesticide application impacts. Physical factors that can reduce the potential for pesticide drift impacts include the separation distance and elevation differences between possible receptors and the area being treated with pesticides. Physical barriers between potential receptors and pesticide application areas, such as buildings or trees that can create air turbulence that aides in pesticide dispersal, should also be considered.

The ropes course area would be a minimum of 250 feet south of the closest agricultural field, and the elevation of the ropes course area is approximately 40 feet above the adjacent agricultural field. In addition, there are numerous oak trees located between the closest agriculture field and the ropes course area, as well as the trees in the ropes course area, that would serve as a physical barrier. The temporal and physical conditions described above will not eliminate the potential for the project site to be adversely affected by pesticide drift impacts, however, based on the Project's proposed operating hours, separation distance from the closest agricultural field, and the presence of physical barriers, the potential exposure risk is considered to be low and not a significant environmental impact.

An area on the western portion of the project site property (Assessor Parcel 137-270-031) has been developed as a telecommunications facility and several cell phone antennas are co-located on this site. The antenna site is approximately 450 feet northeast of the closest Project-related structure, which would be the proposed western end of zipline 3. Email correspondence between the project applicant and AT&T states that AT&T has "no issues/concerns from a safety standpoint given the 450-ft distance of your project from our antenna structure at 17-ft height."

As a result, impacts to public health or safety resulting from the proposed project would be **less than significant**.

(d) Less than significant impacts. The proposed project would not interfere with any known emergency response or emergency evacuation plan.

(f-g) Less than significant impacts. The proposed project site is not located in close proximity to any toxic disposal site, oil pipelines, or oil well facilities. The project site is located adjacent to ongoing surface mining operation which harvests gravel from the bed of the Santa Ynez River. However, this operation is located over 1,400 feet from the proposed project and is not expected to pose a health or safety risk to future recreationist on the site. Therefore, impacts would **be less than significant.**

Cumulative Impacts:

Since the project would not create significant impacts with respect to hazardous materials and/or risk of upset, it would not have a cumulatively considerable effect on safety within the County.

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be less than significant.

4.10 HISTORIC RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Adverse physical or aesthetic impacts on a structure or property at least 50 years old and/or of historic or cultural significance to the community, state or nation?				X	
b. Beneficial impacts to an historic resource by providing rehabilitation, protection in a conservation/open easement, etc.?				X	

Setting:

Physical:

The project site contains numerous agricultural structures in excess of 50 years in age, none of which have been identified as having historic or cultural significance to the community, state, or nation.

Regulatory:

The County's Environmental Thresholds and Guidelines Manual, Section 8, provides clear guidelines for evaluating potentially historic structures for their cultural significance within the community, state, or nation. Structures are deemed potentially historically significant if they:

a) possess integrity of location, design, workmanship, material, and/or setting,
b) are at least 50 years in age,
c) and demonstrate additional historical attributes, which include but are not limited to: the work of a master designer/builder, are associated with a particular architectural style important to the community, illustrates broad patterns of cultural, social, political, economic, or industrial history, etc.

If a structure has been evaluated in conformance with the aforementioned guidelines and been found to exhibit historically significant character the proposed demolition and/or substantial alteration of said structure could be considered a potentially significant impact to the environment as mandated by CEQA.

Impact Discussion:

(a, b) No Impact. The proposed project site contains existing residential and agricultural structures which exceed 50 years in age. All of these existing structures are located on Parcel 1. The project includes conversion of an existing warehouse to an orientation building for the zipline and rope course facilities. However, this conversion would require interior work only and would not result in exterior changes to the structures. Typically, interior changes to historic structures are not considered a significant impact unless the changes involve modification of an interior public space (i.e. hotel lobby, courtyard, etc.) or result in a substantial change to the historical context of the structure. The structure proposed for conversion has no interior public spaces and no known historical context of significance. Impacts to historic structures would be **less than significant**

Cumulative Impacts.

Since the project would not result in any substantial change in the historic character of the site, it would not have any cumulatively considerable effect on the region's historic resources.

Mitigation and Residual Impact:

No mitigation measures are required. Residual impacts would be less than significant.

4.11 LAND USE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Structures and/or land use incompatible with existing land use?			X		
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X		
c. The induction of substantial growth or concentration of population?			X		
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				X	
e. Loss of existing affordable dwellings through demolition, conversion or removal?				X	
f. Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X	
g. Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	
h. The loss of a substantial amount of open space?				X	
i. An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)				X	
j. Conflicts with adopted airport safety zones?				X	

Setting:

Physical:

The project is located on three separate parcels: APNs 137-270-033, -031, and 137-280-017. The two northernmost parcels (APNs 137-270-033 and -031) are located within the Santa Ynez Valley Community Plan (see Attachment 5, Santa Ynez Valley Community Plan exhibit). The proposed project site currently contains one existing single-family home, a guest house, four agricultural employee dwellings, and multiple agricultural support structures. The project site also contains two developed wells which are available for domestic use. The site is bounded by the Santa Ynez River and horse ranches and farming to the north, cattle grazing to the east, a blueberry farm and cattle grazing to south, and a surface mining operation and grazing to the west.

Regulatory:

The project site is located within the boundaries of the proposed Santa Ynez Valley Community Plan. The subject parcel is located in the AG-II-100 zone district, and has a Comprehensive Plan designation of AC (Commercial Agriculture). The property is governed by the regulations of the County Comprehensive Plan and the Land Use and Development Code.

Environmental Threshold: The Thresholds and Guidelines Manual contains no specific thresholds for land use. Generally, a potentially significant impact can occur if a project would result in substantial growth inducing effects.

Impact Discussion:

(a) ***Less than Significant Impacts***. The recreational components of the project would be located on areas of the subject parcels that would not introduce substantial land use conflicts with the surrounding development and agricultural uses. Though most of the site is utilized for agriculture both the proposed zip line and rope course facilities would be located on portions of the subject parcels that are constrained by steep terrain and/or contain dense oak woodland that is not suitable for grazing or cultivation.

The private driveway that would provide access to the project site currently serves two single-family residences located on the project property, four agricultural employee residences also located on the project property, and general ranch operations conducted on the project site and parcels adjacent to the driveway. Traffic counts on the driveway were not measured as part of the Project's traffic impact evaluation but for this analysis it would be reasonable to assume that existing traffic on the driveway is very low, perhaps on the order of approximately 100 trips per day. This estimate is based on a standard vehicle trip generation rate of ten trips per day for each residence (6 x 10) and a somewhat lower trip generation for general ranch operations (assumed to be a total of approximately 40 trips per day).

Existing and existing plus project-generated traffic noise conditions along the access driveway were estimated using a Federal Highway Administration traffic noise emission model. If existing traffic on the driveway is approximately 100 trips per day, resulting traffic noise conditions at a distance of 50 feet from the centerline of the driveway were calculated to be 41.2 dBA Ldn. Under peak operating conditions, the Project would add 84 daily vehicle trips to the driveway, which would increase traffic noise at a location 50 feet from the driveway centerline to 43.8 dBA Ldn. The resulting traffic noise would be below the County's 45 dBA significance threshold for interior noise in residences. Therefore, project-related traffic noise would not result in a significant land use impact.

The access driveway is mostly paved, except for a short segment where the driveway crosses the Santa Ynez River. Therefore, increased traffic on the roadway would not result in a substantial increase in dust-related impacts. The Project would only operate during daylight hours, therefore, additional traffic on the driveway would not be a substantial source of lighting (headlight) impacts. Therefore, impacts would be **less than significant**.

(b) ***Less than significants.*** The proposed zip line and ropes course would be a recreational activity that would be open to the public on agriculturally zoned property. The project would not make substantial changes (e.g., grading or major structural development) to the 1,186-acre project site. Preliminary review indicates that the proposal would be consistent with the Comprehensive Plan, Santa Ynez Community Plan, and Land Use &Development Code policies and requirements. The A-II zoning and comprehensive land use designation policies and regulations are in place to promote agricultural uses. However, Policy 1A.1.a-b of the Agricultural Element and Section 35.43.240 of the Land Use and Development Code allows for recreational uses in agriculturally designated lands, through the use of discretionary permits. As described in the Agricultural Resources section the proposed recreational uses would not affect the agricultural suitability. Therefore, impacts would be **less than significant.**

(c) ***Less than significant impacts.*** The proposed employment of ten additional full-time employees on the premises would not be considered a significant growth-inducing project nor would it include substantial population growth or concentration. As a result, impacts would be **less than significant**.

(d -j) ***No impacts.*** The project would not be growth inducing, and would not result in the loss of affordable housing, or a significant displacement of people. The project would not involve the extension of a sewer trunk lines or result in the loss of substantial amounts of open space. Additionally, the project would not create any identified social or economic effect that could result in a significant physical change, and future development on the site would not affect, nor be affected by, airport safety zones.

(h) No impacts: The property is currently privately owned and is not currently used, nor has it been historically used, by the surrounding community for active or passive recreational purposes Therefore, the proposed project would not result in a significant impact related to the loss of open space.

Cumulative Impacts:
The implementation of the project is not anticipated to result in any substantial change to the site's conformance with environmentally protective policies and standards. Thus, the project would not cause a cumulatively considerable effect on land use.

Mitigation and Residual Impact:

No mitigation measures are required. Residual impacts would be less than significant.

4.12 NOISE

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?			X		
b. Short-term exposure of people to noise levels exceeding County thresholds?			X		
c. Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?			X		

Setting:

The subject property is located in a rural area approximately one half mile east of Highway 101and approximately 0.75 miles south of SR 246. The Santa Ynez Airport is approximately five miles to the northeast. The proposed project site is located adjacent to ongoing surface mining operation which does have the potential to occasionally generate noise that exceeds the 65-dBA threshold for noise exposure. The proposed project site is located outside of 65 dB(A) noise contours for roadways, public facilities, airport approach and take-off zones. There are no noise sensitive uses within 1,600 feet of the proposed project.

Setting/Threshold: Noise is generally defined as unwanted or objectionable sound which is measured on a logarithmic scale and expressed in decibels (dB(A)). The duration of noise and the time period at which it occurs are important values in determining impacts on noise-sensitive land uses. The Community Noise Equivalent Level (CNEL) and Day-Night Average Level (L_{dn}) are noise indices which account for differences in intrusiveness between day- and night-time uses. County noise thresholds are: 1) 65 dB(A) CNEL maximum for exterior exposure, and 2) 45 dB(A) CNEL maximum for interior exposure of noise-sensitive uses. Noise-sensitive land uses include: residential dwellings; transient lodging; hospitals and other long-term care facilities; public or private educational facilities; libraries, churches; and places of public assembly.

The proposed project site is located outside of 65 dB(A) noise contours for roadways, public facilities, airport approach and take-off zones. There are no noise sensitive uses within 1,600 feet of the proposed project.

Impact Discussion:

(a) ***Less than significant impacts.*** The proposed zipline and ropes course project on the approximately 1,200-acre property would be located outside of the 65dB(A) noise contours for roadways, public facilities, airport approach and take-off zones. Therefore, the proposed project would not create long term exposure of people to noise levels exceeding County Thresholds. Impacts would be **less than significant**.

(b) ***Less than significant impacts.*** Noise generated from equipment during grading and construction activities typically can temporarily exceed County noise thresholds of 65 dB(A) CNEL for a distance of up to approximately 1,600 feet. The nearest single family residence is located approximately 2,300 feet northeast of the project site. The LUDC limits construction activities within 1,600 feet of residential receptors to the hours between 8:00 a.m. and 5:00 p.m., Monday through Friday. In this case, there are no residential receptors or other sensitive receptors within 1,600 feet of the site. Therefore, impacts would be **less than significant**.

(c) ***Less than significant impacts.*** The proposed project would not create a substantial increase in the ambient noise levels for adjoining areas. The primary noise source within the project site area is ongoing surface mining operation located northwest of the proposed development. The noises associated with the proposed project include sounds from recreationists using the zip line and ropes course. The sounds from these uses would be intermittent and temporary in nature and would only occur during times when the facility is operating. The proposed project site is located outside of 65dB(A) noise contours for roadways, public facilities, airport approach and take-off zones. Further, the subject recreational uses would not utilize amplified sound such as music or PA systems. Therefore, impacts to ambient noise levels would remain at **less than significant** levels.

Cumulative Impacts:

The implementation of the project is not anticipated to result in any substantial noise effects. Therefore, the project would not contribute in a cumulatively considerable adverse noise impact in the area.

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be less than significant.

4.13 PUBLIC FACILITIES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. A need for new or altered police protection and/or health care services?			X		
b. Student generation exceeding school capacity?				X	
c. Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)?			X		
d. A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)?			X		
e. The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X		

Setting:

Physical:

The project site does not contain any public facilities but it is located approximately one mile west of the City of Solvang's wastewater treatment facility. Police protection for the site would be provided by the County Sheriff's Department. The local station serving this area is located at 1745 Mission Road in Lompoc, which is approximately four miles from the project site. The closest emergency healthcare facility in relation to the project site is the Santa Ynez Valley Cottage Hospital located at 2050 Viborg Road in Solvang, approximately two miles from the project site.

Regulatory:

The County's Comprehensive Plan, Land Use Element, Land Use Development Policy 4 states: "Prior to the issuance of a use permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan."

Impact Discussion:

Thresholds

(a) ***Less than Significant impact:*** The proposed project includes the development of zipline and ropes course facilities and would not constitute a increase in residential population. As such, project development would not have a significant impact on existing police protection or health care services. Therefore, the project site could be served by the Sheriff's Department and the existing health care system without a significant impact to public service. Impacts would be **less than significant.**

(b) No impacts: The proposed recreational project would not generate additional student populations. Therefore, there is **no impact** to schools.

(c) Less than significant impact*:* The proposed project is not expected to generate significant amounts of solid waste, falling far below both the 196 tons per year threshold for significant impacts and the 40 tons per

year threshold for adverse impacts. Therefore the project would constitute an incremental and less **than significant** contribution to cumulative solid waste generation.

(d) ***Less than Significant Impact.*** The proposed project includes remodeling of the existing restroom facilities and an altered sewer system facility. The nearest public sewage disposal system is located in the City of Solvang immediately northeast of the project site. Prior to the construction of a private sewage disposal system, approval by the Planning and Development Department and Environmental Health Services would be required. Therefore, impacts would be **less than significant.**

(e) Less than Significant Impact. The proposed project would not increase the amount of storm water runoff from the site enough to warrant the construction of new storm water drainage or water quality facilities. Therefore, impacts would be **less than significant.**

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be less than significant.

Cumulative Impacts:

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for public services. Therefore, the project's contribution to the regionally significant demand for public services is not considerable, and is less than significant.

4.14 RECREATION

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Conflict with established recreational uses of the area?			X		
b. Conflict with biking, equestrian and hiking trails?			X		
c. Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)?			X		

Setting:

Physical:

The proposed project site is not designated by the County for public recreational activity. The Santa Ynez River traverses the northern edge of the project site, this watershed has been historically used for recreational purposes. It is also served by an existing improved river crossing culvert which provides access to Hwy 246.

The proposed project site is located approximately 1,000 feet south of Buellton. A portion of the project site is located adjacent to the Santa Ynez River. No established recreational uses (including parks, biking, equestrian or hiking trails) are located on or adjacent to the proposed project site.

Regulatory:

The County's Comprehensive Plan, Land Use Element, Parks/Recreation Policies state, in part: "Opportunities for hiking and equestrian trails should be preserved, improved, and expanded wherever compatible with surrounding uses."

Setting/Threshold: The Thresholds and Guidelines Manual contains no threshold for park and recreation impacts. However, the Board of Supervisors has established a minimum standard ratio of 4.7 acres of recreation/open space per 1,000 people to meet the needs of a community. The Santa Barbara County Parks Department maintains more than 900 acres of parks and open spaces, as well as 84 miles of trails and coastal access easements.

Impact Discussion:

(a, b) Less than significant impact. The proposed project would result in the development of zip line and rope course facilities. The proposed project site does not contain, and is not adjacent to, any known public trail or designated bikeway. The property is currently privately owned but is located adjacent to the Santa Ynez River. This major regional watershed has been historically used by the public for hiking, fishing, etc. Project implementation would not result in any conflicts with established recreational uses of the area, including biking, equestrian or hiking trails. Impacts would be **less than significant.**

(c) Less than significant impact. The proposed project would result in the development of zip line and ropes course facilities. Project implementation would provide additional recreational choices for residents of the area and would result in less than significant adverse impacts on the quality and quantity of existing recreational opportunities, both in the project vicinity and County-wide.

Cumulative Impacts:

Since the project would not affect recreational resources, it would not have a cumulatively considerable effect on recreational resources within the County.

Mitigation and Residual Impact: No mitigation is required. Residual impacts would be less than significant.

4.15 TRANSPORTATION/CIRCULATION

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system?			X		
b. A need for private or public road maintenance, or need for new road(s)?			X		
c. Effects on existing parking facilities, or demand for new parking?			X		
d. Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods?			X		
e. Alteration to waterborne, rail or air traffic?			X		
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)?			X		

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
g. Inadequate sight distance?			X		
ingress/egress?			X		
general road capacity?			X		
emergency access?			X		
h. Impacts to Congestion Management Plan system?				X	

Setting:

Physical:

The proposed project site is located approximately one half mile east of Highway 101 and approximately 1000 feet southwest of the City of Solvang. The project site is currently accessed via an existing private road which extends east from Highway 101. It is also served by an existing improved driveway and river crossing which provides ingress and egress access to State Route 246 (SR 246) approximately 0.75 miles to the north. This existing driveway is located within a private non-exclusive easement. The Highway 101/246 intersection is located approximately 1.5 miles to the east; 246/154 intersection is located approximately nine miles to the east.

Setting/Thresholds:

According to the County's Environmental Thresholds and Guidelines Manual, a significant traffic impact would occur when:

a. The addition of project traffic to an intersection increases the volume to capacity (V/C) ratio by the value provided below, or sends at least 15, 10 or 5 trips to an intersection operating at LOS D, E or F.

LEVEL OF SERVICE (including project)	INCREASE IN VOLUME/CAPACITY GREATER THAN
A	**0.20**
B	**0.15**
C	**0.10**
	Or the addition of:
D	**15 trips**
E	**10 trips**
F	**5 trips**

b. Project access to a major road or arterial road would require a driveway that would create an unsafe situation, or would require a new traffic signal or major revisions to an existing traffic signal.

c. Project adds traffic to a roadway that has design features (e.g., narrow width, road side ditches, sharp curves, poor sight distance, inadequate pavement structure) or receives use which would be incompatible with substantial increases in traffic (e.g. rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use, etc.) that will become potential safety problems with the addition of project or cumulative traffic. Exceeding the roadway capacity designated in the Circulation Element may indicate the potential for the occurrence of the above impacts.

d. Project traffic would utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable levels of service (A-C) but with cumulative traffic would degrade to or approach LOS D (V/C 0.81) or lower. Substantial is defined as a minimum change of 0.03 for intersections which would operate from 0.80 to 0.85 and a change of 0.02 for intersections which would operate from 0.86 to 0.90, and 0.01 for intersections operating at anything lower.

Impact Discussion:

(a) ***Less than Significant.*** The proposed project would add -84 average daily trips (ADTs) and 16 AM and PM peak hour trips (PHTs) to area roadways. Project traffic could affect the SR 246/private driveway intersection, which currently experiences an acceptable level of service. This would not represent a significant traffic congestion impact (increased wait times etc.) to area intersections or roadways, based on County significance thresholds (i.e., an increase of greater than 0.10 in volume-to-capacity ratio at nearby intersections experiencing poor levels of service, or use of a substantial portion of remaining roadway capacity). As a result, the project's contribution to peak hour traffic at this intersection represents a negligible increase over existing traffic levels and would not exceed the threshold of significance. The project would not result in unsafe driveways; impede pedestrian, bicycle, or transit access; nor would it otherwise cause or exacerbate an unsafe traffic condition. Therefore, impacts would be **less than significant.**

(b, c, d) ***Less than significant impacts.*** The proposed project would not create the need for private or public road maintenance or new roads. The existing public roadway infrastructure is adequately designed to serve the proposed project. According to the "Traffic and Parking Analysis prepared by- Associated Transportation Engineers (ATE, January 24, 2014), the parking demand for the project during peak summer season would be 24 spaces, including a demand for 8 parking spaces for employees and 16 spaces for visitors, which assumes 20 visitors on-site at a given time for zipline use, 20 visitors on-site at a given time for ropes course use, and an average vehicle occupancy of 2.5 persons per vehicle. Parking for the project would be provided in existing unmarked areas that would accommodate 45 vehicles. The parking areas are located onsite and outside of any road right-of-way. The proposed parking supply of 45 spaces would adequately accommodate the project's peak parking demands. No impacts to existing transit systems or circulation patterns would occur as a result of the overall proposed project. Therefore, impacts would be **less than significant.**

(e) ***Less than significant impacts***. The proposed project is not located adjacent to waterborne or rail traffic and is outside of an Airport Safety Zone. Therefore, impacts would be **less than significant.**

(f, g) ***Less than significant impacts***. Primary access to the project site would be provided via an existing private driveway connection to State Route (SR) 246. This portion of SR 246 includes two traffic lanes and a two-way left turn lane. The two way left turn lane can be used as a refuge to allow acceleration and merging into the westbound travel lane for guest making a left turn movement from the private driveway/ SR 246 intersection. However, based on ~~a~~ requests by Caltrans, the applicant is proposing to flare the existing driveway entrance to allow eastbound vehicle traffic to decelerate and make a safe right turn movement into the project driveway, and to make a safe right turn from the driveway and accelerate onto SR 246 without affecting traffic flow.

Secondary access connection to the site would be provided via an existing at-grade connection to U.S. Highway 101 located south of the Santa Rosa Road interchange. This access would only be available in the event of an emergency. The project site ingress/egress driveway that extends south from SR 246 crosses the Santa Ynez River via an "Arizona" crossing, and the emergency ingress/access road crosses Nojoqui Creek via an "Arizona" crossing. To avoid potentially significant access safety issues, the project proposes to not operate during or immediately after periods of inclement weather. The project would not create a traffic hazard for motorists, pedestrians, bicyclists, or transit users, or affect emergency access.

The long-term operational and short-term construction related impacts would not cause an increase in traffic hazards to motor vehicles, and adequate sight distance for ingress/egress, general road capacity, and emergency access would be provided. Therefore, impacts would be **less than significant.**

(h) ***No Impact.*** Roadways and intersections in the project area operate at acceptable levels of service and are not subject to Congestion Management Plan requirements.

Cumulative Impacts:

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for traffic. Therefore, the project's contribution to the regionally significant traffic congestion is not considerable, and is less than significant.

On July 10, 2015 a discussion item was presented to the Agricultural Preserve Advisory Committee regarding a proposal to construct a guest ranch and zip line project on Assessor Parcel 137-300-007 at a site approximately four miles south of the Sierra Grande project. Access to the guest ranch/zip line project would be from an existing at-grade connection to U.S. 101 that is approximately four miles south of the SR 246 interchange. Therefore, an additional zip line project in the region would not contribute to cumulative traffic conditions on SR 246 or other roads that would serve the Sierra Grande project.

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be less than significant.

4.16 WATER RESOURCES/FLOODING

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?			X		
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?			X		
c. Change in the amount of surface water in any water body?			X		
d. Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?			X		
e. Alterations to the course or flow of flood water or need for private or public flood control projects?			X		
f. Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion?			X		

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
g. Alteration of the direction or rate of flow of groundwater?			X		
h. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?			X		
i. Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?			X		
j. The substantial degradation of groundwater quality including saltwater intrusion?			X		
k. Substantial reduction in the amount of water otherwise available for public water supplies?			X		
l. Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?			X		

Existing Setting:

The Santa Ynez River traverses the northern edge of the project site and the associated floodplain extends into flat areas of the parcel. The project partially overlies the Santa Ynez River riparian basin. Current FEMA maps identify both a floodway and a 100-year flood plain on the northern fringes of the project site. The project site currently contains two domestic wells. Due to the project site's extremely close proximity to the Santa Ynez River, the groundwater table for this region of the county is unusually high.

Water Resources Thresholds

A project is determined to have a significant effect on water resources if it would exceed established threshold values which have been set for each overdrafted groundwater basin. These values were determined based on an estimation of a basin's remaining life of available water storage. If the project's net new consumptive water use [total consumptive demand adjusted for recharge less discontinued historic use] exceeds the threshold adopted for the basin, the project's impacts on water resources are considered significant.

Water Quality Thresholds:

A significant water quality impact is presumed to occur if the project:

- Is located within an urbanized area of the county and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
- Increases the amount of impervious surfaces on a site by 25% or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands;

- Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity);
- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses[2] of a receiving water body;
- Results in a discharge of pollutants into an "impaired" water body that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act); or
- Results in a discharge of pollutants of concern to a receiving water body, as identified by the RWQCB.

Impact Discussion

(a, e-f) ***Less than significant impact.*** Project implementation includes installation and operation of a zipline and ropes course facilities and renovation of an existing warehouse to an orientation center. Only the northern portion of the proposed parking lot would be located within the 100-year floodplain. However, since no development is proposed in this area the project would not create changes in currents or the course or direction of water movements, or alter the course or flow of flood water. Access to the project site would be from the driveway that extends south from SR 246 and crosses the Santa Ynez River via an "Arizona" crossing, and the proposed emergency ingress/access road crosses Nojoqui Creek via an "Arizona" crossing. No changes to the existing roadway crossings over the Santa Ynez River or Nojoqui Creek are proposed, therefore, the project would not affect flows in the river or creek. Further, to ensure public safety, the project would not be open during rain events or when rain is anticipated. There is an adequate supply of water for the project and the project would not contribute to overdraft of groundwater resources. Therefore, no exposure of people or property to water related flooding hazards would occur and, impacts would be **less than significant**.

(b-d) ***Less than significant impact.*** The project includes installation of utility type support poles to elevate the zip line guy wires and support platforms for the ropes course. The development foot print associated with the zip line course is approximately 847 sq. ft. of pole area. Installation of the poles would be conducted by hand and would not include pervious surfaces. While construction activities related to the installation of the support poles could potentially create temporary runoff and erosion problems, application of standard County grading, erosion, and drainage-control measures would ensure that erosion or storm water runoff impacts would be less than significant. There would be no changes to percolation rates, surface run-off patterns, or surface water amounts. Therefore, impacts on surface water quality, including storm water runoff, direction or course of surface or ground water or the direction, volume, or frequency of runoff would be **less than significant impact**.

(g-k) Less than significant impact. Water would be provided by an existing water well and sewer service would be provided by a proposed new septic system that would replace the system that currently serves the warehouse. No additional utilities besides what already exist on the project site would be needed for the proposed project. Water use on the property for the project is limited to restroom use by the employees and guests which would be well below levels that could increase groundwater draw to substantially affect the

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Beneficial uses for Santa Barbara County are identified by the Regional Water Quality Control Board in the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, and include (among others) recreation, agricultural supply, groundwater recharge, fresh water habitat, estuarine habitat, support for rare, threatened or endangered species, preservation of biological habitats of special significance.

groundwater basin. Therefore, no significant impacts to the quantity of local groundwater would result from the project.

The project would utilize an on-site wastewater disposal system (septic) which would contribute to the cumulative degradation of groundwater quality. However, the construction and ongoing use of this system would be subject to the approval of the Environmental Health Services Department and therefore all expected impacts from this disposal system are expected to be adverse but **less than of significant**.

(l) Less than significant impact. Runoff from the existing driveway and/or the proposed parking lot could introduce oil and other hydrocarbons into drainage facilities. However, the additional recreational uses would be expected to generate only minor amounts of storm water pollutants, such as cleansers, paint, and motor oil. Minor amounts of such household hazardous material would not present a significant potential for release of waterborne pollutants and would be highly unlikely to create a public health hazard.

Cumulative Impacts:
The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for water resources. Therefore, the project's contribution to the regionally significant issues of water supplies and water quality is not considerable, and is less than significant.

Mitigation and Residual Impact: No mitigation is required. Residual impacts would be less than significant.

5.0 INFORMATION SOURCES

5.1 County Departments Consulted

Police, Fire, Public Works, Flood Control, Parks, Environmental Health, Special Districts, Regional Programs, Other : Agricultural Planning

5.2 Comprehensive Plan

X	Seismic Safety/Safety Element	X	Conservation Element
X	Open Space Element		Noise Element
	Coastal Plan and Maps	X	Circulation Element
	ERME	X	Santa Ynez Community Plan

5.3 Other Sources

X	Field work	X	Ag Preserve maps
	Calculations	X	Flood Control maps
X	Project plans	X	Other technical references (reports, survey, etc.)
	Traffic studies		
	Records	X	Planning files, maps, reports
	Grading plans	X	Zoning maps
	Elevation, architectural renderings		Soils maps/reports
	Published geological map/reports	X	Plant maps
X	Topographical maps	X	Archaeological maps and reports
			Other

6.0 PROJECT SPECIFIC *(short- and long-term)* AND CUMULATIVE IMPACT SUMMARY

The proposed project does not have potential impacts that cannot be feasibly mitigated to less than significant levels.

I. Project-Specific Impacts which are of unavoidable significance levels (Class I): None

II. Project-Specific Impacts which are potentially significant but can be mitigated to less than significant levels (Class II): Biological Resources, and Geologic Processes

III. No potentially significant adverse cumulative impacts have been identified.

7.0 MANDATORY FINDINGS OF SIGNIFICANCE

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory?		X			
2. Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals?			X		
3. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.)			X		
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X		
5. Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR ?			X		

Compliance with required mitigation measures would avoid significant impacts to the biological resources associated with existing coast live oak woodlands, and nesting sites for raptors. The project's effects on air quality, traffic, water, and public services would be below adopted thresholds of significance.

8.0 PROJECT ALTERNATIVES

Not Applicable. The proposed project does not have potential impacts that cannot be feasibly mitigated to less than significant levels.

9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS

Zoning

The project site is zoned "AG-II-100" Agriculture under the Land Use and Development Code, Inland Zoning Ordinance. The proposed project is consistent with the requirements of the Santa Barbara County Land Use and Development Code (Inland Zoning Ordinance. The AG-II-100 zoning of the site allows for the uses and densities proposed.

Comprehensive Plan

The project will be subject to all applicable requirements and policies under the Santa Barbara County Land Use and Development Code, and the County's Comprehensive Plan. The consistency analysis will be provided in the forthcoming Staff Report. The following policies from the County's Comprehensive Plan are applicable to the proposed project, and will be included in the Staff Report:

1. Land Use and Development Policy # 4
2. Visual Resource Policies 2, 5
3. Hillside and Watershed Protection Policies 1, 2, 3, 5, 6, 7
4. Santa Ynez Valley Community Plan Policies: Action BIO-SYV-1.2, BIO-SYV-4, DevStd, BIO-SYV-4.8, DevStd, BIO-SYV-4.8, DevStd, BIO-SYV-8.3, Policy BIO-SYV-11

10.0 RECOMMENDATION BY P&D STAFF

On the basis of the Initial Study, the staff of Planning and Development:

____ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.

_X_ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an ND. The ND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.

____ Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.

____ Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas:

✓ With Public Hearing _____ Without Public Hearing

PREVIOUS DOCUMENT:

PROJECT EVALUATOR:_____ DATE:

11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

____ I agree with staff conclusions. Preparation of the appropriate document may proceed.
____ I DO NOT agree with staff conclusions. The following actions will be taken:
____ I require consultation and further information prior to making my determination.

SIGNATURE:_____ **INITIAL STUDY DATE**: _____

SIGNATURE:_____ **NEGATIVE DECLARATION DATE**:_____

SIGNATURE:_____ **REVISION DATE: _____**

SIGNATURE:_____ **FINAL NEGATIVE DECLARATION DATE: _____**

12.0 ATTACHMENTS

1. Vicinity Map
2. Project Plans
   Figure 2.1 Site Plan,
   Figure 2.2 Rope Course
   Figure 2.3 Warehouse Elevations
   Figure 2.4 Proposed Parking Areas
3. Biological Oak Tree Assessment, (Bill Spiewak, December 13, 2013)
4. CalEEMod Calculations
5. Santa Ynez Valley Community Plan Exhibit
6. Comment Letters
7. Ephemeral Stream Assessment (Bruce Reitherman, June 1, 2016)

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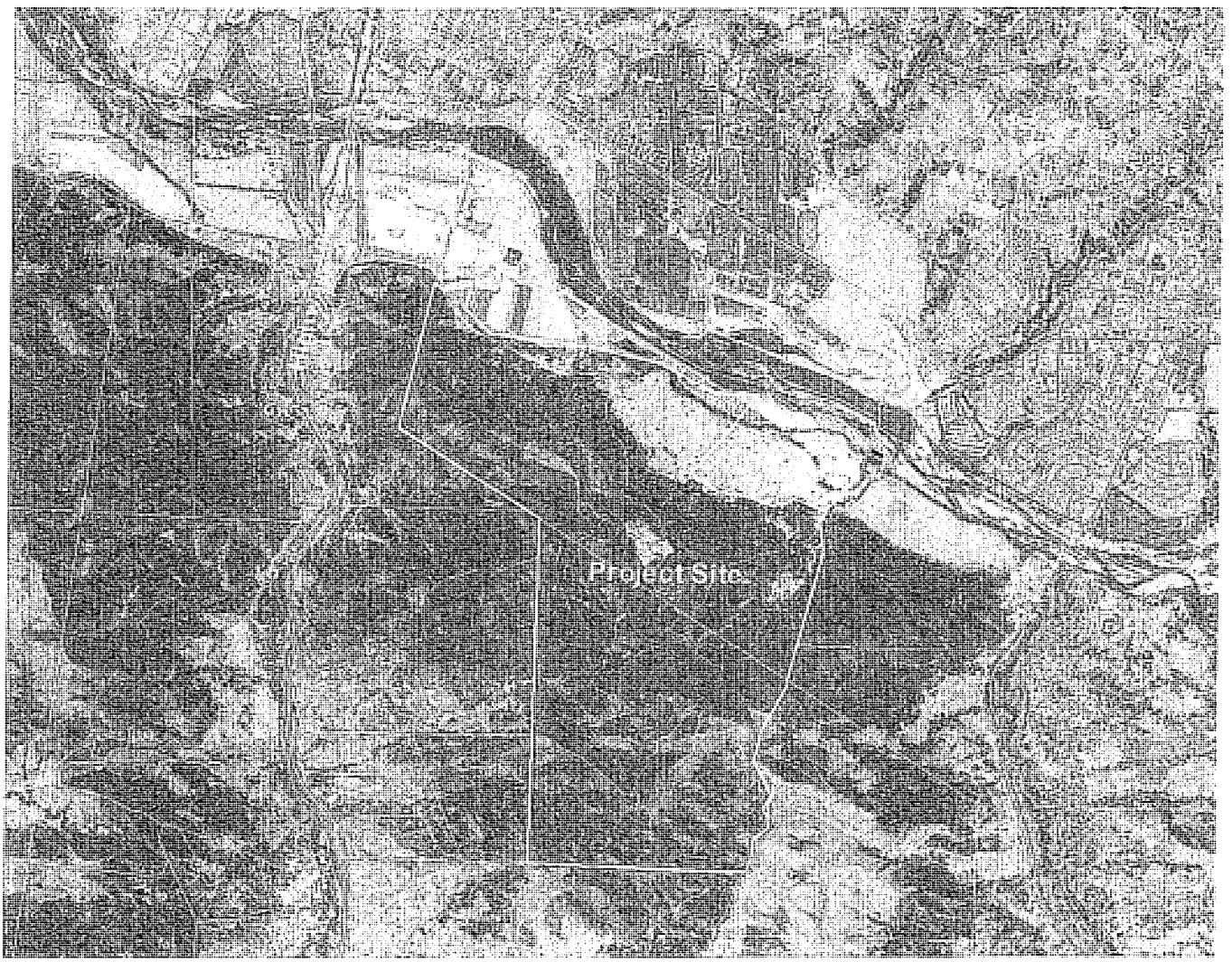
Attachment 1
Vicinity Map



ATTACHMENT 2 PROJCT PLANS

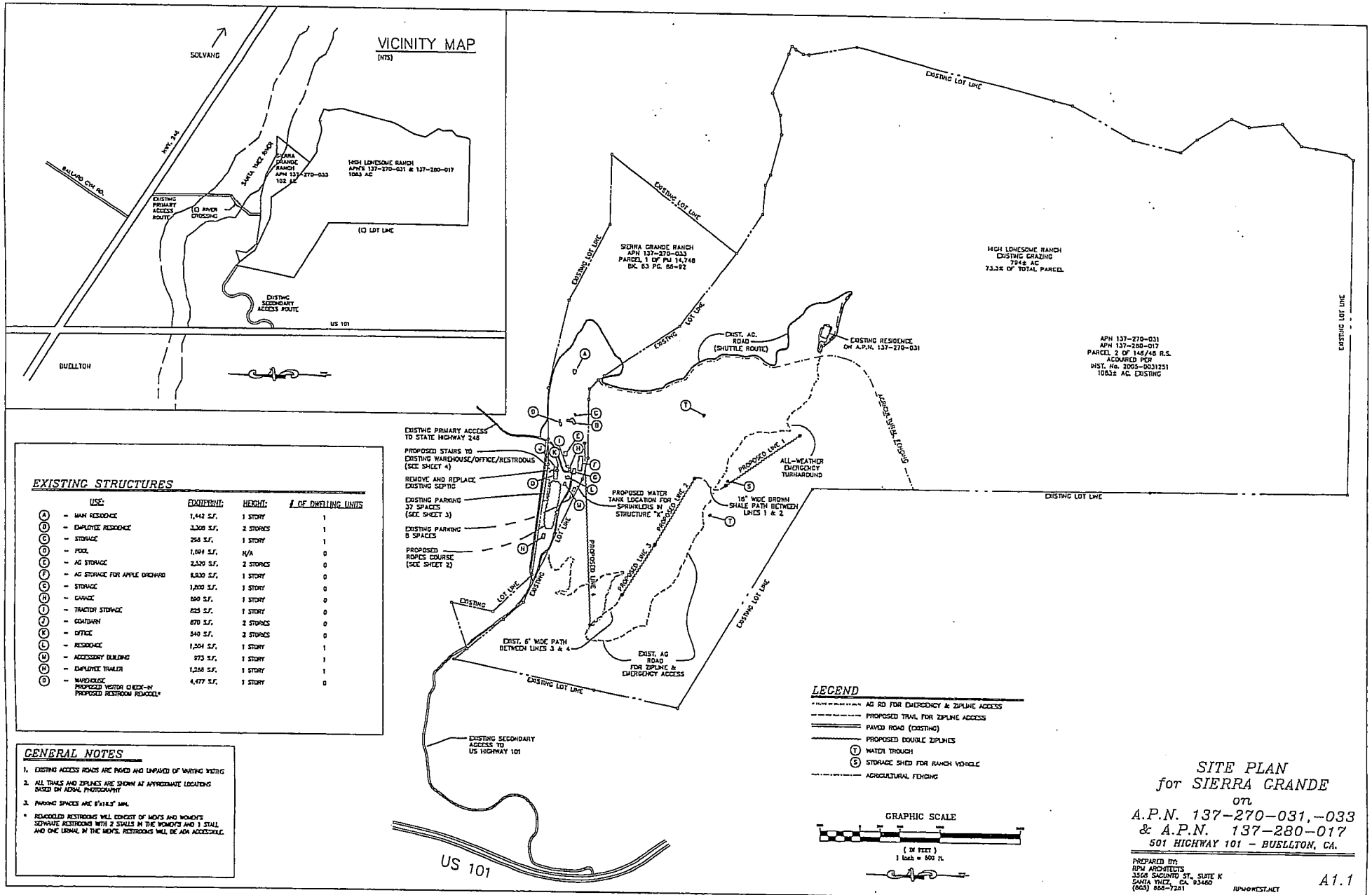


Figure 2.1 Site Plan

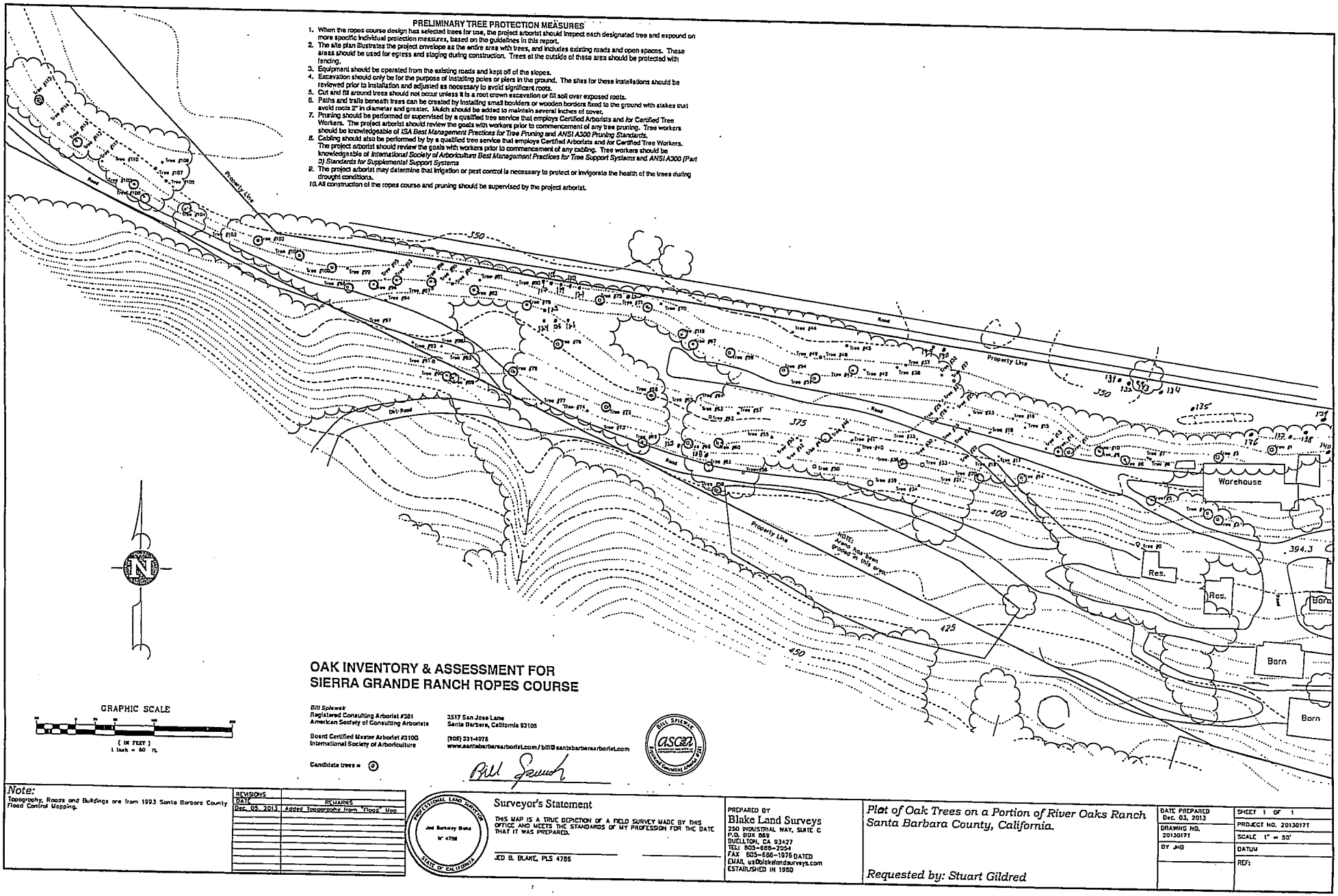


Figure 2.2 Ropes Course

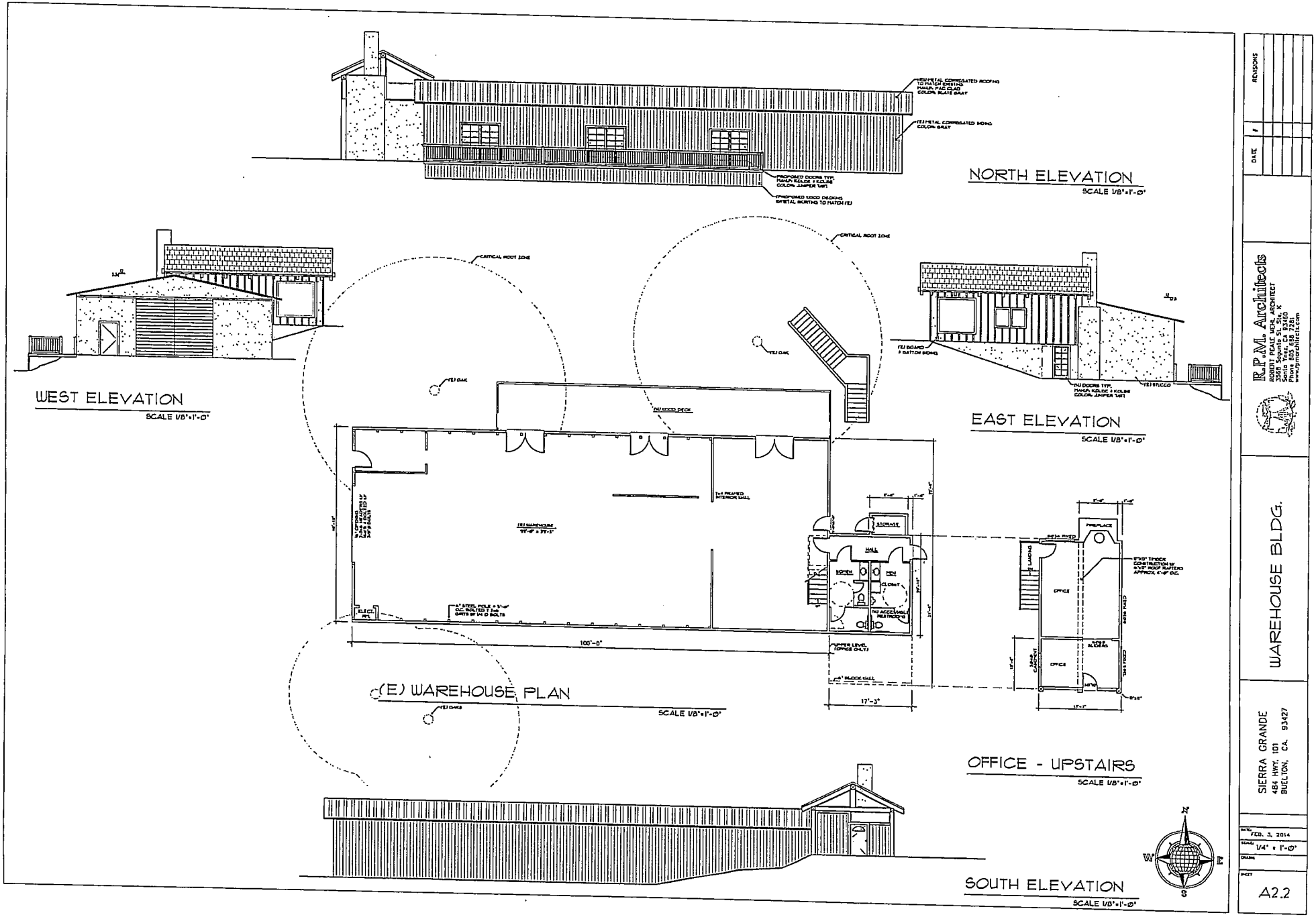


Figure 2.3 Warehouse Elevations

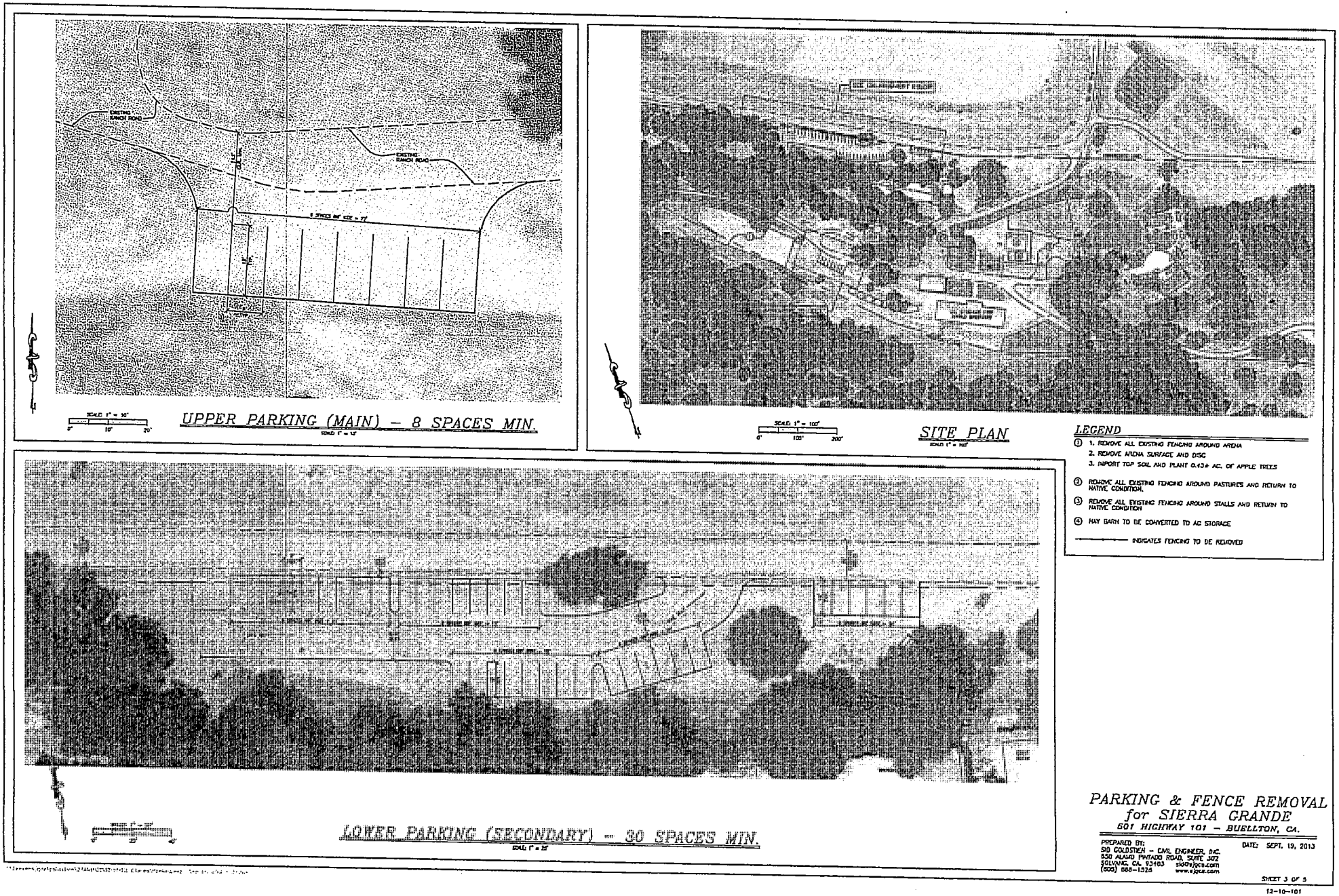


Figure 2.4 Proposed Parking Areas

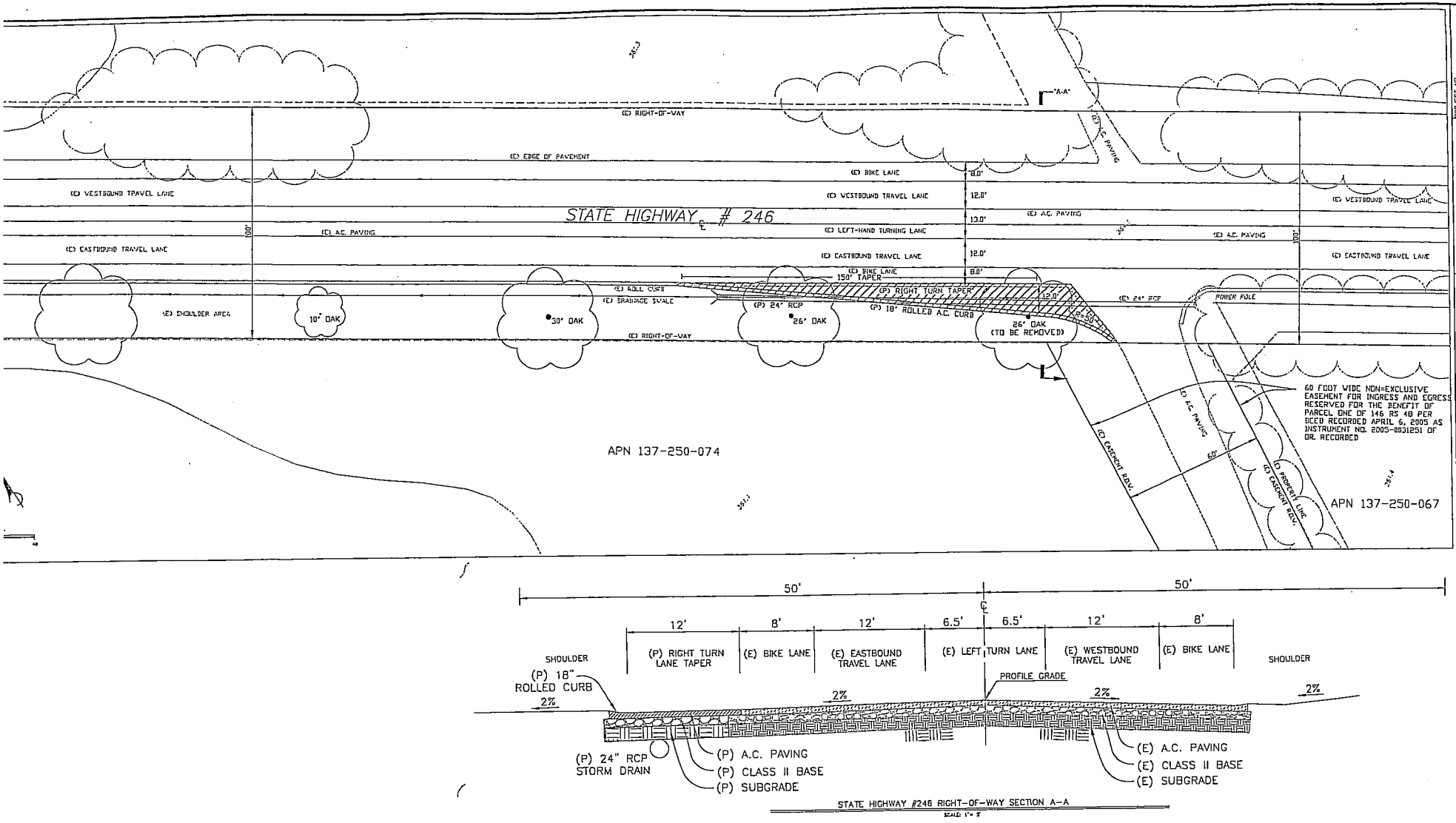


FIGURE 2.5 PROPOSED DRIVEWAY TAPER

Bill Spiewak
CONSULTING ARBORIST
Registered Consulting Arborist #381 • American Society of Consulting Arborists

OAK TREE ASSESSMENT
for the Sierra Grande Ranch Ropes Course

Prepared for
Jane Gray - Environmental Planner - Project Manager
Dudek Engineering and Environmental
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Prepared by:
Bill Spiewak
Registered Consulting Arborist #381 — Board Certified Master Arborist #310B
American Society of Consulting Arborists — International Society of Arboriculture

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December 13, 2013

SUMMARY

I was retained to inventory and assess the oak trees on the subject property for a preliminary study relative to the proposed Ropes Course Project. I was on the site in November and December 2013 and looked at one hundred thirty-three California Live Oaks and five Valley Oaks.

I found most of the trees to be in fair to very good condition. Many of the trees warrant pruning, cabling, and control of some of the erosion where soil has accumulated around the root crowns or has been washed away. I've identified forty-six large oak trees that are good candidates for integrating into the course. I've also included recommendations to avoid and minimize impacts to the trees, all of which are within the goal of the applicant.

This report is intended to be used as a guideline for the development of the project. Refer to the table of contents on the next page for the organization of this document. The location of the trees can be found on the accompanying site plan or as an attached PDF in the electronic version.

TABLE OF CONTENTS

INTRODUCTION

BACKGROUND/ASSIGNMENT

In November 2013, I prepared a preliminary report regarding the oak trees at the Sierra Grande Ranch in Santa Ynez. I discussed how to minimize and avoid potential impacts to trees by providing basic management guidelines.

Since that time, the County of Santa Barbara required my client to provide a report with greater detail about the trees, their condition, and how to protect them from damage as a result of the proposed ropes course.

As a result the owners of Sierra Grande Development retained me to inventory the trees, assess their condition, address potential impacts, and provide a report with my findings and recommendations. Potential impacts that have been addressed include: 1) constructing and attaching minimally invasive structures; 2) tree pruning; 3) ongoing maintenance; 4) long-term preservation; and 5) other management issues associated with the trees. I returned to the site during the first week of December 2013 to inspect each tree within the parameters of the project.

Limits of the assignment

A ropes course is a relatively new activity and very unique to Santa Barbara County. The guidelines set forth in this report are based on oak tree health and the science of arboriculture. There are no industry standards that apply specifically to a ropes course through a woodland. However, tree industry standards and best management practices are applicable to this project. I also did research on ropes course construction prior to preparation of this report.

Use of this report

It is intended that this report act as a preliminary guideline that sets as a foundation for the development of this project. As the project evolves, the design should be reviewed and each component be compared to these guidelines for conformity. Arboriculture is a dynamic and evolving science. Over time, it may be determined that other appropriate measures be updated to protect and preserve the trees. Although there is no time line for updates, the Certified Arborist inspecting trees is required to renew his/her certification every two years and should be current with regional tree related information that may be directed at oak tree management.

to the extent possible woodpecker holes or other cavities the might provide nesting sites for particular bird species;

- tree trimming and maintenance within the Ropes Course does not eliminate all damaged branches or other sources of potential nest cavities in an effort to "clean up" the woodland to a standard based excursively on aesthetic character and not based on an understanding that a healthy ecosystem includes trees that, as a result of age, disease, trauma or natural patterns of growth, evidence decay essential to the deep function of the area as a habitat for all native species;
- construction/installation of poles/cables, and clearance and maintenance of roads/trails takes place between late July and early march;

8. Conclusion

The Sierra Grande Rural Recreation Project, if constructed in the manner described in Project Plans, maintained/operated as described by Project Applicants, and executed with the mitigations enumerated in this assessment in mind, poses no significant threat to known, sensitive biological resources.

9. Citations

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Curtis, Odette E., R. N. Rosenfield and J. Bielefeldt. 2006. Cooper's Hawk (Accipiter cooperii), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online:http://bna.birds.cornell.edu/bna/species/075-doi:10.2173/bna.75

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times when a variety of birds might be inclined to nest within the activity impact zone.

Most species of birds likely to nest in oak woodland within the Ropes Course area could find abundant alternate nesting sites outside the limits of disturbance. Impacts to those species are therefore deemed likely not to be significant.

Possible exceptions to this statement include nesting birds that require cavities, including American kestral, tree swallows, Bewick wren, woodpeckers (Acorn, Nuttal's, Hairy , Downy) oak titmouse, western bluebird, and some species of flycatcher (and European starling, an introduced species that often competes aggressively with native birds for limited cavity nest availability). Observations in the Ropes Course area revealed numerous cavities, some the result of woodpecker borings, and others the product of natural damage and decay to the branches and trunks of oaks many decades old. I am unable to definitively determine potential impacts resulting from Ropes Course activity to bird species that are inclined to nest in these cavities, but conclude that impacts are likely not to be significant owing to the large number of cavities available and the extensive undisturbed habitat available nearby.

Cooper's hawk (*Accipiter cooperii*) is the only special-status species likely to nest near or within the Project activity envelope. In California, Cooper's hawks have shown a strong preference to nest in oak trees (Asay 1987), although they have also been known to use eucalyptus for this purpose within the County of Santa Barbara (Author, personal observations). Because the Ropes Course provides habitat especially suitable, that area was examined with special focus. No individuals nor any signs of nests were observed during surveys along the Zip Lines Tour or Ropes Course areas.

Cooper's hawk nests are typically built out of small sticks, occasionally rimmed with green tree sprigs, placed in a main crotch or on a horizontal limb against the trunk of a live tree, and partly concealed and shaded by the canopy. Unlike many other species of raptor, Cooper's hawks only occasionally use the same nest in successive or intermittent years. Instead, they typically build a new nest in the same general area (Curtis et. al. 2006).

Abundant suitable nesting habitat in the Project vicinity suggests that paired Cooper's hawks would not find it difficult to locate alternate nest sites nearby should they investigate potential nest sites located within areas where Project activity would disturb them. Impacts to this species are therefore likely not to be significant.

7. Mitigation

Results of this assessment indicate that significant impacts to vegetation, wildlife and birds are not likely, as long as:

- construction/installation activity in the Zip Lines area is confined to small areas at sites located at the edge of existing roads, trails or other disturbed areas, as designated on Project plans;
- installation of cables/hardware/platforms within the Ropes Course tree canopy avoids

PROJECT GOAL

The project partners are adamant about protecting the oak resource due to their love of nature, and their need and desire to preserve trees. Their goal is to create an eco-tourist activity that integrates structurally sound and biologically healthy oaks.

PROJECT DESCRIPTION

A ropes course is a challenging outdoor personal development and team building activity which usually consists of high and/or low elements. Low elements take place on the ground or only a few feet above the ground. High elements are usually constructed in trees or made of utility poles and require a belay for safety. This course will begin and end within an area, approximately 2000 feet long by 50-200 feet wide and will travel through the crowns of mature Coast Live Oak (*Quercus agrifolia).*

Platforms and cables will be attached to trees without invasive hardware in order to preserve the health and structure of the trees. It may be necessary to install a limited amount of hardware developed for trees that is in accordance with *International Society of Arboriculture Best Management Practices for Tree Support Systems* and *ANSI A300 (Part 3) Standards for Supplemental Support Systems.* In addition, poles will be installed within the ropes course that are independent of trees and used for attaching cables, platforms, ladders, and other ropes course gear.

The terrain throughout the ropes course will be utilized in its natural condition aside from the roads that have existed on this property. Paths may be installed that will be mulched or covered with materials that avoid compacting soil within the root zones of the trees. This may include the use of wooded decks (or suitable other) that are supported by piers set in the ground where they will not impact tree roots.

Regular inspections will be provided that check the condition of the trees and the equipment. The frequency of tree inspections have not yet been determined but should occur at least once annually and most likely after severe storms.

OBSERVATIONS

GENERAL SITE & TREES

While on the site, one hundred sixteen (116) oak trees were numbered, although the individual trunks of two multi-trunk trees where independently labeled (#6 & #7 are one tree and #9 &#10 and are one tree). That indicates that one hundred fourteen (114) oaks were labeled. These were the larger trees. In addition, I observed twenty two unnumbered smaller oaks that were within the understory or on steeper terrain. These trees are now numbered on the site plan and the tree inventory as #117-#140.

All of the oak species are California Live Oak *(Quercus agrifolia)* with the exception of five Valley Oaks *(Quercus lobata)*. The Valley Oaks were going dormant at the time of my inspection but appeared to be biologically healthy. Most of them were older and had structural defects including large columns of decay in the trunks. None of the Valley Oaks will be selected for use in the ropes course due to their condition.

I found most of the oaks to be in good condition both biologically and structurally. A small number were in poor condition. I also noticed that drought has affected the color and density of the foliage on many trees. The crowns varied from dark green and dense to thinner and lighter in color. Despite the thinner crowns, I felt most of these trees were in good condition and awaiting winter rains. If we experience another year of below normal rainfall, it may become necessary to supplement with monthly deep watering.

Throughout the oak grove are several paved and unpaved roads. These have been in place for many years and allow easy movement through the area. Weather has caused some ruts in the roads that may need to be patched. The roads divide the property with a central road between upper and lower slopes. Trees are growing on all slopes and on the flat terrain. I also observed old vehicles and equipment throughout the site which is typical of an old working ranch.

There was a significant amount of soil erosion throughout the area. The soil around the base of some trees has been washed away exposing an abundance of roots on all sides or only on the lower side of the trunk. This was primarily seen on trees growing on the lower portion of the slope. Soil can be carefully added to cover those exposed roots where the erosion is significant.

On the upper slope and on some trees on the lower slope, soil has accumulated on the higher side of the trunk. This will warrant root crown excavations around these trees, which is the careful removal of excess soil down to the root flare. Soil erosion will be something that will require maintenance.

Many of the oaks have a typical defect called co-dominant stems with included bark. With many of these oaks, weight reduction at the ends of limbs in conjunction with cabling, will mitigate these potential problems.

Co-dominant stems are two or more trunks, leaders, limbs or branches that grow adjacent to each other, at similar rates, and can be similar in size. As these stems continue to grow each year, they also enlarge in diameter. Eventually, the space between them closes and the bark becomes included or embedded. This results in a weak attachment between the stems. This anatomical growth is a common defect in trees and the cause for the majority of splitting that occurs as co-dominant stems with included bark get large and heavy. The defect can often be mitigated with removal of one of the co-dominant stems, weight reduction pruning and/or sometimes cabling. Despite this being a common problem, not every co-dominant stem with included bark will fail. Targets below the tree, a risk assessment, and the tree's significance should be the basis for concern.

I also observed high voltage utility wires running through the property. Several oaks have been severely pruned below the wires by the public utility. These trees will need to be inspected to be sure that poor pruning methods do not promote decay and damage to those specific oaks and that the ropes course does not conflict with the wires.

INDIVIDUAL TREE ASSESSMENT

The table below contains the tree inventory. Refer to the site plan for its location by corresponding number. I have also described the column headings on the spreadsheet.

#	Valley Oak	Candidate Tree	DBH	Health	Structure	Average Condition	Comment	Recommendation

Column Headings & Descriptions

- # is the tree # and corresponds with the number on the site plan.
- **Valley Oak** - an "x" in that column indicates one of the five on site.
- **Candidate Tree** is a tree that I think can be used for the ropes course due to its health and structure. These have been highlighted in yellow on the spreadsheet and also identified on the site plan.
- **DBH** is the diameter at breast height (measured at 54" above ground). The measurement was taken slightly higher or lower where a limb may have interfered. With multi-trunk trees, both trunk diameters were measured and represented on the spreadsheet with a "/" between each trunk diameter.
- **Health** is rated from 1-5 and represents the biological condition. Most trees are between 2 and 4 with a "+" or a "-" to represent higher or lower degrees.
- **Structure** is rated from 1-5 and represents the structural condition. All trees are between 2 and 4 with a "+" or "-" to represent higher or lower degrees.
- **Average condition** is rated as very good, good, fair, and poor. The ratings are: Very good is 4, Good is 3+ to 4-, Fair is 2+ to 3, Poor is 2.
- **Comment** is a significant or key observation that warranted some note.
- **Recommendations** are what should be done to maintain or improve the conditions of the tree. Crown cleaning and crown thinning are recommended for most trees. I have also recommended some cabling and root crown excavation. These maintenance tasks are described later in the report.

Tree Inventory

In the electronic version of this report, see the tree inventory on attached spreadsheet that represent pages 7-10 of the hard copy.

DISCUSSION

POTENTIAL PROJECT IMPACTS

I have listed and discussed potential impacts below. Although many may not be an issue with this project, the list contains the items that need to be considered. These will be addressed in the future after specific trees are identified for use in the development and the design of the ropes course.

Constructing & Attaching Minimally Invasive Structures

1. Platforms and supports can be suspended and attached to trees using ropes, webbing, and other non-invasive fasteners, in conjunction with ground supported poles and beams.
2. Although unlikely, it may be found that some additional hardware may be necessary to improve stability of the platforms. Tree hardware is commonly used in the industry and may be considered for use provided installation is consistent with *International Society of Arboriculture Best Management Practices for Tree Support Systems* and *ANSI A300 (Part 3) Standards for Supplemental Support Systems.* These standards designate types of acceptable hardware, placement within a tree, angles of attachment, inspection periods, and load bearing.

Protecting the Soil & Roots

3. The soil and roots below trees are subject to damage from earthwork and compaction. Compaction can occur after construction by people utilizing the facility. Compaction can be avoided by applying layers of mulch or coarse wood chips over the root zones. As the mulch decomposes, new mulch should be added to maintain a layer of approximately 2"-3" thick. It should be expected that mulch will need to be replenished as part of ongoing maintenance.
4. It may be necessary to install soil retaining landscape plants or borders where chips and soil may erode. This can be done with minimally invasive pins or stakes hammered into the ground (such as rebar, pipe, or steel stakes) that retain landscape materials.
5. Posts or piers for platforms may need to be secured into the ground in holes or footings packed with concrete. Holes should be hand dug to the required depth. Large diameter roots (2" and greater) will need to be avoided by careful digging and altering placement of the holes if necessary. The project arborist should provide direction in these situations.

Tree Pruning

6. Tree pruning is often necessary to reduce risks from falling deadwood and breaking limbs. This may be required every year and sometimes more frequently, depending on weather.
7. Pruning of mature trees should be limited to the removal of deadwood, weakly attached limbs, or those with structural defects.
8. As ongoing maintenance, thinning the crown should be limited to not more than 20% of live tissue during any one year. However, regular crown thinning of live wood is often discouraged in mature trees as the leaves help sustain a healthy tree. Under certain situations, it may become necessary to prune more than 20% of the live crown. This should be directed by the project arborist.
9. All pruning operations should follow A300 Pruning Standards and performed by qualified arborists certified through the International Society of Arboriculture.

Ongoing Maintenance

10. Tree pruning, replenishing of mulch, and inspection of equipment and hardware, are all maintenance concerns that should be scheduled and documented based on the impacts of severe weather, growth, and the effects of site use. The schedule should be directed by the project arborist on an as needed basis and after an inspection. Trees should be inspected at not more than one year intervals and likely more frequently depending on conditions.
11. Ongoing maintenance will help sustain the health of trees and people, and protect the the property owner from negligence.
12. On-going maintenance may include supplemental irrigation during drought.

Long Term Preservation

13. As living organisms, oaks grow for many years and decline for many years. Sometimes environmental stresses cause health and structural problems for trees. Many of these cannot be controlled but only managed to minimize risks.
14. It is important that oak trees continue to be planted to mitigate the aging process of trees and insure the long term preservation of the oak resource.
15. A planting plan that includes planting acorns within designated areas should be created that assures preservation of the oak resource.

Other Tree Management Issues

16. Trees in general are subject to weather and other environmental impacts. In addition, people may cause damage to trees through vandalism.
17. Some of the problems that may impact the trees in the future, non-project related, include storms, drought, freeze, fire, pest and disease, and vandalism.
18. In the case of any of these impacts, the trees should be assessed and treated as appropriate as directed by the project arborist.

TREE MAINTENANCE DESCRIPTIONS

Crown Cleaning

Crown cleaning is the removal of dead, diseased, or dying branches. It also includes removing limbs that are unsafe or non-contributing to the health and structure of the tree.

Crown Thinning

Crown thinning is selectively removing limbs or branches that open up the crown to allow light, reduce wind-sail, and mostly to reduce the weight. With this project, thinning should be limited to the ends of horizontal and diagonally growing limbs. The upright vertical limbs do not warrant thinning.

Root Crown Excavation and Fill Soil

A root crown excavation is the careful and manual removal of accumulated soil around the base of the tree. The root crown is the transition zone between the trunk and the roots. All trees have a flare where they enter the ground. If the trunk appears to grow out of the ground without any flare, soil or leaf liter has built up around it. The root crown is highly susceptible to rot from moisture that is held against the trunk, especially when the root crown is raised above normal. However, all oaks are susceptible to root rot when they receive year-round irrigation. Monthly deep watering is not considered to be damaging during drought years.

In some instances, soil has eroded around the base of the trees, exposing roots. Although this was a natural occurrence, adding soil over the exposed roots can promote new root growth, add to the stability of the tree, and counteract erosion. Native soil from the site should be used for fill soil and should not exceed the top of the root crown.

Cabling

Cabling is the installation of specially designed tree hardware to assist in support of limbs. This is recommended where are co-dominant limbs with included bark and excess weight. This operation should follow the standards presented in the A300 Standards for the Cabling and Bracing of trees.

CONCLUSIONS

1. The guidelines in this report provide a foundation for the design of the project.
2. The project arborist should be involved in the design phase to ensure compliance.
3. The use of these trees for the project will not harm them provided it is in accordance with the guidelines in this report.
4. Within the project envelope I have identified forty-six trees that are good candidates for integration of climbing structures due to their health and structure.
5. Tree maintenance should be performed as listed in the recommendations column in the inventory spreadsheet before building ariel structures in the oaks.
6. In order to protect trees and people, a plan for ongoing inspection and maintenance must developed and implemented.

PRELIMINARY TREE PROTECTION MEASURES

1. When the ropes course design has selected trees for use, the project arborist should inspect each designated tree and expound on more specific individual protection measures, based on the guidelines in this report.
2. The site plan illustrates the project envelope as the entire area with trees, and includes existing roads and open spaces. These areas should be used for egress and staging during construction. Trees at the outside of these area should be protected with fencing.
3. Equipment should be operated from the existing roads and kept off of the slopes.
4. Excavation should only be for the purpose of installing poles or piers in the ground. The sites for these installations should be reviewed prior to installation and adjusted as necessary to avoid significant roots.
5. Cut and fill around trees should not occur unless it is a root crown excavation or fill soil over exposed roots.
6. Paths and trails beneath trees can be created by installing small boulders or wooden borders fixed to the ground with stakes that avoid roots 2" in diameter and greater. Mulch should be added to maintain several inches of cover.
7. Pruning should be performed or supervised by a qualified tree service that employs Certified Arborists and /or Certified Tree Workers. The project arborist should review the goals with workers prior to commencement of any tree pruning. Tree workers should be knowledgeable of *ISA Best Management Practices for Tree Pruning* and *ANSI A300 Pruning Standards.*
8. Cabling should also be performed by by a qualified tree service that employs Certified Arborists and /or Certified Tree Workers. The project arborist should review the goals with workers prior to commencement of any cabling. Tree workers should be knowledgeable of *International Society of Arboriculture Best Management Practices for Tree Support Systems* and *ANSI A300 (Part 3) Standards for Supplemental Support Systems*
9. The project arborist may determine that irrigation or pest control is necessary to protect or invigorate the health of the trees during drought conditions.

10. All construction of the ropes course and pruning should be supervised by the project arborist.

ARBORIST DISCLOSURE STATEMENT & CERTIFICATION OF PERFORMANCE

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

I Bill Spiewak, certify:

That I have personally inspected the trees on the property referred to in this report and have stated my findings accurately.
The analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and commonly accepted arboricultural practices.

Prepared by: Bill Spiewak

Bill Spiewak
Registered Consulting Arborist #381
American Society of Consulting Arborists

Board Certified Master Arborist #310B
International Society of Arboriculture

REFERENCES

1. American National Standards Institute (ANSI) A300 (Part 1)-2006 Tree, Shrub, and Other Woody Plant Maintenance-Standard Practices (Pruning). Washington, D.C.
2. American National Standards Institute (ANSI) A300 (Part 3)-2006 Tree, Shrub, and Other Woody Plant Maintenance-Standard Practices (Supplemental Support Systems). Washington, D.C.
3. Costello, L. R., and Hagen, H. W., and Jones, K. S.2011. Oaks in the Urban Landscape: Selection, Care, and Preservation. University of California: Agriculture and Natural Resources.
4. Harris, R. W., and Matheny, N. P., and Clark, J. R.2004. Arboriculture: Integrated Management of Landscape Trees, Shrubs, and Vines, Fourth Edition. Prentice Hall.
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8. http://en.wikipedia.org/wiki/Ropes_course
9. www.flagstaffsupreme.com

Sierra Grande Zipline

Santa Barbara County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	4.48	1000sqft	0.10	4,477.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2015
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 - Land use of was where house because of the large structue hey are converting

Construction Phase -

Vehicle Trips - Project sepcific trip rates based on information in traffic study.

Water And Wastewater - Project specific information based on project relying on septic system.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	2.59	26.89
tblVehicleTrips	SU_TR	2.59	26.89
tblVehicleTrips	WD_TR	2.59	26.89
tblWater	AerobicPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	SepticTankPercent	0.00	100.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0744	0.7280	0.4551	6.3000e-004	2.3700e-003	0.0495	0.0519	8.5000e-004	0.0456	0.0464	0.0000	58.8589	58.8589	0.0171	0.0000	59.2178
Total	0.0744	0.7280	0.4551	6.3000e-004	2.3700e-003	0.0495	0.0519	8.5000e-004	0.0456	0.0464	0.0000	58.8589	58.8589	0.0171	0.0000	59.2178

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	tons/yr										MT/yr					
2016	0.0744	0.7280	0.4551	6.3000e-004	2.3700e-003	0.0495	0.0519	8.5000e-004	0.0456	0.0464	0.0000	58.8588	58.8588	0.0171	0.0000	59.2178
Total	0.0744	0.7280	0.4551	6.3000e-004	2.3700e-003	0.0495	0.0519	8.5000e-004	0.0456	0.0464	0.0000	58.8588	58.8588	0.0171	0.0000	59.2178

	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	tons/yr										MT/yr					
Area	0.0227	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Energy	9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	5.8863	5.8863	2.4000e-004	6.0000e-005	5.9109
Mobile	0.0987	0.2319	1.0585	1.4700e-003	0.1092	2.6400e-003	0.1118	0.0292	2.4200e-003	0.0317	0.0000	119.7094	119.7094	6.5900e-003	0.0000	119.8478
Waste						0.0000	0.0000		0.0000	0.0000	0.8546	0.0000	0.8546	0.0505	0.0000	1.9152
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.6308	1.6308	0.2354	8.1000e-004	6.8255
Total	**0.1214**	**0.2327**	**1.0592**	**1.4700e-003**	**0.1092**	**2.7000e-003**	**0.1119**	**0.0292**	**2.4800e-003**	**0.0317**	**0.8546**	**127.2266**	**128.0812**	**0.2927**	**8.7000e-004**	**134.4995**

2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.0227	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Energy	9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	5.8863	5.8863	2.4000e-004	6.0000e-005	5.9109
Mobile	0.0987	0.2319	1.0585	1.4700e-003	0.1092	2.6400e-003	0.1118	0.0292	2.4200e-003	0.0317	0.0000	119.7094	119.7094	6.5900e-003	0.0000	119.8478
Waste						0.0000	0.0000		0.0000	0.0000	0.8546	0.0000	0.8546	0.0505	0.0000	1.9152
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.6308	1.6308	0.2354	8.1000e-004	6.8255
Total	**0.1214**	**0.2327**	**1.0592**	**1.4700e-003**	**0.1092**	**2.7000e-003**	**0.1119**	**0.0292**	**2.4800e-003**	**0.0317**	**0.8546**	**127.2266**	**128.0812**	**0.2927**	**8.7000e-004**	**134.4995**

	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	Grading	Grading	1/16/2016	1/19/2016	5	2	
2	Building Construction	Building Construction	1/20/2016	6/7/2016	5	100	
3	Paving	Paving	6/8/2016	6/14/2016	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

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
Grading	4	10.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2016

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	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0112	8.7000e-003	1.0000e-005		8.0000e-004	8.0000e-004		7.7000e-004	7.7000e-004	0.0000	1.0828	1.0828	2.2000e-004	0.0000	1.0874
Total	**1.3100e-003**	**0.0112**	**8.7000e-003**	**1.0000e-005**	**7.5000e-004**	**8.0000e-004**	**1.5500e-003**	**4.1000e-004**	**7.7000e-004**	**1.1800e-003**	**0.0000**	**1.0828**	**1.0828**	**2.2000e-004**	**0.0000**	**1.0874**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	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
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	0.0000	0.0000
Worker	4.0000e-005	7.0000e-005	6.2000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0751	0.0751	0.0000	0.0000	0.0752
Total	**4.0000e-005**	**7.0000e-005**	**6.2000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0751**	**0.0751**	**0.0000**	**0.0000**	**0.0752**

3.2 Grading - 2016

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	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0112	8.7000e-003	1.0000e-005		8.0000e-004	8.0000e-004		7.7000e-004	7.7000e-004	0.0000	1.0828	1.0828	2.2000e-004	0.0000	1.0874
Total	**1.3100e-003**	**0.0112**	**8.7000e-003**	**1.0000e-005**	**7.5000e-004**	**8.0000e-004**	**1.5500e-003**	**4.1000e-004**	**7.7000e-004**	**1.1800e-003**	**0.0000**	**1.0828**	**1.0828**	**2.2000e-004**	**0.0000**	**1.0874**

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	tons/yr										MT/yr					
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	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	0.0000	0.0000
Worker	4.0000e-005	7.0000e-005	6.2000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0751	0.0751	0.0000	0.0000	0.0752
Total	**4.0000e-005**	**7.0000e-005**	**6.2000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0751**	**0.0751**	**0.0000**	**0.0000**	**0.0752**

3.3 Building Construction - 2016

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	tons/yr										MT/yr					
Off-Road	0.0691	0.6853	0.4106	5.7000e-004		0.0470	0.0470		0.0432	0.0432	0.0000	53.4584	53.4584	0.0161	0.0000	53.7970
Total	**0.0691**	**0.6853**	**0.4106**	**5.7000e-004**		**0.0470**	**0.0470**		**0.0432**	**0.0432**	**0.0000**	**53.4584**	**53.4584**	**0.0161**	**0.0000**	**53.7970**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	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
Vendor	5.8000e-004	3.7900e-003	7.9100e-003	1.0000e-005	2.0000e-004	5.0000e-005	2.5000e-004	6.0000e-005	5.0000e-005	1.0000e-004	0.0000	0.6958	0.6958	1.0000e-005	0.0000	0.6959
Worker	4.2000e-004	7.3000e-004	6.2100e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.7512	0.7512	5.0000e-005	0.0000	0.7522
Total	**1.0000e-003**	**4.5200e-003**	**0.0141**	**2.0000e-005**	**1.1100e-003**	**6.0000e-005**	**1.1700e-003**	**3.0000e-004**	**6.0000e-005**	**3.5000e-004**	**0.0000**	**1.4470**	**1.4470**	**6.0000e-005**	**0.0000**	**1.4481**

3.3 Building Construction - 2016

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	tons/yr										MT/yr					
Off-Road	0.0691	0.6853	0.4106	5.7000e-004		0.0470	0.0470		0.0432	0.0432	0.0000	53.4583	53.4583	0.0161	0.0000	53.7969
Total	**0.0691**	**0.6853**	**0.4106**	**5.7000e-004**		**0.0470**	**0.0470**		**0.0432**	**0.0432**	**0.0000**	**53.4583**	**53.4583**	**0.0161**	**0.0000**	**53.7969**

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	tons/yr										MT/yr					
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	0.0000	0.0000
Vendor	5.8000e-004	3.7900e-003	7.9100e-003	1.0000e-005	2.0000e-004	5.0000e-005	2.5000e-004	6.0000e-005	5.0000e-005	1.0000e-004	0.0000	0.6958	0.6958	1.0000e-005	0.0000	0.6959
Worker	4.2000e-004	7.3000e-004	6.2100e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.7512	0.7512	5.0000e-005	0.0000	0.7522
Total	**1.0000e-003**	**4.5200e-003**	**0.0141**	**2.0000e-005**	**1.1100e-003**	**6.0000e-005**	**1.1700e-003**	**3.0000e-004**	**6.0000e-005**	**3.5000e-004**	**0.0000**	**1.4470**	**1.4470**	**6.0000e-005**	**0.0000**	**1.4481**

3.4 Paving - 2016

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	tons/yr										MT/yr					
Off-Road	2.8000e-003	0.0266	0.0182	3.0000e-005		1.6500e-003	1.6500e-003		1.5300e-003	1.5300e-003	0.0000	2.4575	2.4575	6.7000e-004	0.0000	2.4717
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-003**	**0.0266**	**0.0182**	**3.0000e-005**		**1.6500e-003**	**1.6500e-003**		**1.5300e-003**	**1.5300e-003**	**0.0000**	**2.4575**	**2.4575**	**6.7000e-004**	**0.0000**	2.4717

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	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
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	0.0000	0.0000
Worker	1.9000e-004	3.3000e-004	2.7900e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3380	0.3380	2.0000e-005	0.0000	0.3385
Total	**1.9000e-004**	**3.3000e-004**	**2.7900e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3380**	**0.3380**	**2.0000e-005**	**0.0000**	**0.3385**

3.4 Paving - 2016

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	tons/yr										MT/yr					
Off-Road	2.8000e-003	0.0266	0.0182	3.0000e-005		1.6500e-003	1.6500e-003		1.5300e-003	1.5300e-003	0.0000	2.4575	2.4575	6.7000e-004	0.0000	2.4717
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-003**	**0.0266**	**0.0182**	**3.0000e-005**		**1.6500e-003**	**1.6500e-003**		**1.5300e-003**	**1.5300e-003**	**0.0000**	**2.4575**	**2.4575**	**6.7000e-004**	**0.0000**	**2.4717**

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	tons/yr										MT/yr					
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	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	0.0000	0.0000
Worker	1.9000e-004	3.3000e-004	2.7900e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3380	0.3380	2.0000e-005	0.0000	0.3385
Total	**1.9000e-004**	**3.3000e-004**	**2.7900e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3380**	**0.3380**	**2.0000e-005**	**0.0000**	**0.3385**

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	tons/yr										MT/yr					
Mitigated	0.0987	0.2319	1.0585	1.4700e-003	0.1092	2.6400e-003	0.1118	0.0292	2.4200e-003	0.0317	0.0000	119.7094	119.7094	6.5900e-003	0.0000	119.8478
Unmitigated	0.0987	0.2319	1.0585	1.4700e-003	0.1092	2.6400e-003	0.1118	0.0292	2.4200e-003	0.0317	0.0000	119.7094	119.7094	6.5900e-003	0.0000	119.8478

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	120.39	120.39	120.39	289,358	289,358
Total	120.39	120.39	120.39	289,358	289,358

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
Unrefrigerated Warehouse-No	8.80	4.60	4.60	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488581	0.036221	0.211775	0.155813	0.050113	0.007529	0.019404	0.013627	0.001902	0.002205	0.008084	0.001620	0.003129

4.4 Fleet Mix

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.0143	5.0143	2.3000e-004	5.0000e-005	5.0336
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.0143	5.0143	2.3000e-004	5.0000e-005	5.0336
NaturalGas Mitigated	9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8720	0.8720	2.0000e-005	2.0000e-005	0.8773
NaturalGas Unmitigated	9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8720	0.8720	2.0000e-005	2.0000e-005	0.8773

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	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	16341	9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8720	0.8720	2.0000e-005	2.0000e-005	0.8773
Total		**9.0000e-005**	**8.0000e-004**	**6.7000e-004**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.8720**	**0.8720**	**2.0000e-005**	**2.0000e-005**	**0.8773**

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	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	16341	9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8720	0.8720	2.0000e-005	2.0000e-005	0.8773
Total		9.0000e-005	8.0000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8720	0.8720	2.0000e-005	2.0000e-005	0.8773

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	17236.5	5.0143	2.3000e-004	5.0000e-005	5.0336
Total		5.0143	2.3000e-004	5.0000e-005	5.0336

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	17236.5	5.0143	2.3000e-004	5.0000e-005	5.0336
Total		5.0143	2.3000e-004	5.0000e-005	5.0336

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	tons/yr										MT/yr					
Mitigated	0.0227	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Unmitigated	0.0227	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005

6.2 Area by SubCategory

Unmitigated

SubCategory	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
	tons/yr										MT/yr					
Architectural Coating	5.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0175					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.0227**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

Mitigated

SubCategory	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
	tons/yr										MT/yr					
Architectural Coating	5.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0175					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	8.0000e-005
Total	**0.0227**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.0000e-005**	**8.0000e-005**	**0.0000**	**0.0000**	**8.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.6308	0.2354	8.1000e-004	6.8255
Unmitigated	1.6308	0.2354	8.1000e-004	6.8255

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	1.036 / 0	1.6308	0.2354	8.1000e-004	6.8255
Total		**1.6308**	**0.2354**	**8.1000e-004**	**6.8255**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	1.036 / 0	1.6308	0.2354	8.1000e-004	6.8255
Total		1.6308	0.2354	8.1000e-004	6.8255

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.8546	0.0505	0.0000	1.9152
Unmitigated	0.8546	0.0505	0.0000	1.9152

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	4.21	0.8546	0.0505	0.0000	1.9152
Total		**0.8546**	**0.0505**	**0.0000**	**1.9152**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	4.21	0.8546	0.0505	0.0000	1.9152
Total		**0.8546**	**0.0505**	**0.0000**	**1.9152**

9.0 Operational Offroad

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

10.0 Vegetation

Sierra Grande Zipline

Santa Barbara County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	4.48	1000sqft	0.10	4,477.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2015
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 - Land use of was where house because of the large structue hey are converting

Construction Phase -

Vehicle Trips - Project sepcific trip rates based on information in traffic study.

Water And Wastewater - Project specific information based on project relying on septic system.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	2.59	26.89
tblVehicleTrips	SU_TR	2.59	26.89
tblVehicleTrips	WD_TR	2.59	26.89
tblWater	AerobicPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	SepticTankPercent	0.00	100.00

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					
2016	1.4000	13.7924	9.3110	0.0131	0.8463	0.9409	1.6509	0.4386	0.8657	1.2066	0.0000	1,278.2555	1,278.2555	0.3567	0.0000	1,285.7454
Total	1.4000	13.7924	9.3110	0.0131	0.8463	0.9409	1.6509	0.4386	0.8657	1.2066	0.0000	1,278.2555	1,278.2555	0.3567	0.0000	1,285.7454

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					
2016	1.4000	13.7924	9.3110	0.0131	0.8463	0.9409	1.6509	0.4386	0.8657	1.2066	0.0000	1,278.2555	1,278.2555	0.3567	0.0000	1,285.7454
Total	1.4000	13.7924	9.3110	0.0131	0.8463	0.9409	1.6509	0.4386	0.8657	1.2066	0.0000	1,278.2555	1,278.2555	0.3567	0.0000	1,285.7454

	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	0.1243	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0400e-003
Energy	4.8000e-004	4.3900e-003	3.6900e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2671	5.2671	1.0000e-004	1.0000e-004	5.2991
Mobile	0.5214	1.1909	5.4411	8.2400e-003	0.6132	0.0145	0.6277	0.1639	0.0133	0.1772		738.1575	738.1575	0.0400		738.9967
Total	**0.6461**	**1.1953**	**5.4452**	**8.2700e-003**	**0.6132**	**0.0148**	**0.6280**	**0.1639**	**0.0136**	**0.1775**		**743.4256**	**743.4256**	**0.0401**	**1.0000e-004**	**744.2968**

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	0.1243	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0400e-003
Energy	4.8000e-004	4.3900e-003	3.6900e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2671	5.2671	1.0000e-004	1.0000e-004	5.2991
Mobile	0.5214	1.1909	5.4411	8.2400e-003	0.6132	0.0145	0.6277	0.1639	0.0133	0.1772		738.1575	738.1575	0.0400		738.9967
Total	**0.6461**	**1.1953**	**5.4452**	**8.2700e-003**	**0.6132**	**0.0148**	**0.6280**	**0.1639**	**0.0136**	**0.1775**		**743.4256**	**743.4256**	**0.0401**	**1.0000e-004**	**744.2968**

	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	Grading	Grading	1/16/2016	1/19/2016	5	2	
2	Building Construction	Building Construction	1/20/2016	6/7/2016	5	100	
3	Paving	Paving	6/8/2016	6/14/2016	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

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
Grading	4	10.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2016

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					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.3122	11.2385	8.7048	0.0120		0.8039	0.8039		0.7674	0.7674		1,193.6106	1,193.6106	0.2386		1,198.6217
Total	**1.3122**	**11.2385**	**8.7048**	**0.0120**	**0.7528**	**0.8039**	**1.5566**	**0.4138**	**0.7674**	**1.1811**		**1,193.6106**	**1,193.6106**	**0.2386**		**1,198.6217**

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	0.0413	0.0649	0.6063	1.0200e-003	0.0935	7.1000e-004	0.0943	0.0248	6.5000e-004	0.0255		84.6449	84.6449	5.1900e-003		84.7539
Total	**0.0413**	**0.0649**	**0.6063**	**1.0200e-003**	**0.0935**	**7.1000e-004**	**0.0943**	**0.0248**	**6.5000e-004**	**0.0255**		**84.6449**	**84.6449**	**5.1900e-003**		**84.7539**

3.2 Grading - 2016

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					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	1.3122	11.2385	8.7048	0.0120		0.8039	0.8039		0.7674	0.7674	0.0000	1,193.6106	1,193.6106	0.2386		1,198.6217
Total	1.3122	11.2385	8.7048	0.0120	0.7528	0.8039	1.5566	0.4138	0.7674	1.1811	0.0000	1,193.6106	1,193.6106	0.2386		1,198.6217

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	0.0413	0.0649	0.6063	1.0200e-003	0.0935	7.1000e-004	0.0943	0.0248	6.5000e-004	0.0255		84.6449	84.6449	5.1900e-003		84.7539
Total	0.0413	0.0649	0.6063	1.0200e-003	0.0935	7.1000e-004	0.0943	0.0248	6.5000e-004	0.0255		84.6449	84.6449	5.1900e-003		84.7539

3.3 Building Construction - 2016

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	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646		1,178.5549	1,178.5549	0.3555		1,186.0202
Total	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646		1,178.5549	1,178.5549	0.3555		1,186.0202

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	0.0101	0.0736	0.1272	1.5000e-004	4.1600e-003	1.0000e-003	5.1500e-003	1.1800e-003	9.2000e-004	2.1000e-003		15.4160	15.4160	1.3000e-004		15.4187
Worker	8.2500e-003	0.0130	0.1213	2.0000e-004	0.0187	1.4000e-004	0.0189	4.9600e-003	1.3000e-004	5.0900e-003		16.9290	16.9290	1.0400e-003		16.9508
Total	0.0184	0.0866	0.2485	3.5000e-004	0.0229	1.1400e-003	0.0240	6.1400e-003	1.0500e-003	7.1900e-003		32.3450	32.3450	1.1700e-003		32.3695

3.3 Building Construction - 2016

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	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646	0.0000	1,178.5549	1,178.5549	0.3555		1,186.0202
Total	1.3816	13.7058	8.2122	0.0113		0.9398	0.9398		0.8646	0.8646	0.0000	1,178.5549	1,178.5549	0.3555		1,186.0202

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	0.0101	0.0736	0.1272	1.5000e-004	4.1600e-003	1.0000e-003	5.1500e-003	1.1800e-003	9.2000e-004	2.1000e-003		15.4160	15.4160	1.3000e-004		15.4187
Worker	8.2500e-003	0.0130	0.1213	2.0000e-004	0.0187	1.4000e-004	0.0189	4.9600e-003	1.3000e-004	5.0900e-003		16.9290	16.9290	1.0400e-003		16.9508
Total	0.0184	0.0866	0.2485	3.5000e-004	0.0229	1.1400e-003	0.0240	6.1400e-003	1.0500e-003	7.1900e-003		32.3450	32.3450	1.1700e-003		32.3695

3.4 Paving - 2016

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	1.1203	10.6282	7.2935	0.0111		0.6606	0.6606		0.6113	0.6113		1,083.5832	1,083.5832	0.2969		1,089.8175
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1203	10.6282	7.2935	0.0111		0.6606	0.6606		0.6113	0.6113		1,083.5832	1,083.5832	0.2969		1,089.8175

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	0.0743	0.1168	1.0913	1.8300e-003	0.1684	1.2800e-003	0.1697	0.0447	1.1600e-003	0.0458		152.3608	152.3608	9.3400e-003		152.5569
Total	0.0743	0.1168	1.0913	1.8300e-003	0.1684	1.2800e-003	0.1697	0.0447	1.1600e-003	0.0458		152.3608	152.3608	9.3400e-003		152.5569

3.4 Paving - 2016

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	1.1203	10.6282	7.2935	0.0111		0.6606	0.6606		0.6113	0.6113	0.0000	1,083.5832	1,083.5832	0.2969		1,089.8175
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1203	10.6282	7.2935	0.0111		0.6606	0.6606		0.6113	0.6113	0.0000	1,083.5832	1,083.5832	0.2969		1,089.8175

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	0.0743	0.1168	1.0913	1.8300e-003	0.1684	1.2800e-003	0.1697	0.0447	1.1600e-003	0.0458		152.3608	152.3608	9.3400e-003		152.5569
Total	0.0743	0.1168	1.0913	1.8300e-003	0.1684	1.2800e-003	0.1697	0.0447	1.1600e-003	0.0458		152.3608	152.3608	9.3400e-003		152.5569

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	0.5214	1.1909	5.4411	8.2400e-003	0.6132	0.0145	0.6277	0.1639	0.0133	0.1772		738.1575	738.1575	0.0400		738.9967
Unmitigated	0.5214	1.1909	5.4411	8.2400e-003	0.6132	0.0145	0.6277	0.1639	0.0133	0.1772		738.1575	738.1575	0.0400		738.9967

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	120.39	120.39	120.39	289,358	289,358
Total	120.39	120.39	120.39	289,358	289,358

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
Unrefrigerated Warehouse-No	8.80	4.60	4.60	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488581	0.036221	0.211775	0.155813	0.050113	0.007529	0.019404	0.013627	0.001902	0.002205	0.008084	0.001620	0.003129

4.4 Fleet Mix

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	4.8000e-004	4.3900e-003	3.6900e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2671	5.2671	1.0000e-004	1.0000e-004	5.2991
NaturalGas Unmitigated	4.8000e-004	4.3900e-003	3.6900e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2671	5.2671	1.0000e-004	1.0000e-004	5.2991

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					
Unrefrigerated Warehouse-No Rail	44.77	4.8000e-004	4.3900e-003	3.6900e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2671	5.2671	1.0000e-004	1.0000e-004	5.2991
Total		4.8000e-004	4.3900e-003	3.6900e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2671	5.2671	1.0000e-004	1.0000e-004	5.2991

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					
Unrefrigerated Warehouse-No Rail	0.04477	4.8000e-004	4.3900e-003	3.6900e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2671	5.2671	1.0000e-004	1.0000e-004	5.2991
Total		4.8000e-004	4.3900e-003	3.6900e-003	3.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		5.2671	5.2671	1.0000e-004	1.0000e-004	5.2991

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	0.1243	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0400e-003
Unmitigated	0.1243	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0400e-003

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	0.0284					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0400e-003
Total	**0.1243**	**0.0000**	**4.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.8000e-004**	**9.8000e-004**	**0.0000**		**1.0400e-003**

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	0.0284					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0958					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0400e-003
Total	**0.1243**	**0.0000**	**4.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**9.8000e-004**	**9.8000e-004**	**0.0000**		**1.0400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

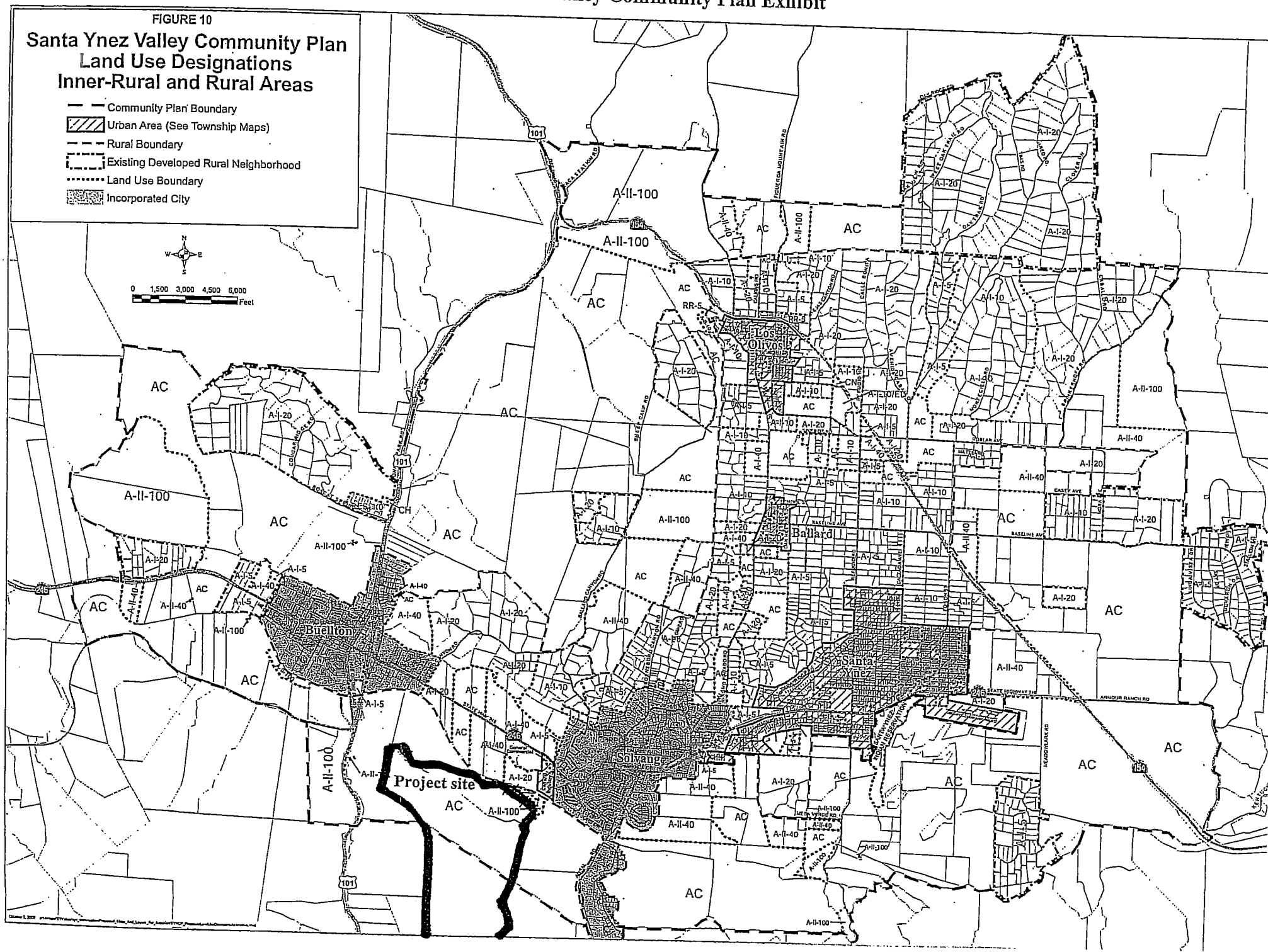
9.0 Operational Offroad

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

10.0 Vegetation

ATTACHMENT 3

Santa Ynez Valley Community Plan Exhibit



ATTACHMENT 6

Public Comment Letters

1. State of California Department of Transportation dated March 3, 2015
2. Santa Barbara County Air Pollution Control District, dated February 17, 2015
3. Joseph Liebman, dated February 27, 2015
4. Mullen & Henzell, LLB, dated March 3, 2015

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3111
TTY 711

Serious drought.
Help save water!

March 3, 2015

John Zorovich, Planner
County of Santa Barbara
624 W. Foster Road, Suite C
Santa Maria CA 93445

05-SB-246-027.30
SCH# 2015021001

COMMENTS ON THE MITIGATED NEGATIVE DECLARATION (MND) FOR THE SIERRA GRANDE RURAL RECREATION PROJECT

Dear Mr. Zorovich:

The California Department of Transportation (Caltrans) appreciates the opportunity to review and comment on the MND for the Sierra Grande Rural Recreation Project. Caltrans offers the following comments:

1) During a visit to the site, Caltrans staff noted that the access from State Route (SR) 246 is a low level, "Arizona crossing" of the Santa Ynez River bed. Caltrans staff also discovered a sign along this access road instructing travelers to use US 101 when the river is flooded. For safety and operational reasons, Caltrans is opposed to any intensification of use of the at-grade intersection of US 101 for this project. In early discussions, it was agreed that "there will be no 101 access, except for emergency vehicles and that if access off 246 is impassable due to a rain event, the ropes course and zipline would not be in operation" (email from Jane Gray, October 3, 2014). We do not find this language in the project description and it is important that it be a condition of the project's approval.

2) Given that the land use of the driveway on SR 246 will be changing from private to public use, it is important that a "public road intersection" on SR 246 be constructed as a condition of approval for the project. In addition to facilitating public use of the driveway, it will also provide better sight distance to see motorists and bicyclists along SR 246. While the project description mentions the driveway improvement on page 1, for purposes of clarity and since the improvement will be on State right of way, we would like to request language that the driveway be constructed through an encroachment permit with Caltrans.

We appreciate your attention on this project and are here to answer any questions; further, we request to be notified of any public hearings on the project. Please feel free to contact me at (805) 549-3131 or adam.fukushima@dot.ca.gov.

Sincerely,

Adam Fukushima, PTP
Development Review
Caltrans District 5

Attachment: Email dated October 3, 2014 from Ms. Jane Gray

Santa Barbara County
Air Pollution Control District

February 17, 2015

John Zorovich
Santa Barbara County
Planning and Development
624 W. Foster Road
Santa Maria, CA 93455

Re: APCD Comments on the Draft Mitigated Negative Declaration for Sierra Grande Rural Recreation Project, 13CUP-00000-00012

Dear Mr. Zorovich:

The Air Pollution Control District (APCD) has reviewed the referenced project, which consists of a Draft Mitigated Negative Declaration (MND) for a Major Conditional Use Permit to allow for a Zip Line Tour and Ropes Course. Also, included is a request to change the use of an existing 4,477 square foot warehouse to be used as an orientation center for the operation of the proposed ropes course and zip line. The subject property, a 1,189-acre parcel zoned AG-II-100 and identified in the Assessor Parcel Map Book as APN 137-270-033, 137-270-031, and 137-280-017, is located at 484 Highway 101 in the unincorporated Buellton area.

APCD staff offers the following comments on the Draft MND:

1. **Section 4.3 Air Quality, Impact Discussion:** Throughout the discussion the attached CalEEMod printout is referred to as *Attachment 3* when the CalEEMod printout is labeled *Attachment 4* and the *Oak Tree Assessment* report is labeled *Attachment 3*. Please correct all references.

2. **Section 4.3 Air Quality, Impact Discussion a, c, Page 8-9:** It is stated that *"the worst case scenario short-term construction emissions [are] 0.1 pounds per day of PM_{10}."* According to the CalEEMod worst case scenario (page 4 of the Summer emissions report), the overall unmitigated construction PM_{10} emissions are 1.65 lbs/day. Please correct this statement to be consistent with the CalEEMod emission estimates.

   It is stated that CalEEMod calculated the *"worst case short-term construction emissions [to be] 11.23 pounds per day of NOx and 1.31 pounds per day of ROC."* According to the CalEEMod worst case scenario (page 4 of the Summer emissions report), the overall unmitigated construction emissions of NOx is 13.8 lbs/day and 1.40 lbs/day of ROC. Please correct this statement to be consistent with the CalEEMod emission estimates.

3. **Section 4.3 Air Quality, Impact Discussion a, c, Page 9 and Table 4.3-1:** It is stated that *"the total criteria pollutants generated by mobile and area sources would be ... 0.52 lb/day ROC."* According to the CalEEMod worst case scenario (page 4 of the Summer emissions report) the overall unmitigated operation emissions are 0.65 lbs/day of ROC. Please correct this statement and *Table 4.3-1* to be consistent with the CalEEMod emission estimates.

   Also, in *Table 4.3-1*, the row identified as "Area Sources" shows criteria pollutants emissions as

"n/a", however the CalEEMod Summer emissions report does calculate Area Source emissions for the proposed project. Please revise the table and enter in the correct area source emission estimates; 0.12 lbs/day of ROC, 0.00 lbs/day of NOx and 0.00 lbs/day of PM_{10}.

4. **Section 4.3 Air Quality, Greenhouse Gas Emissions/Global Climate Change, Methodology, Page 10:** Please include a description of the interim approach (San Luis Obispo County Air Pollution Control District's criteria) used to evaluate greenhouse gas emissions as it looks to be inadvertently omitted.

5. **Section 4.3 Air Quality, Greenhouse Gas Emissions/Global Climate Change, Impact Discussion, Page 10:** It is stated that all of the following are classified under area emissions *"energy, consumer products, solid waste, water conveyance."* Please note that energy, solid waste, and water conveyance are not considered area sources, but rather commonly known as "indirect sources". These indirect sources are individually calculated in CalEEMod (see page 4 of the Annual emissions report). In CalEEMod, the total operational greenhouse gas emissions are made up of emissions from the following sources: area, energy, mobile, waste, and water.

If you or the project applicant have any questions regarding these comments, please feel free to contact me at (805) 961-8893 or via email at NightingaleK@sbcapcd.org.

Sincerely,

Krista Nightingale

Krista Nightingale,
Air Quality Specialist
Technology and Environmental Assessment Division

cc: Jane Gray, Dudek
TEA Chron File

LAW OFFICES OF
JOSEPH LIEBMAN
A PROFESSIONAL CORPORATION
4250 MARIPOSA DRIVE
SANTA BARBARA, CALIFORNIA 93110

Joseph Liebman
E-mail:jliebmanlaw@gmail.com
www.jliebmanlaw.com

TELEPHONE (805) 563-2421

February 27, 2015

SENT VIA E-MAIL

County of Santa Barbara
Planning and Development
Attn. John Zorovich
Email jzoro@co.santa-barbara.ca.us

Re: Sierra Grande Rural Recreation Project
13 CUP-00000-00012

Dear Mr. Zorovich:

Please be advised that this office represents Lisa and Gary Novatt and their respective trusts ("Novatt") with regard to the ranch owned by them formerly known as 484 Highway 101 Buellton (now 500 Highway 101) (the "subject property") purchased from Sierra Grande Development LLC/Stuart Gildred in 2012.

We understand that Mr. Gildred has applied to the County of Santa Barbara for a conditional use permit in order to run a zip line and ropes course on his land, which is now zoned agriculture. If the permit is approved by the County many people unfamiliar with the area and the roads servicing the property will be traveling on Highway 246 and the private roadways that service the property on a daily basis. This will give rise to serious public safety concerns that will need to be addressed as a condition to approval of any CUP.

Novatt and Stuart Gildred utilize the same easements for ingress and egress to their respective properties. Given that the easements are narrow and are of insufficient width to accommodate more than one vehicle traveling the easement at a time, Novatt has serious concerns for the safety of people traveling on the easements and entering and leaving Highway 246.

Just this past weekend there were two serious vehicle accidents on Highway 154 near the Roblar intersection. Highway 246 presents the same traffic related issues here given that access to Highway 246 from the easement to the Gildred property is uncontrolled. Moreover, traffic on that road between Solvang and Buellton can be extremely heavy depending on the day and time.

While my clients do not object in principle to the Gildred proposal, they want to ensure that their safety and that of the public is adequately addressed and safeguarded. Given the number of anticipated vehicles that will be accessing and leaving the Gildred property using 246,

it would seem appropriate to have Mr. Gildred do the following:

1. The easements to and from the Gildred property should be widened to accommodate the width of two vehicles (not less than 22 feet);

2. The easements are now unpaved in places and should be paved to meet County road standards.

3. Traffic controls should be placed at the easement intersection with 246 to ensure that vehicles stop before entering Highway 246;

4. An independent traffic study should be commissioned to evaluate the traffic impacts to Highway 246 and neighboring properties and what improvements are necessary to protect the safety of all concerned.

Thank you. Should you have any questions, please contact me.

Very truly yours,

Joseph Liebman

cc: clients (via email)

Mullen & Henzell L.L.P.
ATTORNEYS AT LAW

e-mail: bpiersma@mullenlaw.com

March 3, 2015

VIA HAND DELIVERY & EMAIL

Mr. John Zorovich
County of Santa Barbara
Planning and Development
123 East Anapamu Street
Santa Barbara, CA 93101

Re: Response to Notice of Availability of and Public Hearing on the Draft Negative Declaration for the Proposed Sierra Grande Rural Recreation Project, 13CUP-00000-00012, dated February 2, 2015, and Draft Mitigated Negative Declaration 15NGD-00000-00002, dated February 2, 2015

Dear Mr. Zorovich:

Our office represents Pollyrich Farms LLC ("Pollyrich"), which owns two parcels of land neighboring the above-referenced project (the "Project"). This letter follows up on our telephone conversation earlier today. I have further reviewed the Draft Mitigated Negative Declaration ("DMND"), dated February 2, 2015, for the Project and would like to submit the following additional comments on behalf of Pollyrich.

First, pursuant to our conversation, please be sure to add both Pollyrich and this office to the list of parties to be notified on any matters pertaining to the above-referenced project. The contact information is as follows:

Rick Oas
Pollyrich Farms
468 Ballard Canyon Road
Solvang, CA 93463
(805) 688-0220

Brett Piersma
Mullen & Henzell LLP
112 East Victoria Street
Santa Barbara, CA 93101
(805) 966-1501

Next, The DMND fails to provide an accurate Project description and therefore fails to analyze the full set of potential environmental impacts the Project creates. The DMND misconstrues several key items and glosses over others. The record supports a fair argument that the Project may cause more significant environmental impacts than

stated, and for these reasons the County must prepare an Environmental Impact Report.

The Project site lies just to the south of Highway 246 and is adjacent to several parcels that are zoned and operated as agriculture. Access to the Project requires use of an easement which runs along two agricultural parcels which have sensitive agricultural use, and such increased flow of traffic runs substantial risk of creating significant environmental impacts on the current use and enjoyment of those properties. One such parcel is currently in an Agricultural Preserve under the Williamson Act, and the other is in the process of entering such a contract. Because the Project would create impacts of greater significance than that indicated in the DMND, an Environmental Impact Report should be prepared in order to provide the legally required level of analysis commensurate with the potentially significant impacts created by the Project.

1. Private Access Road.

Section 1.0 Request/Project Description of the DMND states that the primary access point for the Project "would be via an existing 20-foot wide private all-weather surface driveway off of Highway 246." However, the DMND fails to consider the potential impacts the Project will create on the properties over which the private driveway runs. Furthermore, the DMND completely ignores the fact that this driveway crosses over prime agricultural land.

An analysis of the overall site reveals that the driveway described is actually an easement for ingress and egress. The easement runs across my client's property. By its own description, the proposed Project would result in a significant increase of use of the existing easement to a potential 80 additional visitors per day. The proposed project site currently only contains one single-family home, a guest home, agricultural employee dwellings, and agricultural support structures. The increase in traffic flow over the easement will be ten-fold, creating significant adverse impacts to the air quality, traffic and circulation, and biological resources surrounding the Project. Furthermore, we do not believe the applicant has a legal right to use the easement to accommodate the proposed Project as it overburdens our client's property. Any environmental document prepared by the County for this Project must consider and analyze alternative access.

Further, the applicant proposes to "flare the existing driveway entrance to allow westbound traffic to decelerate and make a safe turning movement." This proposed alteration to the existing improvements on our client's property may very well go beyond the terms of the applicant's rights under the express easement. During

mh

our conversation this morning you explained to me that the flaring discussed in the DMND would be done to Highway 246 and not to the easement road, but that is not clear by the language in the DMND. In the likely event the applicant attempts and is unable to make changes to the easement, the DMND or EIR must analyze the resulting traffic and circulation impacts that would result at the entrance to the easement along Highway 246.

2. Land Use.

Section 4.11 Land Use identifies the physical setting of the Project, but fails to identify all impacted parcels. As discussed above, the "private access road" is actually an easement over our client's property, which is used for active agriculture. The Project proposes to make physical and substantial changes to the structure of the easement by enlarging the driveway entrance, thereby facilitating a substantial increase in traffic to and from the Project site and through our client's property, but the DMND fails to analyze or even mention the potential impacts created by the driveway improvements to the active agricultural uses adjacent to the Project. This is an additional way in which the DMND is materially deficient.

3. Traffic and Congestion on Highway 246.

Entrances and exits along Highway 246 have been historically dangerous and precipitous. In the past few years, there have been several accidents as vehicles have exited the southern parcels and entered into the westbound lanes. Many drivers fail to use the middle lane and instead immediately enter the westbound lane of traffic. The Project would significantly increase the traffic along this corridor and increase the danger associated with entering and exiting. The DMND fails to analyze these adverse impacts to traffic and circulation and does not identify how the proposed Project mitigates impacts on the flow of traffic, and it should not be approved.

4. Noise-Sensitive Uses.

Section 4.12 Noise states that "there are no noise sensitive uses within 1,600 feet of the proposed project." However, as discussed above, the uses of the land adjacent to the easement road over which the increased traffic will travel are currently agricultural. As the project includes adjustments to the easement, the position of the DMND that there are no noise sensitive uses within 1,600 feet of the proposed project cannot be maintained. There will be a substantial increase in traffic over the easement road and between two agricultural properties, impacting the animals grazing on those properties.

mh

5. Agricultural Preserve/Williamson Act.

As discussed above, the parcel containing the proposed access to the Project is used exclusively for agriculture and specifically for the layup, rehabilitation, and grazing of horses. The current traffic flow over the easement to the Project site has already interfered with the use and enjoyment of our client's property as the increased flow of larger vehicles has meant a concomitant increase in noise and disruption to the animals on the property. There have been accidents along the easement and damage done to the fence, all the result of the applicant's current use. In one such accident, a young driver drove through two fences and careened onto the servient tract owner's property, thankfully not injuring any horses.

An increase in use to the magnitude described would adversely impact the existing agricultural use of the property and is inconsistent with the Uniform Rules for Agricultural Preserves, which explains that one of the primary purposes of the Williamson Act is the conservation of land for agricultural use. While the Agricultural Preserve Advisory Committee may have reviewed the Project for compatibility with the Uniform Rules, it may not have been alerted to the existence of the easement or the impact the Project will have on agricultural use on neighboring parcels.

6. Notice Requirement.

Finally, notwithstanding your explanation that the proper notice procedures were followed, we believe the Project has not been sufficiently noticed to adjacent landowners including Pollyrich. On February 2, 2015, Planning and Development issued a "Notice of Availability of and Public Hearing on the Draft Negative Declaration" for the Project. However, that notice was not mailed, delivered, or provided in any way to Pollyrich, which owns two parcels (APNs 137-250-074 & 137-250-056) adjacent to the Project site. Pollyrich did not receive notice of this hearing and public comment period until March 1, 2015, nearly two weeks after the public hearing held on February 18, 2015.

During our telephone conversation, you indicated to me that the county is required to serve proper notice on any property owners within 300 feet of a project site. As discussed above, the easement road must be considered as part of the project as a whole because changes to it are included in the DMND. The easement traverses property owned by Pollyrich and as such, notice to Pollyrich and its neighbors is required. As no properly noticed public hearing has been held, the Project should not be approved. Instead, a properly noticed public hearing date should be set to allow all stakeholders the opportunity to voice their concerns

Ephemeral Stream Assessment

Sierra Grande Rural Recreation Project

CUP 13CUP-00012
Buellton, Santa Ynez Valley
Santa Barbara County
APNs 137-270-003, -031, 137-280-017

Prepared by:

Bruce Reitherman
P.O. Box 545
Summerland, CA 93067

Submitted to Client: **June 1, 2016**

1. Introduction and Objective

Approval is sought for a Conditional Use Permit on property zoned Agriculture (AG-II-100) in compliance with Section 35.82.060 of the County Land Use and Development Code, to allow for a Zip Line Tour and Ropes Course to be located on APNs137-270-031 and 137-280-017 and APN 137-270-033, on the south side of the Santa Ynez Valley near the town of Buellton (the "Project"). (Figure 1.)

Figure 1: Vicinity map.

Since late 2013, at which time the Project Applicants submitted plans to the County of Santa Barbara Planning and Development Department, John Zorovitch, Planner, a number of environmental assessments of the Project's potential biological impacts have been completed by the author (Reitherman 2014, 2015a, 2015b). Additional previous reports were prepared related to a California Department of Fish and Wildlife (CDFW) Streambed Alteration Agreement for road construction projects in a nearby reach of the Santa Ynez River (Reitherman 2010a, 2010b, 2010c, 2011).

The current document specifically addresses the extent to which the Project area contains or would likely impact a qualifying watercourse as defined by the California Department of Wildlife Code 1602. Under this regulation, the CDFW requires a Lake and Streambed Alteration Agreement (LSA) when it determines that an activity, as

described in a complete LSA notification, may substantially adversely affect existing fish or wildlife resources (CDFW 2016). Such an assessment also relies on guidance provided by related documents that further define and clarify terminology and criteria surrounding designation of qualifying watercourses, which may be episodic (dry for periods of time) perennial (flow year round) or ephemeral (Collins 2008, CDFW 2010).

In its broadest terms, CDFW Code 1602 requires "*an entity to notify CDFW prior to commencing any activity that may do one or more of the following: 1) substantially divert or obstruct the natural flow of any river, stream or lake; 2) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or 3) deposit debris, waste or other materials that could pass into any river, stream or lake."*

Landforms within the Project area generally do not possess characteristics likely to create conditions suitable for qualifying watercourses (limited precipitation, steep slopes, small watershed catchment areas and thin soils), and numerous field investigations and more casual observations of the area during a variety of seasons have yielded no evidence of such water features. Nevertheless, in order to further clarify the presence/absence of watercourses on the property that would likely require additional permitting, this Ephemeral Stream Assessment evaluates climate (precipitation), topography (slope and relief) hydrology (watershed extent and capacity to generate/concentrate flow), geology (soil types, porosity and observed erosion), and biotic indicators of potential wetland or streambed conditions.

The assessment concludes that no watercourses exist near the Project activities of a kind that might likely qualify them for consideration under a CDFW Streambed Alteration Agreement or other similar instrument of regulatory oversight.

2. Project Description

The Project proposes two kinds of activities: a zip line tour, and a ropes course. These activities would respectively take place in two distinct areas: on upland hillsides vegetated in chaparral/oak woodland/grassland, and at the base of the hill within an agricultural/residential complex located in a heavily disturbed oak woodland with a ruderal understory. The Project would also develop in two phases, the first being a construction phase (installation of infrastructure/equipment, road and trail repair), and an operational phase (including access via road and short trails to zip lines and the ropes course areas).

Figure 2 shows a Google Earth Image based on the Project Site Plan that features the locations of the zip lines (Designated #0-4) the ropes course area, and the roads/trails by which access to these areas would be achieved.

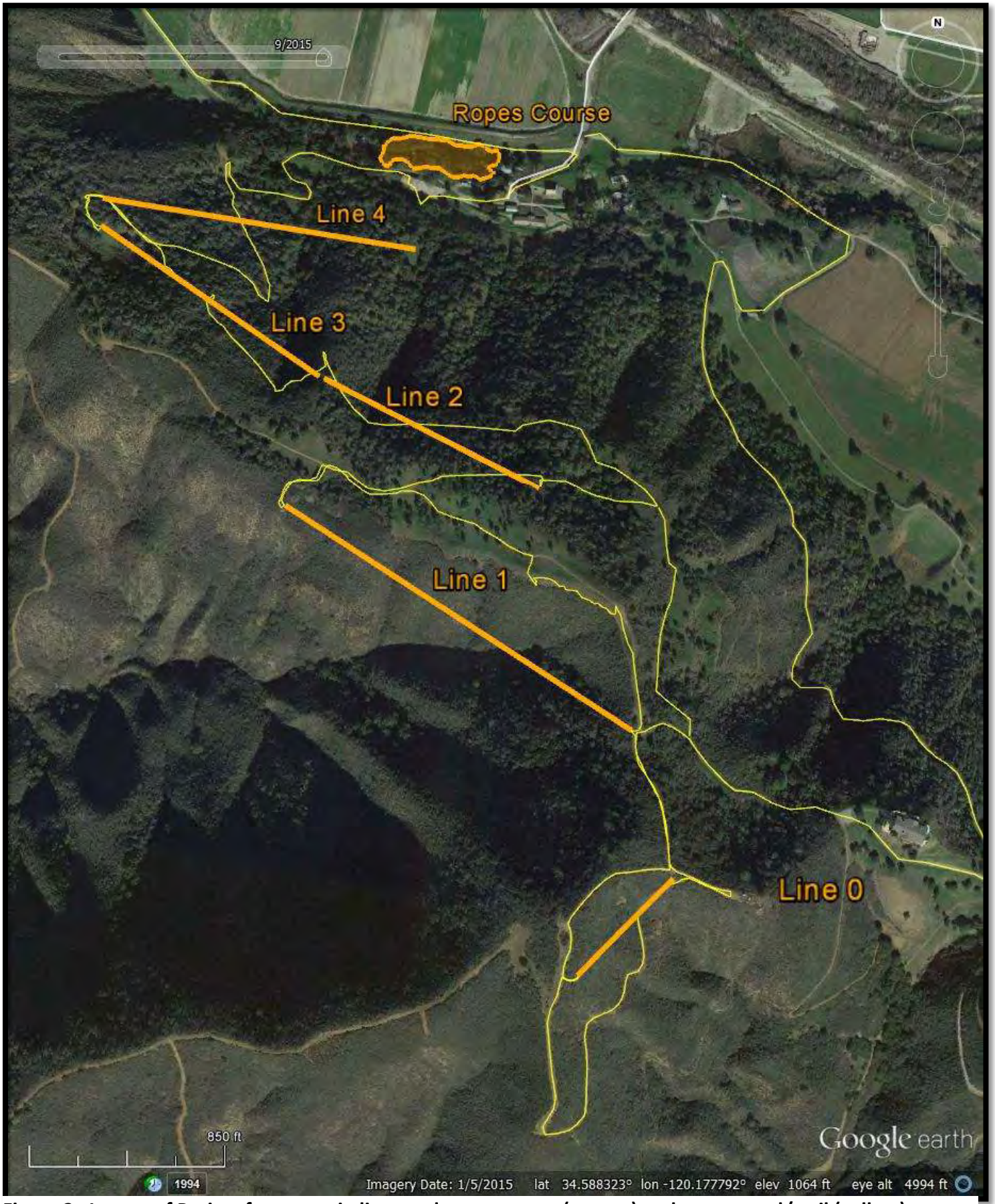


Figure 2. Layout of Project features: zip lines and ropes course (orange) and access road/trail (yellow).

The zip lines tour would consist of ten pairs of poles for a total of 20, each about 20 feet tall and about 12 to 18 inches in diameter, each with a platform for take-off and landing. Installation of the poles is anticipated to require a rubber-tired backhoe equipped with an augur working from the edge of existing dirt roads. Once poles have been installed, hanging the zip line cables would be accomplished by pulling lines of increasing strength from each launch site to its corresponding terminus until the high-test cables have been strung and secured. Along with other methods that would cause no impacts to the areas between the zip line poles, Project Applicants have indicated a willingness to use a helicopter to facilitate impact-free cable installation if necessary.

Access to the top of the zip line tour for installation and operations would primarily be by vehicle on a paved road that would require no major improvements or modifications. Visitors would access other parts of the zip line course by walking on existing all-weather dirt roads or on foot trails to be constructed using low-impact materials and methods.

The ropes course would occupy an area approximately 2,000' long by 50-200' wide, and would be located on generally flat or terraced ground within oak woodland adjacent to a paved access road where a number of existing agricultural structures and installations are located.

3. Methods

Google Earth satellite imagery was consulted in detail as an aid in mapping of topography, determination of slope, extent of watershed catchment areas and as an indicator for the distribution of vegetation that would indicate the possibility of ephemeral water courses of substantial size and inundation duration. In addition to at least twelve visits that the author has paid to the Project property in the last six years, I made a separate trip specifically for the purpose of evaluating possible presence of ephemeral watercourses on May 28, 2016 under cloudy skies with temperatures in the mid 60s°F.

During this field visit, the entire Project area was extensively examined by driving or walking to each of the pole locations via existing access roads and trails. Additional observations were made during transit between poles on a course that followed to the extent possible the straight lines that the Zip Line cables would necessarily follow over a topography with pronounced high relief. (Yellow lines in Figure 2 indicate path actually traveled during this field investigation).

4. Environmental Setting

Located at the western edge of the Santa Ynez Valley on the north-facing slope of the Santa Ynez mountains, the project lies on the flank of foothills that rise up from the

plain of the nearby Santa Ynez River. Plant communities encompassed by Project are limited to chaparral, southern oak woodland and grassland, the latter dominated by non-native plant species amendable to cattle grazing. Riparian woodlands and associated wetland habitats located downslope from all Project activity are separated from it by expanses of open ground, gravel pit mining, dirt and paved roads, and acres of cultivated row crops.

5. Results and Analysis

Precipitation --low rainfall, intermittent intervals, long summer drought

Data provided by the Santa Barbara County Flood Control Department indicates that the Project area receives on average only about 18 inches of precipitation per year, with rainfall events (no snow) tending to last no more than a few days and often interspersed with clear, sunny conditions. Precipitation frequently falls with some intensity but lasts short durations. Moreover, the County's Mediterranean climate is famously characterized by long months of summer drought (SB Co Flood Control 2016).

Topographic Character--steep slopes

Such circumstances strongly argue against perennial accumulations of water runoff except in the bottoms of large canyons or valleys with extensive watershed catchment areas or where artesian springs feed surface flows. Neither of these conditions are found within the Project area, all of which is located not in valleys or canyon bottoms, but mostly on the tops of ridges that are dramatically steep. Maximum slope angles for all significant canyons or hillsides crossed by zip lines average nearly 100% (45 degrees)(Google Earth 2016a). See figure 3 for Google Earth Imagery referencing locations of canyon bottoms along which slope was calculated (pink) and zip line paths (orange).

Hydrology--small watersheds

Zip Lines 0, 1, 2, and 3 are all located within 500 feet of the top of the site's main ridgeline. Watershed areas within these four drainages upslope of zip line paths are therefore uniformly far too small, averaging about 3.6 acres, to collect adequate rainfall to generate substantial surface flows close to Project activity. Zip Line #4, located closer to the bottom of the hillside, encompasses a watershed of only about 13 acres (Google Earth, 2016b). See figure 3 for Google Earth Imagery referencing estimated locations and extents of watersheds (blue).

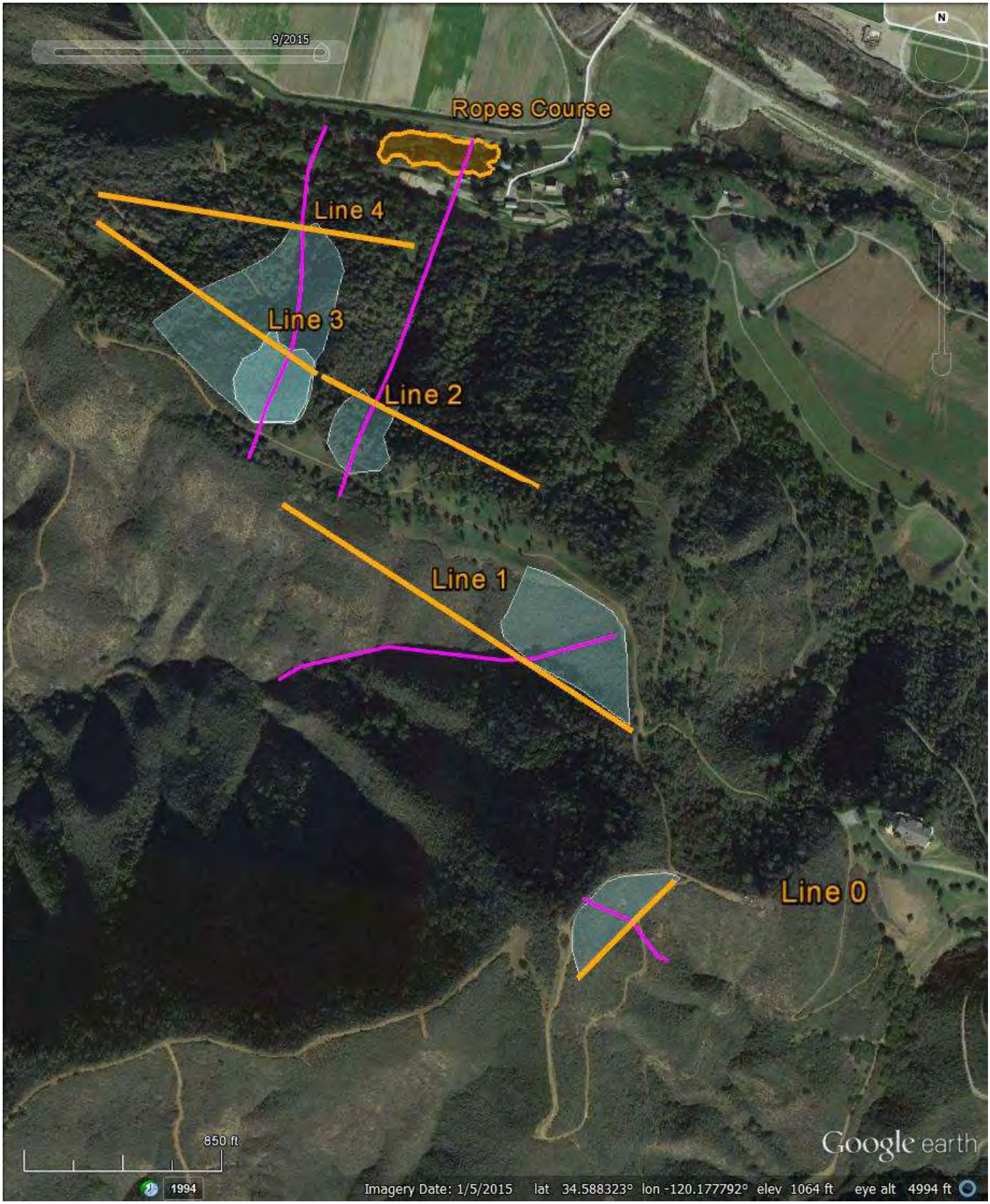


Figure 3. Zip lines (orange) and canyon bottoms (pink). Estimated potential watershed areas (blue).

Geology/Soil Types--poorly suited to water retention, little observed erosion

The majority of soils within the Project area are classified as LdG Lodo loam with an Available Water Storage value of 4.2 cm (out of a possible 100 cm) and Drainage Classes characterized as "somewhat excessively drained." Minimum bedrock depth is 28 cm (UC Davis 2016). Visual investigation of all canyon bottoms crossed by all zip line paths showed no evidence of substantial erosion or downstream transport of waterborne sediment. All of these soil characteristics infer poor water retention and strongly suggest that the soils contained within the previously mentioned small watersheds would be unable to hold subsurface moisture for any substantial length of time, and that periods during which water might actually flow in the canyon bottoms would be of low volume, high velocity and exceedingly short duration.

Biotic indicators--absence of riparian or other wetland vegetation

Previous biological assessments of the property have not identified riparian or other wetland vegetation in proximity to Project activities. Nevertheless, each potential drainage bottom crossed by zip lines was carefully reexamined in the field for evidence that might indicate the presence of substantial water resources, be they perennial, episodic or ephemeral. Google Earth imagery was also consulted for visual suggestion of such vegetation. All efforts to discover such vegetation were unsuccessful. Indeed, field investigations revealed in all canyon bottoms only a dense shrubby cover of dry slope vegetation typical of hillsides on adjacent canyon flanks devoid of perceptible drainage features. (See Appendix A for a selection of representative photos.)

Elevation of Zip Lines--Height above canyon bottoms in excess of 100 feet

All five Project zip lines have been designed to be situated in such a way that the cable is elevated above the underlying terrain at a considerable height for much of each transit between anchor poles. Where zip lines cross canyon bottoms, i.e. where the potential to contain substantial water flows is hypothetically greatest, zip lines are elevated at an average of at least 100 feet. In other words, even if this assessment had uncovered significant indications of substantial water resources in one or another of the Project's canyon bottoms (which it has not), negative Project impacts to the property's hydrologic, vegetative or faunal resources would been extremely remote owing to the fact that all activity, limited though it might be in the middle of the zip line, would take place about ten stories above the canyon bottom.

6. Conclusion

In its broadest terms, CDFW Code 1602 requires "*an entity to notify CDFW prior to commencing any activity that may do one or more of the following: 1) substantially divert or obstruct the natural flow of any river, stream or lake; 2) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or 3) deposit debris, waste or other materials that could pass into any river, stream or lake."*

While Code 1602 requires consideration of ephemeral flows, the evidence herein presented strongly indicates that none of the potential drainages within the Project site rise to the level where they could reasonably be designated as a watercourse qualifying for further review under this regulation.

7. Citations

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8. Appendix A: Site Photos.

Photo 2. Line "0", looking towards the northwest from the launch site to the landing site.

Photo 1. Line 1, looking westward from launch to landing site, which is located near oak trees in the middle distance, more than one-third of a mile away.

Photo 4. Lines 2 and 3, which traverse across the north face of this hill about 500 feet down from the ridge top.

Photo 3. Line 4, looking down toward the landing site, which is located in the grass clearing near structures visible in middle distance about one-quarter mile away.

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Conclusion

The proposed Project results in many significant impacts which the DMND fails to adequately identify, address, or mitigate. The DMND fails to provide the appropriate level of analysis for the scope of the Project and is silent as to identified impacts. An environmental impact report is required due to the substantial evidence presented of potential significant impacts to traffic, circulation, air quality, and biological resources and inconsistencies with the Uniform Rules for Agricultural Preserves. The EIR process will allow the County and the general public to carefully consider the Project and craft conditions and project alternatives to the Project such that the impacts identified can be avoided or reduced.

Due to the gravity of the deficiencies identified in the DMND, we request that the County reschedule a public comment period and provide proper notice to the neighboring parcels. We also request that the County prepare and circulate responses to the comments submitted. A response to comments will avoid unnecessary confusion and dispute between the County, the applicant, and the public as the Project progresses through the County process.

Very truly yours,

Brett W. Piersma of
Mullen & Henzell L.L.P.

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