

**PLANNING DIVISION  
HUMBOLDT COUNTY PLANNING & BUILDING DEPARTMENT  
3015 H STREET | EUREKA, CA 95501**

**Initial Study and Draft Mitigated Negative Declaration**

1. **Project title:** Emerald Family, LLC Conditional Use Permit: APNs 522-201-001 and 522-491-016; Case Nos.: CUP16-022, SP16-032; Apps No. 10406
2. **Lead agency name and address:** Humboldt County Planning & Building Department, 3015 H Street, Eureka, CA 95501-4484; Phone: (707) 445-7541; Fax (707) 445-7446
3. **Contact person and phone number:** Michelle Nielsen, Senior Planner (707) 268-3708; fax: 707-445-7446; email: mnielsen@co.humboldt.ca.us
4. **Project location:** The project site is located in Humboldt County, in the Willow Creek area, 500 feet west of the intersection of Flower-McNeil Road and Country Club Road, on the property known as 131 Flower-McNeil Road, and further described as Assessor's Parcel Number (APN) 522-201-001. SW ¼ of Section 28 and NW ¼ of Section 33, Township 07 North, Range 05 East.

5. **Project sponsor's name and address:**

<b>Applicant</b>	<b>Owner</b>	<b>Agent</b>
Emerald Family, LLC P.O. Box 1643 Willow Creek, CA 95573	S&S Cornerstone Development, LLC Co. P.O. Box 904 Willow Creek, CA 95573	Manhard Consulting 611 "I" Street, Suite A Eureka, CA 95501 (707) 444-3800

6. **General plan designation:** (AR;IG) Agricultural Rural (AR), Density: 20 to 5 acres per dwelling unit; Industrial, General (IG), Density: N/A; Willow Creek Community Plan (WCCP), Slope Stability: Low Instability (1).
7. **Zoning:** Agriculture General (AG), with a Special Building Site combining zone specifying that the minimum parcel size is the per the subdivision map of record (B-6); Flood Plain (FP), Heavy Industrial (MH).
8. **Project Site History:** The project site is located in an area of Willow Creek historically known as Flowers Flat. Flowers Flat is the neighborhood northeasterly of the Willow Creek Commercial District and is reached by Country Club Road, which goes over the saddle of a ridge that divides Flower's Flat from the commercial district. Originally Flowers Flat was connected to the old settlement of China flat at Big Rock, by McNeill Road, which ran almost to the mouth of Willow Creek stream, then headed west through the current project area to connect with the 1890 County Road. Flowers Flat, before the Flowers family owned it, was for the most part homesteaded in 1909 by Alvah P. White, known to be active in hydraulic mining (Jamie Roscoe & Associates 2016).

After the gold mining days, and before World War II, the Flower's Flat area was primarily in agriculture. The Flowers farmhouse and outbuilding were located on the northern end of the present Stockel mill site property, 300 meters east of the current project area. Between Country Club Road and Kimtu, probably accessed by the northeasterly leg of Flower McNeill Road was a rodeo grounds. North of Chilton Road is the probable location of another mill on Flowers Flat that was constructed by John Chilton during World War II. By 1948, aerial photography shows that mill buildings had been constructed on the project site (Jamie Roscoe and Associates 2016).

In 1958, the project site had changed hands and the Rochlin Veneer and Plywood Company began its operations. Shortly after purchasing the property the new owners demolished the previous mill

buildings and constructed a new building and a mill pond. The Rochlin Veneer and Plywood Company operated at the project site from approximately 1958 to 1978.

Historical imagery indicates that several modifications were made to the mill building between 1965 and 1988. This involved the removal of a 1,200 square foot segment of the building's north wall. Several additions were made to the building including: 1) a 5,200 square foot addition to the eastern wall of the building; 2) a 375 square foot shed was constructed on the north wall of the eastern addition; 3) two additional structures were added to the north wall of the original mill building including a 600 square foot open air walkway and a 300 square foot open air shed building. Between 1965 and 1975, a residence was constructed in the northeast corner of the property which is currently used as an office. Analysis of aerial photography also indicates that the mill pond was filled between 1977 and 1983, presumably when closing the mill. Since closure of the mill, the mill building was converted to a machinist and welding shop, and all of the mill equipment was removed from the property (Jamie Roscoe & Associates 2016).

Present on the property today are three buildings, two of which are associated with the mill. The three structures remaining on the property include a 20,300 square foot metal commercial building, an 890 square foot office (originally constructed as a residence), and an approximately 775 square foot residence.

9. **Description of project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or on-site features necessary for its implementation. Attach additional sheets if necessary.) Emerald Family, LLC is applying for a Conditional Use Permit and Special Permit for cannabis cultivation, processing, nursery, and manufacturing facilities in accordance with Humboldt County Code Section 314-55.4 of Chapter 4 of Division I of Title III, Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The business is proposed to operate on an approximately 17-acre portion of a 41-acre parcel which was used in the past for agriculture, lumber milling, residential, and as a machinist and welding shop (see discussion under Project Site History above).

The project proposes to develop the site for cannabis uses in three phases which are listed on the Proposed Site Plan (Sheet C0). As described on the Proposed Site Plan:

### **Phase 1**

It is proposed to construct or modify the following improvements for Phase I of the project:

- Existing Building "A": The existing 23,000 s.f. commercial metal building will be rehabilitated and used for processing activities by the applicant; and
- Proposed Cultivation Area: A 3-acre portion of the site is proposed to be used for greenhouse cultivation by the applicant. Approximately 10 metal hoop greenhouse structures (3,000 s.f. each) will be placed in the 3-acre cultivation area. During Phase 1 of the project, the area proposed for development of Greenhouse Building "C" in Phase 2 of the project (~4-acres), will also be used by the applicant for outdoor and greenhouse cultivation. Approximately two metal hoop greenhouse structures (3,000 s.f. each) will be placed on the western edge of the ~4-acre area and the remainder of the area will be used for "full sun" outdoor cultivation. The total area of greenhouse and outdoor cultivation during Phase 1 of the project will be approximately 7-acres.

### **Phase 2**

Phase 2 of the project will require separate land use permit approval prior to initiation. It is proposed to construct or modify the following improvements for Phase 2 of the project:

- Existing Building "B": The existing 890 s.f. office building will be rehabilitated and leased for distribution and transportation activities;
- Proposed Greenhouse Building "C": A 160,000 s.f. greenhouse with eight (8) 20,000 s.f. rooms is proposed to be constructed and used for mixed light cultivation by the applicant. Develop-

ment of this structure will reduce the greenhouse and outdoor cultivation area used in Phase 1 of the project from ~7-acres to 3-acres;Proposed Building "D": A 17,500 s.f. metal building is proposed to be constructed and used for manufacturing activities by the applicant;

- Rainwater Catchment Pond: An approximately 3 million gallon rain water catchment pond is proposed to be constructed on the western edge of the site that will be used as the main water supply for the cannabis facility. The rainwater catchment system will also include tanks, piping, pumps, and filters to capture, transport, and filter the rainwater. This pond will be designed to overflow into the existing vegetated basin at the site (i.e. remnants of the former log pond) (see Stormwater Management and Water Sources discussion below); and
- Pre-Treatment Pond: An approximately 1 million gallon pre-treatment pond is proposed to be constructed and used as part of the stormwater system (see Proposed Site Plan). Roof runoff from most of the existing and proposed structures at the site (except Existing Building "B" and the equipment storage building) will ultimately be pumped to the pre-treatment pond. This pond will be designed to overflow into the rainwater catchment pond (see stormwater management discussion below).

### **Phase 3**

Phase 3 of the project will require separate land use permit approval prior to initiation. It is proposed to construct or modify the following improvements for Phase 3 of the project:

- Proposed Building "E": A 4-story building that will contain a 10,000 s.f. nursery area and 10,000 s.f. breeding area on the 1<sup>st</sup> floor and 25,000 s.f. of indoor cultivation on the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> floors (total = 95,000). The nursery and breeding areas are proposed to be used by the applicant and the 2<sup>nd</sup> – 4<sup>th</sup> floors will be leased.

### **Hours/Days of Operation and Number of Employees**

The proposed cannabis facility will operate year-round, with peak activity during the fall months. The facility will operate 24 hours per day with the peak hours occurring from 9 a.m. to 5 p.m. There will be at least one security guard on site at all times and limited manufacturing activities will also occur in 8 hour shifts outside of the peak hours. It is anticipated that approximately 5 employees will be on-site outside of the peak operating hours. The maximum number of employees during Phases 1 and 2 of the project will be 50 employees. During Phase 3, the maximum number will increase to 75 employees.

### **Access/Parking**

The project site is accessed from Country Club Road which is a two-lane County roadway that is over 24 feet in width. Country Club Road is identified as a Major Collector by CalTrans (2011) and provides access to rural residential, agricultural, commercial, recreational, public facility, and industrial uses in the Willow Creek area. The existing access road to the project site is off Country Club Road and is in good condition. The access road is known as Flowers-McNeill Road which is a roadway that is currently utilized to access the project site, some rural residences, and an adjacent mini-storage business. Flower-McNeill Road connects with Country Club Road approximately 430 feet east of the project site. Flowers-McNeill Road is paved from the intersection with Country Club Road to several hundred feet into the project site. These roads will be used to connect the project site with Highway 299 which is an approximately 0.7 mile drive from the site.

As shown on the Proposed Site Plan, the project proposes to develop several internal access roads and parking areas to serve the facility. All of the internal access roads are proposed to be paved, with the exception of one small road section on the west side of the Proposed Greenhouse Building "C," that will be rocked with gravel. Also, the existing unpaved access road to the proposed rainwater catchment pond area will not be improved as part of the project. As shown on the Proposed Site Plan, the project proposes to develop 131 on-site parking spaces within four areas (Zones A-D) at the site. The full buildout of the project will result in approximately 3.25 acres of pavement and concrete at the site which will primarily be for vehicular/equipment access and parking.

### **Traffic**

During Phases 1 and 2, the proposed facility will generate up to 260 vehicle/truck trips per day. This will include 10 truck trips (5 in/5 out) from deliveries, 200 employee vehicle trips (4 trips per day per employee), and 50 vehicle/truck trips from the retail nursery (25 in/25 out). During Phase 3, the proposed facility will generate up to 360 vehicle trips per day. This will include 10 truck trips (5 in/5 out) from deliveries, 300 employee vehicle trips (4 trips per day per employee), and 50 vehicle/truck trips from the retail nursery (25 in/25 out). Truck trips will primarily occur from the import of unprocessed cannabis material and supplies necessary for cultivation and manufacturing as well as the export of packaged cannabis products.

### **Landscaping**

As shown on the Landscape Plan (Sheet No. L0) prepared by Manhard Consulting (2016b), the project proposes the installation of landscaping in an around the main parking areas (Zones A and B) and stormwater features at the entrance to the site. The Landscape Plan contains a Plant List of the plant species that will be installed to ornament the site which includes several native trees and shrubs. In addition, it is proposed to plant native species within and around the low impact development (LID) features that will be installed as part of the stormwater system, including the pre-treatment and rainwater catchment ponds.

### **Lighting**

The project site currently contains existing outdoor lighting around the commercial metal building and office. The new buildings proposed at the site will have perimeter lighting installed for security purposes. There will also be outdoor lighting in the main parking area and at the entrance gate. All new outdoor lighting will be the minimum lumens required for security purposes, directed downward, and shielded to prevent lighting spillover onto adjacent properties.

The applicant proposes to use mixed lighting for cultivation which means that at certain times of the year artificial lighting will be used in the greenhouse structure (see Proposed Site Plan). To ensure that light does not escape from the structure at night, the illuminated area within the greenhouse structure will be covered with breathable woven poly tarping when the artificial lighting is in use. The tarp cover will be part of an automated system that will pull the cover over the illuminated area prior to sunset and remove it after sunrise.

### **Stormwater Management**

Development of the proposed cannabis facility will create additional impervious surface and result in an increase in stormwater runoff. As described in the Preliminary Drainage Report prepared by Manhard Consulting (2017a), the project proposes to capture stormwater on-site through a variety of site design measures including catchment tanks, bioswales, detention basins, a pre-treatment pond, and a rainwater catchment pond.

The proposed stormwater features are dispersed between the proposed structures and paved surfaces and are routed in sequence. All runoff from the proposed structures will be diverted to the pre-treatment pond which overflows into the rainwater catchment pond for irrigations storage. The rainwater catchment pond will be designed to overflow to the existing vegetated basin (i.e. remnants of the former log pond). Some of the surface runoff from existing and proposed paved surfaces will also be directed, after pre-treatment, to the existing vegetated basin at the site. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing culvert pipe outfall from the existing vegetated basin to the Trinity River. Use of the existing outfall will require replacement of the culvert pipe under the main access road at the site (see Proposed Site Plan). The culvert pipe outlet will be armored with rock to provide energy dissipation (also see discussion under Riparian Habitat and Wetlands below).

During the 85th percentile, 24-hour storm event, sufficient stormwater detention will occur post construction. Detention volumes are expected to infiltrate at high rates and the use of LID features will

minimize peak storm water runoff, improve the quality of runoff, and provide aesthetic improvement to the final development.

The stormwater system design described in the Preliminary Drainage Report (Manhard, 2017) is for the full buildout of the project (i.e. all 3 phases). The majority of the stormwater system will be constructed as part of Phase 1. The exceptions are the pre-treatment pond and rainwater catchment pond, which will be constructed as part of Phase 2 of the project. During Phase 1, stormwater will be directed, after pre-treatment, to the existing vegetated basin at the site.

### **Riparian Habitat and Wetlands**

Riparian habitat at the site primarily exists on the northern portion of the site along the Trinity River. The project has been designed to maintain a 150-foot setback from the Trinity River as recommended by California Department of Fish and Wildlife (CDFW). This exceeds the 100-foot setback requirements of Section 314-61.1 (Streamside Management Area Ordinance) of the Humboldt County Zoning Regulations for areas outside of Urban Development and Expansion Areas.

To protect this riparian habitat area during construction activities, it is proposed to install and maintain temporary chain link fencing on the edge of the 150-foot setback from the Trinity River. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Department. To protect this riparian habitat area during long-term operation of the project, it is proposed to install and maintain wildlife friendly split-rail fencing on the edge of the 150-foot setback from the Trinity River. The fencing will be installed at the completion of the construction phase once the temporary chain link fencing is removed.

According to the wetland delineation report prepared by SHN Consulting Engineers & Geologists (2016a), approximately 3,353 square feet of 3-parameter wetlands occur at the project site in the area where the former mill pond existed. Based on a follow up site visit with the Army Corps of Engineers on 03/14/17, approximately 2,407 square feet of "Other Water of the U.S." were also identified at the project site based on the presence of an Ordinary High Water Mark (OHWM). In total, 5,760 square feet of Waters of the U.S. have been identified at the site (SHN, 2017). The project does not propose any activities that will have an adverse effect on the federally protected (3-parameter) wetlands identified in the wetland delineation report (SHN 2016a). As shown on the Proposed Site Plan, the project will maintain an approximately 50 foot setback from the delineated jurisdictional areas at the site. The applicant is applying for a Special Permit to reduce the required 100-foot wetland setback to 50 feet.

To protect the delineated jurisdictional area during construction activities, it is proposed to install and maintain temporary chain link fencing on the edge of the proposed 50-foot setback. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Department. To protect the delineated jurisdictional area during long-term operation of the project, it is proposed to install and maintain wildlife friendly split-rail fencing on the edge of the proposed 50-foot setback. The fencing will be installed at the completion of the construction phase once the temporary chain link fencing is removed.

As part of development of the stormwater system at the project site, the culvert pipe outlet from the existing vegetated basin to the Trinity River will need to be replaced. This culvert is currently in disrepair and will be replaced with a culvert of similar size. After replacement of the culvert pipe, the outlet will be armored with rock to provide energy dissipation. This activity will occur outside of the 150-foot setback from the Trinity River but will occur within the Army Corps jurisdictional area that was identified by the presence of an OHWM at the site visit on 03/14/17. A Nationwide Permit will be required by the Army Corps for some of these maintenance activities, and additional permitting may be required from other regulatory agencies. It is estimated that up to 500 s.f. of riparian vegetation could be impacted by replacement of the culvert and the armoring of the outlet. Any removal of riparian vegetation from these maintenance activities will be replaced at a 3:1 ratio at an appropriate location on the project site. This could include the enhancement of existing wetland and riparian areas

on the project site. If applicable, a mitigation plan will be prepared and submitted to regulatory agencies for review and concurrence prior to replacement of the culvert.

### **Water Sources**

Water sources for the project will include water service from the Willow Creek Community Services District (WCCSD) and the capture of rainwater. During Phase 1 of the project, water service from WCCSD will be used for all aspects of the project. During Phase 2 of the project, the 3-acre (3 million gallon) rainwater catchment pond will be developed which will be the main source of water for the proposed facility. At full buildout of the project, the WCCSD water service would be used for domestic needs in the existing and proposed structures (e.g. restrooms, drinking water, and cooking in the employee kitchen), and the captured rainwater will be used for irrigation and manufacturing activities.

### **On-site Wastewater System**

The project site is located within the Willow Creek Community Services District (WCCSD) which does not have a wastewater treatment system. As such, the proposed project will be served by a new on-site wastewater treatment system. As shown on the Proposed Site Plan, this system will be located between the existing metal building at the site and the proposed greenhouse structure. According to the Septic Suitability Letter submitted by Manhard Consulting (2016a) to the Humboldt County Division of Environmental Health (DEH), the soils at the project site are capable of supporting on-site wastewater discharge from the proposed cannabis facility.

### **Electrical Service**

The proposed cannabis facility will use an existing electrical service from Pacific Gas & Electric (PG&E). As noted above, Phase 3 of the project will involve the development of a four-story building which will include approximately 75,000 square feet of indoor cultivation.

Section 55.4.8.3 of the County's CMMLUO requires indoor cultivation operations to offset their greenhouse gas emissions associated with the generation of electricity necessary to power the operation. As stated in Section 55.4.8.3, "*Electrical power for indoor cultivation operations including but not limited to illumination, heating, cooling, and ventilation, shall be provided by on-grid power with 100% renewable source, on-site zero net energy renewable source, or with purchase of carbon offsets of any portion of power not from renewable sources.*"

As noted in Section 55.4.8.3, there are several methods of off-setting the carbon footprint of proposed indoor cultivation operations. One of the easiest methods that will be available to the proposed project, which receives power from PG&E, will be to participate in the Redwood Coast Energy Authority (RCEA) Community Choice Energy (CCE) Program. This program will allow the proposed project to purchase on-grid power with 100% renewable sources. The RCEA Community Choice Energy program will begin in May 2017. For \$0.01 more per kilowatt-hour (kWh), the proposed project can opt up to Repower+ and offset the carbon footprint of the proposed indoor cultivation activities. Participation in the CCE Repower+ program will allow the proposed project to comply with Section 55.4.8.3 of the County's CMMLUO.

10. **Surrounding land uses and setting:** Briefly describe the project's surroundings: The project site is located directly north of the commercial district of the community of Willow Creek. The approximately 41 acre parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The Trinity River is located on the northern portion of parcel 522-201-001 and the confluence of Willow Creek and the Trinity River is located adjacent to the northwest corner of the property. The facility is proposed to be located on an elevated portion of the project site, on an existing industrial footprint, that is located outside of the 100-year flood hazard area according to FEMA mapping. The area on the property proposed for the business is mostly flat and is accessed by Country Club Road, a paved County-maintained road which meets the road category 4 minimum. The northern portion of the site contains a moderately steep slope with riparian vegetation down to the Trinity River and the southern

portion of the site contains moderately steep forested slopes up to Country Club Road. According to the Humboldt County Web GIS mapping ([gis.co.humboldt.ca.us](http://gis.co.humboldt.ca.us)), the property contains prime agricultural soils classified as Et2 (Ettersberg loam, 0 to 3 percent slopes, Storie Index Rating of 61, and a Soil Capability Classification of I). The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek.

11. **Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement). A Construction General Permit will be required from the North Coast Regional Water Quality Control Board. Locally, permits from Humboldt County Building Division and Division of Environmental Health are required.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- |   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Aesthetics                | <input type="checkbox"/> Agriculture Resources                | <input type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources      | <input checked="" type="checkbox"/> Cultural Resources        | <input checked="" type="checkbox"/> Geology / Soils         |
| <input type="checkbox"/> Hazards & Hazardous Materials        | <input checked="" type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning                |
| <input type="checkbox"/> Mineral Resources                    | <input checked="" type="checkbox"/> Noise                     | <input type="checkbox"/> Population / Housing               |
| <input checked="" type="checkbox"/> Public Services           | <input type="checkbox"/> Recreation                           | <input type="checkbox"/> Transportation/Traffic             |
| <input checked="" type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities/Service Systems            | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project COULD have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project COULD have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Michelle Nielsen

Printed name

3/30/17

Date

Humboldt County Planning & Building Department

For

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take into account the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 21, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addresses. Identify which effects from the above checklist were within the scope of and adequately analyze in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated,:" describe the mitigation measures which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plan, zoning ordinances). Reference to a previously prepared or



outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats, however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue identify:
  - a) The significant criteria or threshold, if any, used to evaluate each question; and
  - b) The mitigation measure identified, if any, to reduce the impact to less than significant.

## CHECKLIST, DISCUSSION OF CHECKLIST RESPONSES, PROPOSED MITIGATION

### 1. AESTHETICS . Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### **Setting:**

The project site (APN 522-201-001) is an approximately 41 acre parcel that is located west of Country Club Road within the unincorporated community of Willow Creek on a site that was used in the past for agriculture, lumber milling, residential, and as a machining and welding shop. The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence.

The Trinity River is located on the northern portion of the project site and the confluence of Willow Creek and the Trinity River is located adjacent to the northwest corner of the property. The northern portion of the site contains a moderately steep slope with riparian vegetation down to the Trinity River and the southern portion of the site contains moderately steep forested slopes up to Country Club Road. Moderately steep forested hill slopes surround the project site on all sides of the river valley.

The project site is located adjacent to the Trinity River which, along this section, has been designated "recreational" under the 1968 Wild and Scenic Rivers Act since 1981. The closest sections of the Trinity River that are designated as "scenic" under the Act are 4 miles to the south at the confluence with the South Fork Trinity River and approximately 6.5 miles to the north on the Hoopa Valley Reservation (National Wild & Scenic Rivers System, 2017).

#### **Analysis:**

- a) Finding: The project will not have a substantial adverse effect on a scenic vista. *Less than significant impact with mitigation incorporated.*

Discussion: Although the site is somewhat visible from several locations in the Willow Creek area, including Country Club Road, it is currently an underutilized industrial site that has little aesthetic value. There are no designated vista points in the project area. Country Club Road does not have any scenic vista points or available areas for drivers to stop (e.g. pullouts) within the vicinity of the project site. However, the project site is located adjacent to the Trinity River which, along this section, has been designated "recreational" under the 1968 Wild and Scenic Rivers Act since 1981. The closest sections of the Trinity River that are designated as "scenic" under the Act are 4 miles to the south at the confluence with the South Fork Trinity River and approximately 6.5 miles to the north on the Hoopa Valley Reservation (National Wild & Scenic Rivers System, 2017). The Act recognizes that development (such as what is currently at the site and which pre-existed the Act) would be present. Recreational rivers are those segments of Wild and Scenic Rivers that are readily accessible by road or railroad, that may have some development along their shorelines and that may have undergone some impoundment or diversion in the past. The Big Rock Recreation

Area on Six Rivers National Forest Service property is downstream of the project site. The recreation area includes a boat launch, picnic tables, and areas for swimming and fishing along the river.

This section of river is also adjacent to the town of Willow Creek, population approximately 1,710 (US Census, 2010), with nearby development along or near the shorelines of the river. Other development along this stretch of river (within 2 miles of the project site) include residences, visitor accommodations, a gravel operation and private airstrip, agricultural operations, Veteran's Park and Camp Kimtu, Highways 299 and 96 and other roads, and a bridge over the Trinity River. Further, the project site was historically used for industrial activities, so regular users of this area are accustomed to the presence of commercial and industrial activities near the river.

Impacts to aesthetic resources resulting from the project would be limited to views of the existing and proposed buildings for a short distance while traveling down Country Club Road to the river. For users of the nearby and adjacent gravel bars along the Trinity River and the river itself, the existing vegetation along the perimeter and slope up to the project site reduces the visibility of the site. As such the proposed new development at the project site will not be widely visible. To ensure the project does not create aesthetic impacts, the project's mitigation measures include retention of screening vegetation along Country Club Road and the river, with a minimum width of fifty feet. With respect to the riparian corridors along the Trinity River, these areas will be retained and not disturbed in accordance with the Humboldt County Streamside Management regulations (Humboldt County (HCC) Section 314-61.1 et seq.) which specify a minimum width of 100 feet beginning at the stream transition line (see Mitigation Measure M-1 below). There are no scenic resources, other than the Trinity River, within the project area. Mature riparian vegetation will not be disturbed by the proposed business. People using the area are already familiar with the existing commercial and industrial operations in the project area.

Therefore, the proposed project will not have a substantial adverse effect on a scenic vista.

- b) Finding: The project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. *Less than significant impact.*

Discussion: According to the California Scenic Highway Mapping System, there are no designated state scenic highways in the project vicinity ([www.dot.ca.gov](http://www.dot.ca.gov)). Highway 299 and 96 are listed as "Eligible State Scenic Highways" but the project site is not visible from any of these highways. The project site does not contain any landmark trees, rock outcroppings, or buildings of historical significance.

Therefore, the proposed project will not substantially damage scenic resources within a state scenic highway.

- c) Finding: The project will not substantially degrade the existing visual character or quality of the site and its surroundings. *Less than significant impact with mitigation incorporated.*

Discussion: The existing visual character of the project site is a disturbed underutilized industrial site with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The majority of the site shows evidence of previous disturbances related to industrial activities including graded or paved surfaces. The project site is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek.

During the project's temporary construction period, construction equipment, supplies, and construction activities would be visible on the subject property from immediately surrounding areas. Construction activities are a common occurrence in the region and are not considered to sub-

stantially degrade the area's visual quality. All construction equipment would be removed from the project site following completion of the project's construction activities. As such, the temporary visibility of construction equipment and activities at the project site would not substantially degrade the visual character of the surrounding area.

Development of the site for the proposed project would alter the site's visual character by introducing additional buildings, rainwater catchment ponds, agricultural crops, paved access roads, parking areas, stormwater facilities, and fencing (See Proposed Site Plan).

As shown on the Landscape Plan (Sheet No. L0) prepared by Manhard Consulting (2016b), the project proposes the installation of landscaping in an around the main parking areas (Zones A and B) and stormwater features at the entrance to the site. The Landscape Plan contains a Plant List of the plant species that will be installed to ornament the site which includes several native trees and shrubs. In addition, it is proposed to plant native species within and around the low impact development (LID) features that will be installed as part of the stormwater system, including the pre-treatment and rainwater catchment ponds. The proposed landscaping, in combination with the existing natural landscaping at the site, will be sufficient for ornamenting the project site.

As noted above under section a), the proposed improvements would primarily be visible to drivers on Country Club Drive. However, views of the site would only occur for short distances while driving on the road since trees, other vegetation, and topography along this roadway block views of the site. The clearest view of the site is available along Country Club Road for approximately 250 feet just past the intersection with Kimtu Road. Figure 1 below shows a view from the western edge of Country Club Road looking west towards the project site. This picture was taken approximately 140 north of the intersection of Country Club Road and Kimtu Road.

Figure 1: View of Project Site Looking West from Country Club Road



Country Club Road varies from approximately 90 feet higher than the project site at the top of the ridge to slightly lower than the project site at the intersection with Flower-McNeil Road. The majority of elevation difference between the project site and Country Club Road occurs on the southern boundary of the site, which is primarily obscured by vegetation. Figure 2 below shows the

vegetative screen that occurs along Country Club Road when looking north towards the project site. This picture was obtained from Google Earth street view (2017).

Figure 2: View of Project Site Looking North from Country Club Road



The proposed improvements to the site would ultimately improve the aesthetic character of the property which currently consists of a large deteriorated metal commercial building and undeveloped graded surfaces over much of the site. The proposed buildings would be consistent with other industrial and agricultural development in the Willow Creek area and would be similar in type to historic industrial development of the site.

The proposed 4-story indoor cultivation, nursery, and breeding building has the greatest potential for aesthetic impacts due to its height (~50 feet). To minimize potential visual impacts of this structure, the site has been designed to locate this building on the southern portion of the property against a moderately steep forested slope. At this location, the topography and vegetation at the site block views of the building from most vantage points, including the Trinity River and most sections of Country Club Drive.

To ensure the project does not create aesthetic impacts, the project's mitigation measures include retention of screening vegetation along Country Club Road and the river, with a minimum width of fifty feet. With respect to the riparian corridors along the Trinity River, these areas will be retained and not disturbed in accordance with the Humboldt County Streamside Management regulations (Humboldt County (HCC) Section 314-61.1 et seq.) which specify a minimum width of 100 feet beginning at the stream transition line (see Mitigation Measure M-1 below).

Therefore, the proposed project will not substantially degrade the existing visual character or quality of the site and its surroundings.

- d) Finding: The project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. *Less than significant impact.*

Discussion: The project site currently contains existing outdoor lighting around the commercial metal building and office. The new buildings proposed at the site will have perimeter lighting installed for security purposes. There will also be outdoor lighting in the main parking area and at the entrance gate. All new outdoor lighting will be the minimum lumens required for security purposes, directed downward, and shielded to prevent lighting spillover onto adjacent properties. This is particularly important due to the fact that cannabis plants will be growing on the site outdoor and in the greenhouses. If lighting spillover occurs from the outdoor lighting it could alter the growing cycle of the plants and affect production levels. As such, it will be particularly important for the applicant to ensure that outdoor lighting is contained within the specific areas it is intended to illuminate.

The applicant proposes to use mixed lighting for cultivation which means that at certain times of the year artificial lighting will be used in the greenhouse structure (see Proposed Site Plan). To ensure that light does not escape from the structure at night, the illuminated area within the greenhouse structure will be covered with breathable woven poly tarping when the artificial lighting is in use. The tarp cover will be part of an automated system that will pull the cover over the illuminated area prior to sunset and remove it after sunrise. As such, the artificial lighting used in the mixed light cultivation greenhouse will not create a new source of light that will be visible off-site and affect nighttime views.

The new structures proposed for the business will not be constructed of materials that will reflect light or cause any sources of glare that would impact surrounding land uses, drivers on Country Club Road, or air traffic using the adjacent private airstrip.

Therefore, the proposed project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

**Applicant Proposed Operating Restrictions:**

AE-1. The hours of operation proposed will be from 9:00 a.m. – 5:00 p.m. Monday through Friday. These limits reduce the amount of time activities can be observed.

AE-2. New outdoor lighting proposed as part of the project will be the minimum lumens required, directed downward, and shielded to prevent lighting spillover onto adjacent properties.

AE-3. When artificial lighting is used in the mixed light cultivation greenhouse, an automated system will be used to cover the illuminated area with woven poly tarping to ensure the lighting does not affect nighttime views.

AE-4. Signage shall be in conformance with Humboldt County Code Section 314-87.2, unless otherwise permitted.

**Mitigation:**

**M-1.** Existing vegetation surrounding the project site will be retained to maintain a visual buffer from off-site areas. The width of the buffer shall not be less than 50 feet. Specifically the riparian corridors and buffers along the Trinity River will be retained and not disturbed. The minimum width of this buffer is 100 feet from the stream transition line pursuant to HCC) Section 314-61.1 et seq.

**Findings:**

a) The project will not have a substantial adverse effect on a scenic vista: **Less than significant impact with mitigation incorporated.**

b) The project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway: **Less than significant impact.**

c) The project will not substantially degrade the existing visual character or quality of the site and its surroundings: **Less than significant impact with mitigation incorporated.**

d) The project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area: **Less than significant impact.**

**2. AGRICULTURE & FORESTRY RESOURCES.**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
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- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

**Setting:**

The project site (APN 522-201-001) is zoned Heavy Industrial (MH) and Agricultural General (AG-B-6) and designated Industrial General (IG) and Agricultural Rural (AR). The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The majority of the site shows evidence of previous disturbances related to industrial activities including graded or paved surfaces.

The Farmland Mapping and Monitoring Program of the California Resources Agency has not yet mapped farmland in Humboldt County ([www.consrv.ca.gov](http://www.consrv.ca.gov)). According to the Humboldt County Web GIS mapping ([gis.co.humboldt.ca.us](http://gis.co.humboldt.ca.us)), the property contains prime agricultural soils classified as Et2 (Ettersberg loam, 0 to 3 percent slopes, Storie Index Rating of 61 and a soil capacity rating of I) in the southeast section of the site. The Ettersberg series comprises well drained soils developed from graywacke gravels and river sediments of the Franciscan and Yager formations. The parent material is rich in quartz and shale particles. The soils occur on low river terraces having smooth to nearly flat relief. Vegetation consists of thin Douglas fir stands and open areas of annual grasses and bracken fern. The Ettersberg soils occur at elevations from 100 to 2,500 feet and are used for unirrigated pasture and some timber production (Soils of Western Humboldt County, 1965). The soil on site within the area of the industrial footprint was imported to the site as fill and does not match the mapped soils.

Certain portions of the parcel containing the project site are forested, but the parcel is not zoned for timber production and has never been used for the harvesting of timber.



**Analysis:**

- a) Finding: The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. *Less than significant impact.*

Discussion: According the Humboldt County Web GIS mapping ([gis.co.humboldt.ca.us](http://gis.co.humboldt.ca.us)), the property contains prime agricultural soils classified as Et2 (Ettersberg loam, 0 to 3 percent slopes, Storie Index Rating of 61 and a Soil Capability Classification of I) in the southeast section of the site. Approximately 5.5 acres of the project site have been delineated as containing prime agricultural soils (See Proposed Site Plan). As shown on the Proposed Site Plan, portions of the greenhouse structure, outdoor cultivation area, indoor cultivation, nursery, and breeding building, equipment storage building, access roads, and a parking area will occur on the area of prime agricultural soils. All of the proposed uses that will occur on the prime agricultural soils are agricultural uses or agricultural related uses. Moreover, the project will not convert prime agricultural lands as the subject property has been planned Industrial General (IG) and Heavy Industrial (MH) since June 1986 when these were adopted by the Board of Supervisors. The 1986 application of the IG and MH land use regulations were consistent given the then present use of the property for industrial purposes.

Therefore, the proposed project will not convert prime or unique farmland or farmland of statewide importance to non-agricultural use.

- b) Finding: The project will not conflict with existing zoning for agricultural use, or a Williamson Act contract. *Less than significant impact.*

Discussion: The project site (APN 522-201-001) is zoned Heavy Industrial (MH) and Agricultural General (AG-B-6). According the Humboldt County Web GIS mapping, the portion of the site zoned Agricultural General occurs in the southeast corner of the site and is not the area delineated as containing prime agricultural soils. The project is not proposed to occur on the portion of the site that is zoned Agricultural General. According to the Humboldt County Web GIS mapping, there is no Williamson Act contract applicable to the project site.

Therefore, the proposed project will not conflict with existing zoning for agricultural use or a Williamson Act contract.

- c) Finding: The project will not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526). *No impact.*

Discussion: This project will not conflict with existing forestland or timberland zoning because the project site does not contain an economically viable unit of timberland and is not zoned for timber production. The project site (APN 522-201-001) is zoned Heavy Industrial (MH) and Agricultural General (AG-B-6).

Therefore, the proposed project will not conflict with existing zoning for, or cause rezoning of, forest land or timberland.

- d) Finding: The project will not result in the loss of forestland or conversion of forest land to non-forest use. *No impact.*

Discussion: The project site does not contain an economically viable unit of forestland, is not zoned for timber production, and has historically been used for industrial activities.



Therefore, the proposed project will not result in the loss of forestland or conversion of forest land to non-forest use.

- e) **Finding:** The project will not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. *Less than significant impact.*

**Discussion:** The proposed project will not produce significant growth inducing or cumulative impacts that will result in the conversion of farmland or forest land. Growth inducing impacts are generally caused by projects that have a direct or indirect affect on economic growth, population growth, or land development. The project will only employ approximately 75 persons; economic benefits would not be such that people might be attracted to the area as a result.

There is the potential for new cannabis cultivation operations to be permitted on farmland and forestland in the project area that will export cannabis material to the proposed facility for processing and manufacturing. Since new cannabis facilities will be required to comply with local and state cannabis regulations and be subject to review under CEQA, it is not anticipated that significant impacts will result from the conversion of farmland or forestland for these new cannabis cultivation operations.

Therefore, the project would not lead to a conversion of farmland to non-agricultural use or forest land to non-forest use in the area surrounding the site.

**Applicant Proposed Operating Restrictions:**

AFR-1. The project has been limited in size and location to non-timber harvested lands.

**Findings:**

- a) The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use: **Less than significant impact.**
- b) The project will not conflict with existing zoning for agricultural use, or a Williamson Act contract: **Less than significant impact.**
- c) The project will not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526): **No impact.**
- d) The project will not result in the loss of forest land or conversion of forest land to nonforest use: **No impact.**
- e) The project will not Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. **Less than significant impact.**

**3. AIR QUALITY.** Where available, the significant criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorpor.	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any cri-	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

teria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| d) Expose sensitive receptors to substantial pollutant concentrations?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Setting:**

The project site is located in Humboldt County, which lies within the North Coast Air Basin (NCAB). The NCAB extends for 250 miles from Sonoma County in the south to the Oregon border. The climate of NCAB is influenced by two major topographic units: the Klamath Mountains and the Coast Range provinces. The climate is moderate with the predominant weather factor being moist air masses from the ocean. Average annual rainfall in the area is approximately 50 to 60 inches with the majority falling between October and April. Predominate wind direction is typically from the northwest during summer months and from the southwest during storm events occurring during winter months.

Project activities are subject to the authority of the North Coast Unified Air Quality Management District (NCUAQMD) and the California Air Resources Board (CARB). The North Coast Unified Air Quality Management District (NCUAQMD) is listed as "attainment" or "unclassified" for all the federal and state ambient air quality standards except for the state 24-hour particulate (PM<sub>10</sub>) standard, which relates to concentrations of suspended airborne particles that are 10 micrometers or less in size.

In determining whether a project has significant air quality impacts on the environment, agencies often apply their local air district's thresholds of significance to project in the review process. The District has not formally adopted specific significance thresholds, but rather utilizes the Best Available Control Technology (BACT) emissions rates for stationary sources as defined and listed in the NCUAQMD Rule and Regulations, Rule 110 – New Source Review (NSR) and Prevention of Significant Deterioration (PSD), Section 5.1 – BACT (pages 8-9) ([www.ncuaqmd.org](http://www.ncuaqmd.org)).

Sensitive receptors near the project site primarily include residential uses to the north, east, and south. Veterans Park is also located approximately 1,500 feet to the northeast of the project site.

**Analysis:**

- a) Finding: The project will not conflict with or obstruct implementation of the applicable air quality plan. *Less than significant impact.*

Discussion: The project site is located within the North Coast Air Basin which encompasses approximately 7,767 square miles. The North Coast Air Basin includes Del Norte, Humboldt, Trinity, and Mendocino counties, as well as the northern and western portions of Sonoma County. Air quality in Del Norte, Humboldt, and Trinity counties is regulated by the North Coast Unified Air Quality Management District (NCUAQMD). The NCUAQMD's primary responsibility is to achieve and maintain federal and state air quality standards, subject to the powers and duties of the California Air Resources Board (CARB). The North Coast Unified Air District is currently listed as being in "attainment" or is "unclassified" for all Federal health protective standards for air pollution (ambient air quality standards). However, under State ambient air quality standards, the air district has been designated "nonattainment" for particulate matter less than ten microns in size (PM<sub>10</sub>) (NCUAQMD Website, 2016). PM<sub>10</sub> air emissions include chemical emissions and other inhalable particulate matter with an aerodynamic diameter of less than 10 microns. PM<sub>10</sub> emissions include, but are not limited to, smoke from wood stoves, dust from traffic on unpaved roads, vehicular exhaust emissions, and airborne salts and other particulate matter naturally generated by ocean surf.

A potentially significant impact to air quality would occur if the project would conflict with or obstruct the implementation of the applicable air management or attainment quality plan. Although the proposed project would represent an incremental increase in air emissions in the air district, of primary concern is that project-related impacts have been properly anticipated in the regional air quality planning process and reduced whenever feasible. Therefore, it is necessary to assess the project's consistency with the applicable district air quality management or attainment plan(s).

The California Clean Air Act (CCAA) requires the NCUAQMD to achieve and maintain state ambient air quality standards for PM<sub>10</sub> by the earliest practicable date. The NCUAQMD prepared the Particulate Matter Attainment Plan, Draft Report, in May 1995. This report includes a description of the planning area (North Coast Unified Air District), an emissions inventory, general attainment goals, and a listing of cost-effective control strategies. The NCUAQMD's attainment plan established goals to reduce PM<sub>10</sub> emissions and eliminate the number of days in which standards are exceeded. The plan includes three areas of recommended control strategies to meet these goals: transportation, land use and burning. Control measures for these areas are included in the Attainment Plan. The project design incorporates control measures identified in the PM<sub>10</sub> Attainment Plan appropriate to this type of project, such as:

- 1) Developing a cannabis cultivation, processing, and manufacturing facility within the community of Willow Creek will reduce vehicle miles traveled and associated vehicular exhaust emissions generated by existing cannabis operations in the more rural areas of eastern Humboldt County. This would include a reduction in fine particulate matter (PM<sub>10</sub>) generated by traffic on unpaved rural roads.
- 2) The proposed facility will use forced-air gas heating instead of woodstoves or fireplaces which will significantly reduce PM<sub>10</sub> emissions generated from heating during long-term operation of the project.

The project site (APN 522-201-001) is located in the unincorporated community of Willow Creek and within the service boundary of the Willow Creek Community Services District (WCCSD). The County of Humboldt has designated the site in the County General Plan as Industrial General (IG) and Agricultural Rural (AR) and zoned the site in the County Zoning Code as Heavy Industrial (MH) and Agricultural General (AG-B-6). Approximately 39 acres of the 41 acre site is zoned Heavy Industrial. If the project site were built out in accordance with the requirements of the County designation/zoning, the majority of the developable portion of the site could be covered with structures since the MH zone does not specify a maximum ground coverage requirement. The project proposes the use of six buildings that will cover approximately 5.2 acres of the site, which is below the maximum development potential that would be permitted by the County's designation/zoning. As such, the proposed project is consistent with the density of industrial and agricultural development planned for in the Humboldt County General Plan for the community of Willow Creek.

Therefore the project will not obstruct implementation of the NCUAQMD Attainment Plan for PM<sub>10</sub>.

- b) Finding: The project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. *Less than significant impact.*

Discussion: Air quality in Humboldt County is regulated by the North Coast Unified Air Quality Management District (NCUAQMD). The NCUAQMD is responsible for monitoring and enforcing local and state air quality standards. Air quality standards are set for emissions that may include, but are not limited to: visible emissions, particulate matter, and fugitive dust. Pursuant to Air Quality Regulation 1, Chapter IV, Rule 400 – *General Limitations*, a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause

injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. Visible emissions include emissions that are visible to the naked eye, such as smoke from a fire. The project will not include any source of visible emissions, including intentional fire/burn.

Air quality impacts can be divided into two phases for a project; construction and operation.

Mobile sources of emissions include equipment used during short-term construction and vehicle/truck traffic and light-duty equipment from long-term operation. According to NCUAQMD Rule 102, the Air District does not currently require permits for the operation of heavy equipment used for construction (except pavement burners) or agricultural operations (NCUAQMD, 2017a). There are no "target" air quality standards/limits in this area; however, heavy equipment is generally subject to off-road equipment emission standards from the California Air Resources Board (CARB), and exceeding those standards may constitute a "nuisance" condition, and can be mitigated by proper equipment maintenance. Emissions from construction equipment will occur for a limited period of time and the equipment will be maintained to meet current emissions standards as required by the California Air Resources Board (CARB) and the NCUAQMD. As described in Section 16 (Transportation/Traffic), during long-term operation the project will generate up to 360 (180 in/180 out) vehicle/truck trips per day once all phases of the project are complete. Due to the small scale of the project, emissions from vehicle/truck traffic and equipment would not be significant from project operation.

Stationary sources of emissions from the project include the proposed cultivation, processing, and manufacturing buildings which will have HVAC and filter systems for air conditioning, odor reduction, and heating. According to NCUAQMD Rule 102, the Air District does not require permits for HVAC systems (NCUAQMD, 2017a). Each building will also have a propane back-up generator that will be used for providing power in the case of a power outage. It is unknown at this time if stationary source permits will be required from the NCUAQMD for the back-up generators, as it is uncertain what size generators will be purchased. NCUAQMD staff has indicated that if the propane generators have engines that are over 162 horse power (h.p.), they will require a stationary source permit (NCUAQMD, 2017b). Propane generators with engines less than 162 h.p. are not regulated by the Air District and they are not concerned about potential emissions from this type and size of stationary equipment. However, if the applicant proposes to use propane generators that require a permit from the Air District, the requirements of the stationary source permit will place limitations on the use of the generators that will ensure air quality impacts will be less than significant.

The project has the potential to generate dust from the following sources: 1) dust generated during construction from heavy equipment activity; 2) dust generated from vehicle/truck traffic on unpaved road sections at the site during long-term operation; and 3) dust from the processing of cannabis material. All activities at the project site are required to meet NCUAQMD Air Quality standards, including Regulation 1, which prohibits nuisance dust generation and is enforceable by the District. The NCUAQMD currently enforces dust emissions according to the CA Health and Safety Code (Section 41701) which limits visible dust emissions that exceed 40% density to a maximum of 3 minutes for any one-hour period. NCUAQMD District Rule 104 states that "*reasonable precautions shall be taken to prevent particulate matter from becoming airborne.*" The USEPA has determined that dust generally settles out of the atmosphere within 300 feet of the source.

Due to the size of the project site (41 acres) and existing vegetation, most of the dust associated with the construction equipment use and vehicle/truck traffic would settle out on-site or be trapped by the surrounding tree canopy and vegetation. The closest sensitive receptors are the residences in the vicinity, but because of the limited activity that will occur, the rapid dissipation of the dust, and the low density of residences, impacts will be minimal.

During short-term construction activities, the following dust control measures will be implemented to reduce nuisance dust generation (See Operating Restriction AQ-1):

1. All exposed surfaces (e.g. parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. Adjacent public roads shall be kept clean of loose dirt tracked onto the roadways from the construction site.
4. All vehicle speeds shall be limited to 15 miles per hour.

As shown on the Proposed Site Plan, most of the access roads that will receive regular use within the site are proposed to be paved with asphalt. This measure will be effective in preventing on-site dust generation from vehicle/truck traffic during long-term operation of the project. The only access road at the site that will not be paved is the small road section on the west side of the Proposed Greenhouse Building "C," that will be rocked with gravel. Also, the existing unpaved access road to the proposed rainwater catchment pond area will not be improved as part of the project. Since these roads are located within the interior of the site and away from surrounding residences, they are not anticipated to be a significant source of dust generation during operation of the project.

The processing and manufacturing buildings will be designed in compliance with OSHA standards to ensure worker health and safety including an adequate ventilation/filter system. The ventilation/filter systems will also ensure that dust generated during processing will not escape from the structures and impact surrounding land uses.

Carbon monoxide (CO) hot spots are typically associated with idling vehicles at extremely busy intersections (i.e. intersection with an excess of 100,000 vehicle trips per day). There are no intersections in Humboldt County or general project area which exceed the 100,000 vehicle per day threshold typically associated with CO hot spots. In addition, the North Coast Air Basin is currently in attainment for carbon monoxide (CO). As such, project related vehicular emissions would not create a hot spot and would not substantially contribute to an existing or projected CO hot spot.

Therefore, the project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

- c) Finding: The project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). *Less than significant impact*.

Discussion: The North Coast Unified Air District is currently listed as being in "attainment" or is "unclassified" for all Federal health protective standards for air pollution (ambient air quality standards). However, under State ambient air quality standards, the air district has been designated "nonattainment" for particulate matter less than ten microns in size (PM<sub>10</sub>) (NCUAQMD Website, 2016).

The NCUAQMD has advised that, generally, an activity that individually complies with the state and local standards for air quality emissions will not result in a cumulatively considerable increase in the countywide PM<sub>10</sub> air quality violation. . In general, construction activities that last for less than one year, and use standard quantities and types of construction equipment, are not required to be quantified and are assumed to have a less than significant impact (NCUAQMD, 2017b).

Although fugitive airborne dust is created naturally in the river valley by summer winds, there

are currently no air quality problems in the region, and this project will not cause a violation of ambient air quality standards either individually or cumulatively in the area. Also, see discussion under subsections a) and b) above.

Therefore, the project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

- d) Finding: The project will not expose sensitive receptors to substantial pollutant concentrations. *Less than significant impact.*

Discussion: Sensitive receptors (e.g. children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes. Sensitive receptors near the project site primarily include residential uses to the north, east, and south. Veterans Park is also located approximately 1,500 feet to the northeast of the project site.

As indicated by the air quality impact analysis under subsection b), the proposed project would not produce significant quantities of criteria pollutants (e.g. PM<sub>10</sub>) during short-term construction activities or long term operation. In addition, the proposed project would not create a carbon monoxide (CO) hot spot.

As part of the proposed cultivation, neem oil and sulfur are proposed to be applied to the cannabis plants using an electrostatic spray system to address pest and mold issues. Pesticide application is normally required to be administered a minimum of 300 feet from sensitive receptors (e.g. residences) in the case of dry pesticides and 200 feet in the case of wet pesticides. Generally, pesticide application should occur at low wind velocities (less than 10 mph). As shown on the Proposed Site Plan and based on a review of aerial photography, application of pesticides in the greenhouse structure and outdoor cultivation area will be a minimum of 300 feet from the closest sensitive receptors which include the caretaker's residence on the project site and an off-site residence to the east of the proposed greenhouse structure. The requirement to maintain appropriate setbacks from nearby residences and only conduct spraying activity at low wind velocities has been included as an operating restriction for the proposed project (see Operating Restriction AQ-6 below).

Therefore, the proposed project will not expose sensitive receptors to substantial pollutant concentrations.

- e) Finding: The project will not create objectionable odors affecting a substantial number of people. *Less than significant impact.*

Discussion: During long-term operation of the project there is the potential to impact air quality due to odors that would be generated by the proposed cultivation, processing, and manufacturing activities. Wind direction often assumes a daily pattern in the river canyons that empty into the Pacific. In the morning hours, cool air from higher elevations flows down the valleys while later in the day as the lower elevation air heats up this pattern is reversed and the airflow heads up the canyon.

Odors that would be generated in the proposed indoor cultivation, processing, and manufacturing buildings will be abated with an air ventilation/filter system containing carbon filters to ensure odors generated by the proposed facility are minimized. Odors from the outdoor and greenhouse cultivation activities will primarily be noticeable between August and October annually.

The closest land uses to the project site that could potentially be impacted by odors include surrounding residences. Based on site visits and review of aerial photography, there are approximately five residences within 800 feet from the proposed greenhouse structure or outdoor cultivation areas. These nearby residents could potentially experience odors from the proposed cultivation activities. According to the 2010 Census, the average household size in Humboldt County was 2.31. Based on this it is estimated that the nearby residential units would provide housing for approximately 12 persons. According to the 2010 Census, Willow Creek has a population of 1,710 persons. The 12 persons that could potentially experience odors from the proposed facility represent approximately 0.7 percent of the population of Willow Creek. Although, these nearby residents may experience odors from the facility, the low number of residents does not comprise a substantial number of people.

While the project has the potential to create objectionable odors, the number of potentially affected properties is low for the following reasons: 1) the location of the cultivation area and large size of the parcel; 2) the parcel contains moderately steep slopes on the northern, southern, and western boundaries; 3) proposed air ventilation/filter systems in the indoor cultivation, processing, and manufacturing buildings; 4) nature and type of surrounding land uses; and 5) low-density and number of residential uses near the project site.

Therefore, the proposed project will not create objectionable odors affecting a substantial number of people.

#### **Applicant Proposed Operating Restrictions:**

AQ-1. During short-term construction activities the following dust control measures will be implemented to reduce nuisance dust generation:

1. All exposed surfaces (e.g. parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. Adjacent public roads shall be kept clean of loose dirt tracked onto the roadways from the construction site.
4. All vehicle speeds shall be limited to 15 miles per hour.

AQ-2. Most of the access roads that will receive regular use within the site are proposed to be paved with asphalt. This measure will be effective in preventing on-site dust generation from vehicle/truck traffic during long-term operation of the project.

AQ-3. Vehicle/trucks on site will be required to maintain a 15 m.p.h. speed limit. The speed limit will be posted on-site.

AQ-4. The processing and manufacturing buildings will be designed with a ventilation/filter system which will ensure that dust generated will not escape from the structures and impact surrounding land uses.

AQ-5. Odors that would be generated in the proposed indoor cultivation, processing, and manufacturing buildings will be abated with an air filtration system containing carbon filters to ensure odors generated by the proposed facility are minimized.

AQ-6. The spray application of pesticides (e.g. neem oil) or other materials (e.g. sulfur) shall occur no closer than 300 feet to adjacent residences. Spraying shall not occur at wind speeds greater than 10 miles per hour. The operator shall measure the wind speed prior to and during spraying activities to ensure wind speeds are below 10 mph. Spraying activities shall cease if wind speeds are measured at greater than 10 mph.

#### **Findings:**

- a) The project will not conflict with or obstruct implementation of the applicable air quality plan: **Less than significant impact.**
- b) The project will not violate any air quality standard or contribute substantially to an existing or pro-

jected air quality violation: **Less than significant impact.**

c) The project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors): **Less than significant impact.**

d) The project will not expose sensitive receptors to substantial pollutant concentrations: **Less than significant impact.**

e) The project will not create objectionable odors affecting a substantial number of people: **Less than significant impact.**

**4. BIOLOGICAL RESOURCES.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

The project site (APN 522-201-001) is an approximately 41 acre property that was historically used for industrial activities in eastern Humboldt County within the town of Willow Creek. The project is proposed to occur on approximately 17 acres of the existing industrial footprint adjacent to the Trinity River. The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran’s Park , and the town of Willow Creek. The project area is located within the Six Rivers National Forest. The climate is typical of inland northern California with warm, dry summers, and cool, wet winters. Annual average precipitation is approximately 51 inches per year.

The Trinity River is the largest tributary to the Klamath River, entering at Weitchpec at RM 43. The basin drains an area of 3,000 mi<sup>2</sup> in Northern California, of which about one-fourth is above Lewiston Dam at RM 112. Terrain in the basin is predominantly mountainous and forested. Elevations in the basin range from 300 ft at the confluence with the Klamath River to 8,888 ft in the headwaters (EPA 2001). Vegetation along the river typically consists of willows and alders, and the upland forest is generally composed



of mixed conifers and hardwoods. Land uses in the watershed include grazing, timber management, rural and residential development, recreation, gravel extraction, infrastructure, and agriculture.

The Trinity River and associated riparian corridor is located on the northern portion of the project site and the confluence of Willow Creek and the Trinity River is located adjacent to the northwest corner of the property. The project site also contains some wetland areas and drainage swales. According to the wetland delineation report prepared by SHN Consulting Engineers & Geologists (2016a), approximately 3,353 square feet of 3-parameter wetlands occur at the project site in the area where the former mill pond existed. The drainage swales at the site are man-made ditches that were constructed for the management of stormwater as part of past industrial uses. The wetland delineation report did not identify these areas as 3-parameter wetlands.

The project area contains habitat for numerous species including some rare, threatened, and endangered species. According to the Natural Resources Assessment prepared by SHN Consulting Engineers & Geologists (2016b), no special status species were documented within the project site study area.

As part of the SHN Natural Resources Assessment (2016b), an evaluation was conducted for the potential presence or absence of habitat for special status plant and animal species. CNDDDB RareFind (CDFW, 2016), BIOS (CDFW, 2016), and CNPS (CNPS, 2016) searches were completed for the Willow Creek and Salyer 7.5-minute USGS quadrangles and all adjacent quadrangles. The aforementioned databases were queried for historical and existing occurrences of state and federally listed threatened, endangered, and candidate plant and animal species; species proposed for listing; and all plant species listed by the CNPS (On-line 2016 inventory). In addition, a list of all federally listed species that are known to occur or may occur in the vicinity was obtained from the USFWS' Information for Planning and Conservation database (USFWS 2016).

### **Plant Species**

Based on a review for special status plant species, 79 special status plant species have been reported from the region consisting of the site's two quadrangles and their surrounding quadrangles. Of the special status plant species reported in the region, 77 plant species are considered to have a low potential to occur at the project site and two species have a moderate potential. Species with a moderate potential for occurrence within the study area are described below:

Pacific Gilia (*Gilia capitata* ssp. *Pacifica*) is an annual herb in the Polemoniaceae family. Its elevation range is reported from 16 to 4,364 feet above sea level. Within its range state-wide, its blooming period is reported as April through August. This species is reported from coastal bluff scrub, chaparral openings, coastal prairie, in addition to valley and foothill grasslands. Although habitat may exist locally for this species, it was not detected within the study area.

Howell's montia (*Montia howellii*) is an annual herb in the Montiaceae family. Its elevation range is reported from 0 to 2,740 feet above sea level. Within its range state-wide, its blooming period is reported as March through May. This species is reported from meadows and seeps, north coast coniferous forest, vernal pools, vernal mesic sites, and sometimes roadsides. *Montia howellii* reference sites were visited the last week in October, 2016 in Arcata (CNDDDB occurrence #104) and the first week in November, 2016 at Burnt Ranch (CNDDDB occurrence #18) to confirm that plants had germinated and were detectable during the November 3, 2016 site visit. Plants were detectable at both of these locations. Although habitat may exist locally for this species, it was not detected within the study area.

### **Animal Species**

Based on a review of special status animal species, 46 special status animal species have been reported with the potential to occur in the project region. Of the special status animal species potentially occurring in the region, 30 animal species are considered to have a no or low potential to occur at the project site and 16 species have a moderate to high potential. Species with a moderate or high potential for occurrence within the study area are described below:

The Cooper's hawk (*Accipiter cooperii*) builds stick platform nests in crotches of riparian deciduous trees and second-growth conifers near streams. Nest is lined with bark. Although habitat may exist locally for this species, it was not detected within the study area. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Large diameter trees will be left intact, and vegetation clearing will occur outside the migratory bird nesting season.

The northern goshawk (*Accipiter gentilis*) nest in predominantly interior mountains in mature and old-growth forest stands with dense canopy cover and open understories. It forages in mature forests as well as meadow edges and open brush. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Large diameter trees will be left intact, and vegetation clearing will occur outside the migratory bird nesting season.

The golden eagle (*Aquila chrysaetos*) needs open terrain for hunting. It builds large platform nests in rugged, open habitats such as cliffs and large trees in open areas. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Large diameter trees will be left intact, and vegetation clearing will occur outside the migratory bird nesting season.

The great blue heron (*Ardea herodias*) utilizes shallow estuaries and emergent wetlands. It's less common along riverine, rocky marine shores, and pastures but will search for prey in shallow water and open fields. It nests in colonies in tops of secluded large snags and live trees. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Large diameter trees will be left intact, and vegetation clearing will occur outside the migratory bird nesting season.

The American peregrine falcon (*Falco peregrinus anatum*) occupies a broad range of ecological communities. It perches on cliffs, power poles, and other tall structures. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Large diameter trees will be left intact, and vegetation clearing will occur outside the migratory bird nesting season.

The bald eagle (*Haliaeetus leucocephalus*) occurs near large bodies of water, or free flowing rivers with abundant fish with adjacent snags or other perches. It nests in large, old-growth, or dominant live tree with open branchwork. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Large diameter trees will be left intact, and vegetation clearing will occur outside the migratory bird nesting season.

The yellow-breasted chat (*Icteria virens*) occurs in thickets and other dense vegetation such as bramble bushes, clearcuts, powerline corridors, and shrubs along streams. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Vegetation clearing will occur outside the migratory bird nesting season.

The osprey (*Pandion haliaetus*) occupies areas adjacent to rivers, lakes, and the coast where large numbers of fish are present. It may be most common around major coastal estuaries and salt marshes. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Large diameter trees will be left intact, and vegetation clearing will occur outside the migratory bird nesting season.

The hermit warbler (*Setophaga occidentalis*) occurs in tall coniferous forests, especially of Douglas fir. It forages on arthropods and nests on conifer branches in open cup of fine twig and other plant material. Project-related activities are not anticipated to have a significant impact on this species or its habitat. Vegetation clearing will occur outside the migratory bird nesting season.

The pallid bat (*Antrozous pallidus*) occurs in semi-arid locations in rocky, mountainous areas and near water. It may also be found over more open, sparsely vegetated grasslands. The pallid bat may roost in attics, rock cracks, or in the open near foliage. Although habitat may exist locally for this species, it was not detected within the study area. If project-related brush clearing or structural work on buildings with bat roosting habitat must occur during the bat reproductive season, bat surveys will be performed

in locations by a qualified biologist to ensure that colonies are not destroyed.

Townsend's big-eared bat (*Corynorhinus townsendii*) feeds on small moths, beetles, and soft-bodied insects. It roosts in caves, mines, tunnels, buildings, or other human-made structures. If project related brush clearing or structural work on buildings with bat roosting habitat must occur during the bat reproductive season, bat surveys will be performed in locations by a qualified biologist to ensure that colonies are not destroyed.

The silver-haired bat (*Lasiorycteris noctivagans*) is primarily a forest dweller, feeding mainly on moths and other insects close to forest streams, ponds, and open brushy areas. It roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark. If project-related brush clearing or structural work on buildings with bat roosting habitat must occur during the bat reproductive season, bat surveys will be performed in locations by a qualified biologist to ensure that colonies are not destroyed.

The long-eared myotis (*Myotis evotis*) feeds on a variety of arthropods including moths, flies, spiders, and especially beetles. It roosts singly, or in small groups in buildings, crevices, spaces under bark, and snags. Caves are used primarily as night roosts. If project-related brush clearing or structural work on buildings with bat roosting habitat must occur during the bat reproductive season, bat surveys will be performed in locations by a qualified biologist to ensure that colonies are not destroyed.

Yuma myotis (*Myotis yumanensis*) usually feeds on small flying insects over water sources such as ponds, streams, and stock tanks. It roosts in buildings, mines, caves, crevices, and under bridges. If project-related brush clearing or structural work on buildings with bat roosting habitat must occur during the bat reproductive season, bat surveys will be performed in locations by a qualified biologist to ensure that colonies are not destroyed.

The foothill yellow-legged frog (*Rana boylei*) frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. They are sometimes found in isolated pools; vegetated backwaters; and deep, shaded, spring-fed pools. Although habitat may exist locally for this species, it was not detected within the study area. Project-related activities are not anticipated to impact on this species or its habitat due to avoidance of wetlands and riparian areas.

The western bumble bee (*Bombus occidentalis*) typically nests underground in abandoned rodent burrows or other cavities. It's a generalist forager that visits a wide variety of flowering plants. Project-related activities are not anticipated to have a significant impact on this species or its habitat.

### **Analysis:**

- a) **Finding:** The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. *Less than significant impact with mitigation incorporated.*

**Discussion:** The project is proposed to occur on an existing industrial footprint adjacent to the Trinity River. The project site (APN 522-201-001) is zoned Heavy Industrial (MH) and Agricultural General (AG-B-6) and designated Industrial General (IG) and Agricultural Rural (AR). The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The majority of the site shows evidence of previous disturbances related to industrial activities including graded or paved surfaces.

Based on the Natural Resources Assessment prepared by SHN Consulting Engineers and Geologists (2016b), various species of plants, birds, mammals, and amphibians protected by federal

and state regulations have potential habitat at the project site. The potential for these species to exist at the project site is greatest along the Trinity River and the associated riparian zone and other vegetated areas of the project site. During the field surveys conducted as part of the SHN Natural Resources Assessment (2016b), no protected species were documented within the project site study area. However, due to the potential for some of these species to exist at the project site, the SHN Natural Resources Assessment (2016b) contains the following recommendations that will reduce impacts to less than significant:

- Conserve existing wetlands and riparian habitats within and adjacent to the project site.
- Limit native tree, shrub, and brush clearing to minimize impacts to nesting bird habitat.
- Leave large trees and snags in place for raptor nesting habitat.
- Limit clearing of vegetation to the non-breeding season for birds and bats. If work is done on structures between September 15 and February 28 (outside reproductive season for most birds and bats), these activities are not likely to affect reproductive success. If brush clearing or structural work on building (in locations with bird or bat nesting/roosting habitat) must occur during the reproductive season, bat and nesting bird surveys should be performed by a qualified biologist to ensure that no active nests are destroyed.
- Consider enclosing open structures that may provide nesting or roosting sites for birds or bats during the non-reproductive season to exclude colonization prior to migratory bird and bat arrival.
- Establish a no development riparian buffer that extends 150 feet from permanently established vegetation closest to the Trinity River or 30 feet from top of its bank; whichever is larger.
- Prepare a construction storm water pollution prevention plan with appropriate best management practices to minimize sediment transport to aquatic ecosystems and consider low impact development strategies.
- Design future water detention ponds so that they are capable of being drained if non-native bullfrogs become established.
- Use native and locally sourced plant material for landscaping and revegetation.
- Ensure that future development or new fencing does not prevent wildlife movement by allowing movement corridors outside the project area.

To minimize potentially significant impacts to protected species, the recommendations from the SHN Natural Resources Assessment (2016b) have been included as Mitigation Measure M-2 for the proposed project.

Once the project commences, the rainwater catchment pond will create a new aquatic environment which may attract wildlife including some of the protected species listed in the setting above. The proposed submersible pumps that will be used to transfer water from the rainwater catchment pond to the various parts of the site have the potential to impact wildlife including amphibian or reptile species if not properly screened. To prevent impacts to these species during the term of the project, pumps will be installed that contain screens meeting the CDFW fish screening criteria. This has been included as Mitigation Measure M-3 for the proposed project.

The rainwater catchment pond, pre-treatment pond, and other stormwater facilities at the site will create new water features on the project site that have the potential to increase the population of insects such as mosquitoes and aquatic species such as bull frogs. To prevent significant insect populations from developing in these new water features, the following measures shall be implemented as part of the project (See Operating Restriction BR-2 below):

- a) Maintain a high quality vegetative buffer around the rainwater catchment pond.
- b) Stocking of the rainwater catchment pond with fish species such as minnows to elimi-

nate insect larvae.

- c) Install aeration equipment in the rainwater catchment pond to prevent stagnation of the water and improve water quality.
- d) Prevent excess nutrients and pollutants from entering the rainwater catchment pond through pre-treatment of stormwater and non-stormwater runoff.
- e) Avoid shallow stagnant areas. Infiltration rates in intermediate detention basins are expected to aid in avoiding shallow stagnation.
- f) Intermediate detention basins/infiltration basins shall be designed as such to not allow for water to remain in the basin for longer than 72 hours.

To prevent significant bull frog populations from developing due to the aquatic environment provided by the rainwater catchment pond, the following measures shall be implemented as part of the project (See Operating Restriction BR-2 below):

- a) Controlling the bull frog population following colonization will be achieved by draining the rainwater catchment pond continuously through the summer until no water remains. This shall be repeated for 2 years to disrupt bull frog life cycles.
- b) Any remaining water not consumed shall be irrigated in the open field near the southeast corner of the project site and discharged into the existing agricultural ditch which is to be improved and maintained.
- c) Direct removal methods shall be used should de-watering be ineffective for the removal of bull frog populations.

With the proposed mitigation measures and operating restrictions, the proposed project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

- b) Finding: The project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. *Less than significant impact with mitigation incorporated.*

Discussion: The project is proposed to occur on approximately 17 acres of the existing industrial footprint established by the former mill adjacent to the Trinity River. Riparian habitat at the site primarily exists on the northern portion of the site along the Trinity River. The project has been designed to maintain a 150-foot setback from the Trinity River as recommended by California Department of Fish and Wildlife (CDFW). This exceeds the 100-foot setback requirements of Section 314-61.1 (Streamside Management Area Ordinance) of the Humboldt County Zoning Regulations for areas outside of Urban Development and Expansion Areas.

To protect this riparian habitat area during construction activities, it is proposed to install and maintain temporary chain link fencing on the edge of the 150-foot setback from the Trinity River. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Department. The fencing will prevent construction equipment from encroaching into the setback area and impacting riparian habitat. To protect this riparian habitat area during long-term operation of the project, it is proposed to install and maintain wildlife friendly split-rail fencing on the edge of the 150-foot setback from the Trinity River. The fencing will be installed at the completion of the construction phase once the temporary chain link fencing is removed. The fencing will prevent encroachment into the setback area during long-term operation (see Operating Restriction BR-3 below).

As part of development of the stormwater system at the project site, the culvert pipe outlet from the existing vegetated basin to the Trinity River will need to be replaced. This culvert is cur-

rently in disrepair and will be replaced with a culvert of similar size. After replacement of the culvert pipe, the outlet will be armored with rock to provide energy dissipation. This activity will occur outside of the 150-foot setback from the Trinity River but will occur within the Army Corps jurisdictional area that was identified by the presence of an OHWM at the site visit on 03/14/17 (see discussion below under subsection c). A Nationwide Permit will be required by the Army Corps for some of these maintenance activities, and additional permitting may be required from other regulatory agencies. It is estimated that up to 500 s.f. of riparian vegetation could be impacted by replacement of the culvert and the armoring of the outlet. Any removal of riparian vegetation from these maintenance activities will be replaced at a 3:1 ratio at an appropriate location on the project site. This could include the enhancement of existing wetland and riparian areas on the project site. If applicable, a mitigation plan will be prepared and submitted to regulatory agencies for review and concurrence prior to replacement of the culvert. This has been included as Mitigation Measure M-4 for the proposed project.

Therefore, in compliance with the recommendations of CDFW, the proposed project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

- c) Finding: The project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. *Less than significant impact.*

The Trinity River and associated riparian corridor is located on the northern portion of the project site and the confluence of Willow Creek and the Trinity River is located adjacent to the northwest corner of the property. The project site also contains some wetland areas and drainage swales.

According to the wetland delineation report prepared by SHN Consulting Engineers & Geologists (2016a), approximately 3,353 square feet of 3-parameter wetlands occur at the project site in the area where the former mill pond existed. Based on a follow up site visit with the Army Corps of Engineers on 03/14/17, approximately 2,407 square feet of "Other Water of the U.S." were also identified at the project site based on the presence of an Ordinary High Water Mark (OHWM). In total, 5,760 square feet of Waters of the U.S. have been identified at the site (SHN, 2017).

The project does not propose any activities that will have an adverse effect on the federally protected (3-parameter) wetlands identified in the wetland delineation report (SHN 2016a). As shown on the Proposed Site Plan, the project will maintain an approximately 50 foot setback from the delineated jurisdictional areas at the site. The applicant is applying for a Special Permit to reduce the required 100-foot wetland setback to 50 feet.

To protect the delineated jurisdictional area during construction activities, it is proposed to install and maintain temporary chain link fencing on the edge of the proposed 50-foot setback. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Department. The fencing will prevent construction equipment from encroaching into the setback area and impacting wetland habitat. To protect the delineated jurisdictional area during long-term operation of the project, it is proposed to install and maintain wildlife friendly split-rail fencing on the edge of the proposed 50-foot setback. The fencing will be installed at the completion of the construction phase once the temporary chain link fencing is removed. The fencing will prevent encroachment into the setback area during long-term operation (see Operating Restriction BR-4 below).

As part of development of the stormwater system at the project site, the culvert pipe outlet

from the existing vegetated basin to the Trinity River will need to be replaced. This culvert is currently in disrepair and will be replaced with a culvert of similar size. After replacement of the culvert, the outfall will be armored with rock to provide energy dissipation. This activity will occur within the Army Corps jurisdictional area that was identified by the presence of an OHWM at the site visit on 03/14/17. A Nationwide Permit will be required by the Corps for some of these maintenance activities, and additional permitting may be required from other regulatory agencies. It is estimated that up to 500 s.f. of riparian vegetation could be impacted by replacement of the culvert and the armoring of the outlet. As described under subsection c, any riparian vegetation that is impacted by this activity will be replaced at a 3:1 ratio at an appropriate location on the project site. This could include the enhancement of existing wetland and riparian areas on the project site (see Mitigation Measure M-4).

The drainage swales at the site are man-made ditches that were constructed for the management of stormwater as part of past industrial uses. These swales are located directly south and southwest of the existing metal commercial building at the site. The drainage swales were assessed as part of the wetland delineation report (SHN, 2016a), and were determined to lack three wetland parameters. As part of the assessment, a test pit was dug in the main drainage swale south of the commercial building (Test Pit #5), and it was determined that no hydric soils indicators were present (SHN, 2016a). Although now host to some hydrophytic vegetation (e.g. Himalayan blackberry), as manmade drainage features the swales are not protected under the County's Streamside Management Area (SMA) ordinance, as they were constructed for industrial purposes and contain no natural water source other than stormwater runoff. The applicant proposes to continue utilizing the drainage swales as part of the stormwater water detention system at the site, which will allow biofiltration of the runoff from the existing and proposed paved surfaces. These features are therefore considered to be stormwater treatment facilities and are not subject to setbacks that would otherwise be applied to natural drainage features such as streams and wetlands. As such it should be acknowledged that any future building and construction should be allowed to occur right up to the edge of these features and maintenance will occur within these features as needed to ensure they continue functioning properly.

As indicated in the Cultivation and Operations Plan for the proposed project, the applicant will irrigate and apply fertilizers at specific agronomic rates, limiting chemical applications to label specifications, and maintaining stable soil and growth media (EFF, 2017; Pg. 34). Water conservation measures proposed by the applicant include the use of drip irrigation systems and the monitoring of soil and plant moisture to allow adaptation of irrigation schedules to minimize overwatering (EFF, 2017; Pg. 31). These practices will allow maximum uptake by the plants and prevent excess water beyond the root zone. The applicant will also use primarily organic fertilizers and Salmon Safe and Clean Green certified pesticides and herbicides for pests and or diseases (EFF, 2017; Pg. 59).

As described in the Cultivation and Operations Plan prepared for the project, the applicant proposes to use Korean Natural Farming technology to reuse and build soil with sustainably harvested and certified materials. The applicant will purchase the base soil material for the first year of cultivation. After the first year, the applicant will use a combination of re-amending the soil with organic nutrients and fermentation farming techniques. The soil will be treated like a living organism, and the biology in the soil will be kept alive by planting cover crops in the off-season. These techniques will reduce runoff, decrease the amount of water used, and decrease soil and fertilizer costs each year (EFF, 2017; Pgs. 62-63). As shown on the Proposed Site Plan, the soils will be repurposed for use in the 10,000 square foot soil remediation area in the southeast corner of the project site.

Implementation of the practices proposed in the Cultivation and Operations Plan will significantly reduce any potential irrigation runoff from the cultivation areas, and will prevent the discharge of nutrients, pesticides/herbicides, salts, and heavy metals to adjacent surface waters,

including the delineated wetlands at the project site.

The proposed project will also be subject to the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Cultivation Waste Discharge Regulatory Program and the County of Humboldt Medical Marijuana Land Use Ordinance. The NCRWQCB program and County ordinance have "standard conditions" applicable to cannabis operations that address potential impacts to water quality. This includes requiring that fertilizers and pesticides/herbicides be applied consistent with product labeling and managed to ensure that they will not enter or be released into surface or groundwater.

Therefore, the project as proposed and in compliance with regulatory requirements, will not have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

- d) Finding: The project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. *Less than significant impact.*

Discussion: The project site (APN 522-201-001) is an approximately 41 acre parcel that is located west of Country Club Road within the unincorporated community of Willow Creek on a site that was used historically used for industrial activities. The project is proposed to occur on approximately 17 acres of the existing industrial footprint adjacent to the Trinity River. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The majority of the site shows evidence of previous disturbances related to industrial activities including graded or paved surfaces.

The primary wildlife corridors on the project site include the Trinity River and associated riparian corridor on the northern boundary of the site and the forested slope on the southern and western boundaries of the site. As described under subsection b), the project has been designed to maintain a 150-foot setback from the Trinity River as recommended by California Department of Fish and Wildlife (CDFW) which will prevent the interference of fish and wildlife movement within this corridor. As shown on the Proposed Site Plan the project site will be setback from the forested slope on the southern and western boundary of the site and does not propose any vegetation removal within this corridor.

The shrubs and trees within the existing industrial footprint at the site could be used for nesting migratory birds. Nesting migratory birds are protected under the Federal Migratory Bird Treaty Act and the California Department of Fish and Wildlife (CDFW) code. Consistent with the recommendations from the SHN Natural Resources Assessment (2016b), bat and nesting bird surveys will occur for any vegetation clearing that is proposed to occur during the reproductive season (March 1<sup>st</sup> – Sept. 14<sup>th</sup>). This will prevent potentially significant impacts to nesting migratory bird species (See M-2 below).

The project proposes to construct a perimeter fence around the proposed facility for security purposes that will be located within the existing disturbed industrial footprint. This fence will occur outside of the existing wildlife corridors listed above and would not impact the movement of fish or wildlife species. The proposed fence is in compliance with the recommendation from the SHN Natural Resources Assessment (2016b) concerning new fencing which states, "Ensure that future development of new fencing does not prevent wildlife movement by allowing movement corridors outside the project area" (See M-2 below).

Therefore, the proposed project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.



- e) Finding: The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. *Less than significant impact.*

Discussion: This project does not conflict with local policies or ordinances protecting biological resources. The project will not involve the removal of any trees at the project site. In addition to the general biological resources policies in the County General Plan, the County maintains Streamside Management Areas (SMAs) to protect sensitive fish and wildlife habitats and to minimize erosion, runoff, and other conditions detrimental to water quality. The width of the SMA on this section of river is 100 feet on either side of the river pursuant to Section 3432(5)(A)(1) of the Humboldt County General Plan as measured from the stream transition line. As described above, the project footprint has been designed to occur outside of the SMA for the Trinity River and will be obtaining a Special Permit for a reduced setback (50 feet) from the Army Corps jurisdictional areas delineated at the site.

Therefore, the proposed project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- f) Finding: The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. *No impact.*

Discussion: According to the U.S. Fish & Wildlife Service Environmental Conservation Online System (ECOS), the project site is not located within the boundaries of a Habitat Conservation Plan. Habitat Conservation Plans in Humboldt County include the following: 1) Green Diamond Resource Company California Timberlands & Northern Spotted Owl (formerly Simpson Timber Company); 2) Humboldt Redwood Company (formerly Pacific Lumber, Headwaters); and 3) Regli Estates. These Habitat Conservation Plans primarily apply to forest lands in the County.

According to the California Department of Fish & Wildlife (CDFW) website, the project site is not located in the boundaries of a Natural Community Conservation Plan. The conservation plans for Humboldt County listed on California Regional Conservation Plans Map on the CDFW website include the Green Diamond and Habitat Conservation Plans.

Therefore, the project will not conflict with any local policies or ordinances protecting biological resources or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Plan, or other approved plan applicable to the project area.

**Applicant Proposed Operating Restrictions:**

BR-1. The rainwater catchment pond, pre-treatment pond, and other stormwater facilities at the site will create new water features on the project site that have the potential to increase the population of insects such as mosquitoes and aquatic species such as bull frogs. To prevent significant insect populations from developing in these new water features, the following measures shall be implemented as part of the project:

- a) Maintain a high quality vegetative buffer around the rainwater catchment pond.
- b) Stocking of the rainwater catchment pond with fish species such as minnows to eliminate insect larvae.
- c) Install aeration equipment in the rainwater catchment pond to prevent stagnation of the water and improve water quality.
- d) Prevent excess nutrients and pollutants from entering the rainwater catchment pond through pre-treatment of stormwater and non-stormwater runoff.
- e) Avoid shallow stagnant areas. Infiltration rates in intermediate detention basins are expected

to aid in avoiding shallow stagnation.

- f) Intermediate detention basins/infiltration basins shall be designed as such to not allow for water to remain in the basin for longer than 72 hours.

To prevent significant bull frog populations from developing due to the aquatic environment provided by the rainwater catchment pond, the following measures shall be implemented as part of the project:

- a) Controlling the bull frog population following colonization will be achieved by draining the rainwater catchment pond continuously through the summer until no water remains. This shall be repeated for 2 years to disrupt bull frog life cycles.
- b) Any remaining water not consumed shall be irrigated in the open field near the southeast corner of the project site and discharged into the existing agricultural ditch which is to be improved and maintained.
- c) Direct removal methods shall be used should de-watering be ineffective for the removal of bull frog populations.

BR-2. Construction activities will incorporate Best Management Practices and the standard erosion control measures of Section 3432.9 of the Humboldt County Framework Plan. These measures will be incorporated in all building and grading permit applications, and will be implemented at the time of ground disturbance.

BR-3. To protect the riparian habitat at the project site during construction activities, it is proposed to install and maintain temporary chain link fencing on the edge of the 150-foot setback from the Trinity River. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Department. The fencing will prevent construction equipment from encroaching into the setback area and impacting riparian habitat. To protect the riparian habitat at the project site during long-term operation of the project, it is proposed to install and maintain wildlife friendly split-rail fencing on the edge of the 150-foot setback from the Trinity River. The fencing will be installed at the completion of the construction phase once the temporary chain link fencing is removed. The fencing will prevent encroachment into the setback area during long-term operation.

BR-4. To protect the delineated jurisdictional area at the project site during construction activities, it is proposed to install and maintain temporary chain link fencing on the edge of the 50-foot setback. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Department. The fencing will prevent construction equipment from encroaching into the setback area and impacting wetland habitat. To protect the delineated jurisdictional area at the project site during long-term operation of the project, it is proposed to install and maintain wildlife friendly split-rail fencing on the edge of the 50-foot setback. The fencing will be installed at the completion of the construction phase once the temporary chain link fencing is removed. The fencing will prevent encroachment into the setback area during long-term operation.

**Mitigation:**

**M-2.** To minimize potential impacts to special status species that may exist at the project site, the applicant shall adhere to the recommendations from the SHN Natural Resources Assessment (2016b).

**M-3.** To prevent impacts to wildlife species including amphibians and reptiles during the term of the project, water pumps will be used for the operation that contain screens meeting the CDFW fish screening criteria ([http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin\\_ScreenCriteria.asp](http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp)).

**M-4.** The applicant shall replace any riparian vegetation, at a 3:1 ratio, that is impacted by replacement and armoring of the existing culvert pipe outfall that drains stormwater from the existing vegetated basin (i.e. remnants of the former log pond) to the Trinity River. The replacement of riparian vegetation will occur at appropriate locations on the project site and could include the enhancement of existing wetland and riparian areas at the site. If applicable, a mitigation plan will be prepared and

submitted to regulatory agencies for review and concurrence prior to replacement of the culvert.

**Findings:**

a) The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service: **Less than significant impact with mitigation incorporated.**

b) The project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service: **Less than significant impact with mitigation incorporated.**

c) The project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means: **Less than significant impact.**

d) The project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites: **Less than significant impact.**

e) The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance: **Less than significant impact.**

f) The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **No Impact.**

**5. CULTURAL RESOURCES.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting:**

The project site (APN 522-201-001) is an approximately 41 acre parcel directly south of the Trinity River within the unincorporated community of Willow Creek on a site that was used in the past for agriculture, lumber milling, residential, and as a machinist and welding shop. Vegetation surrounding the project site includes hardwoods, conifers, and riparian vegetation. The site is located near the confluence of Willow Creek and the Trinity River.

The project area is within the ethnographic territory of the Tsnungwe Tribe. This Tribe inhabited the land along the Trinity River from their border with the Hoopa to the north, the Chimariko to the east, the Whilkut to the west, and the Wintun to the south. Although, no Tsnungwe villages or specific use areas are known within the specific project area, there are several named Tsnungwe sites in the vicinity (Baumhoff 1958; Gibbs 1852; Benson personal communication to Verwayen 2011 and Roscoe 2016).

The project site is located in an area of Willow Creek historically known as Flowers Flat. Flowers Flat is the neighborhood northeasterly of the Willow Creek Commercial District and is reached by Country Club Road, which goes over the saddle of a ridge that divides Flower’s Flat from the commercial dis-

tract. Originally Flowers Flat was connected to the old settlement of China flat at Big Rock, by McNeill Road, which ran almost to the mouth of Willow Creek stream, then headed west through the current project area to connect with the 1890 County Road. Flowers Flat, before the Flowers family owned it, was for the most part homesteaded in 1909 by Alvah P. White, known to be active in hydraulic mining (Jamie Roscoe & Associates, 2016).

After the gold mining days, and before World War II, the Flower's Flat area was primarily in agriculture. The Flowers farmhouse and outbuilding were located on the northern end of the present Stockel mill site property, 300 meters east of the current project area. Between Country Club Road and Kimtu, probably accessed by the northeasterly leg of Flower McNell Road was a rodeo grounds. North of Chilton Road is the probable location of another mill on Flowers Flat that was constructed by John Chilton during World War II. By 1948, aerial photography shows that mill buildings had been constructed on the project site (Jamie Roscoe and Associates, 2016).

In 1958, the project site had changed hands and the Rochlin Veneer and Plywood Company began its operations. Shortly after purchasing the property the new owners demolished the previous mill buildings and constructed a new building and a mill pond. The Rochlin Veneer and Plywood Company operated at the project site from approximately 1958 to 1978.

Historical imagery indicates that several modifications were made to the mill building between 1965 and 1988. This involved the removal of a 1,200 square foot segment of the building's north wall. Several additions were made to the building including: 1) a 5,200 square foot addition to the eastern wall of the building; 2) a 375 square foot shed was constructed on the north wall of the eastern addition; 3) two additional structures were added to the north wall of the original mill building including a 600 square foot open air walkway and a 300 square foot open air shed building. Between 1965 and 1975, a residence was constructed in the northeast corner of the property which is currently used as an office. Analysis of aerial photography also indicates that the mill pond was filled between 1977 and 1983, presumably when closing the mill. Since closure of the mill, the mill building was converted to a machinist and welding shop, and all of the mill equipment was removed from the property (Jamie Roscoe & Associates, 2016).

Present on the property today are three buildings, two of which are associated with the mill. The three structures remaining on the property include a 20,300 square foot metal commercial building, an 890 square foot office (originally constructed as a residence), and an approximately 775 square foot residence.

#### **Analysis:**

- a) Finding: The project will not cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5. *Less than significant impact.*

Discussion: The project site (APN 522-201-001) is an approximately 41 acre parcel that is located west of Country Club Road within the unincorporated community of Willow Creek on a site that was used historically for industrial activities. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The existing structures at the site are not proposed to be removed as part of this project. The metal commercial building at the site is proposed to be renovated and used as a processing facility and the existing office building is proposed to be used for distribution and transportation activities.

A Cultural Resources Investigation of the project site was conducted by Jamie Roscoe & Associates (November 2016). The investigation analyzed the impacts of the project on the existing commercial metal building and office at the project site. As stated on Page 26 of the investigation report:

*"The Rochlin Veneer and Plywood Company's Willow Creek Mill is not currently listed on the California Register of Historic Resources. To comply with CEQA, the Mill property was evaluated against the four eligibility criteria for listing on these registers:*

*(a) Background Research found that the Rochlin Veneer and Plywood Company's Willow Creek Mill site is associated with the post WWII logging boom in the interior of Humboldt County, however because the property is no longer in operation as a mill, the equipment and log decks have been removed and the pond filled in, the property lacks integrity of design, association and feeling.*

*(b) Research did not reveal the Rochlin Veneer and Plywood Company's Willow Creek Mill to be associated with the lives of persons significant in our past.*

*(c) The only building on the property that meets the age requirements to be considered an historical resource is the original mill building, which was constructed circa 1958 and altered sometime between 1965 and 1973. This building is a vernacular industrial building with no particular architectural or aesthetic appeal. The Mill building does not embody the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction.*

*(d) A scatter of refuse was found in the former mill pond area. Excavations of this deposit of both historic-era and modern refuse is unlikely to yield information that will add to the breadth of knowledge surrounding late 20<sup>th</sup> century mills in Humboldt County.*

*Although this investigation was not exhaustive, it is the opinion of the authors that the Rochlin Veneer and Plywood Company's Willow Creek Mill would not be considered a historic resource per CEQA (Article 4, 15064.5(a)). No further studies are recommended at this time."*

Therefore, the proposed project will not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

- b) Finding: The project will not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. *Less than significant impact with mitigation incorporated.*

Discussion: The project area is within the ethnographic territory of the Tsnungwe Tribe. This Tribe inhabited the land along the Trinity River from their border with the Hoopa to the north, the Chimariko to the east, the Whilkut to the west, and the Wintun to the south. Although, no Tsnungwe villages or specific use areas are known within the specific project area, there are several named Tsnungwe sites in the vicinity (Baumhoff 1958; Gibbs 1852; Benson personal communication to Verwayen 2011 and Roscoe 2016). However, due to the parcels location at a significant bend in the Trinity River and adjacent to the confluence of the Trinity River and Willow Creek, it was requested that a Cultural Resources Investigation be conducted for the proposed project.

A Cultural Resources Investigation (November 2016) was completed by Jamie Roscoe & Associates which concluded on Page 28:

*"The investigation concludes that no historical resources, as defined in CEQA, Article 4, 15064.5(a), were identified in the project area. This supports a finding that the proposed project will not cause a substantial adverse change in the significance of an historical resource (Public Resources Code, Section 21084.1). This investigation constitutes a reasonable and good faith effort to identify historical resources in and near the project. The proposed project is recommended to proceed, on the conditions of adhering to the project design and the prede-*

terminated cultivation area.

Although unlikely given the identification effort, the proposed project activities do have the potential to inadvertently uncover subsurface archaeological material or human remains. In the event that materials or remains are unearthed, the following pages offer recommendations that would ensure potential project impacts on the inadvertently discovered historical resources are eliminated or reduced to less than significant levels.

## **5.1 Protocols for Inadvertent Discoveries**

### **Inadvertent Discovery of Archaeological Material**

The following provides means of responding to the circumstances of a significant discovery during the cultural monitoring of the final implementation of the proposed agricultural development within the project parcel. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

### **Inadvertent Discovery of Human Remains**

If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98."

Additionally, as part of the Jamie Roscoe & Associates Cultural Resources Investigation, a site visit was conducted with Bob Benson of the Tsnungwe Council. During the site visit the project plans were reviewed and Mr. Benson indicated that the Tribe had no concerns about the project's impact on known archaeological resources. The inadvertent discovery protocol recommended in the Cultural Resources Investigation has been included as Mitigation Measure M-5 for the project.

With the proposed mitigation measures, the project will not cause a substantial adverse change in the significance of an archaeological resource.

- c) Finding: The project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. *Less than significant impact with mitigation incorporated.*

Discussion: The project site has already been substantially disturbed, and there are no known unique paleontological resources, or unique geological features on or near the site. Regional uplifting and other seismic activity in the area have limited the potential for discovery of paleontological resources. However, there is a potential for fossils to be discovered and inadvertently damaged during project construction even in area with a low likelihood of occurrence. As such an inadvertent discovery protocol for paleontological resources has been included as Mitigation Measure M-5 for the project which states:

*"In the event that paleontological resources are discovered, work shall be stopped within 20 meters of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find."*

With the proposed mitigation measures, the proposed project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

- d) Finding: The project will not disturb any human remains, including those interred outside of formal cemeteries. *Less than significant impact with mitigation incorporated.*

As indicated in the Cultural Resource Investigation completed by Jamie Roscoe & Associates (November 2016), there are no known human remains on the project site. However, due to the potential of discovering unknown human remains during the proposed construction activities, the inadvertent discovery protocol recommended in the Cultural Resources Investigation has been included as Mitigation Measure M-5 (See discussion under subsection b) above).

With the proposed mitigation measures, the proposed project will not disturb any human remains.

**Mitigation:**

**M-5.** The following provides means of responding to the circumstances of a significant discovery during the cultural monitoring of the final implementation of the proposed agricultural development within the project parcel. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

In the event that paleontological resources are discovered, work shall be stopped within 20 meters of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find.

If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

**Findings:**

- a) The project will not cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5: **Less than significant impact.**
- b) The project will not cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5: **Less than significant impact with mitigation incorporated.**
- c) The project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature: **Less than significant impact with mitigation incorporated.**
- d) The project will not disturb any human remains, including those interred outside of formal cemeteries: **Less than significant impact with mitigation incorporated.**

**6. GEOLOGY AND SOILS.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Setting:**

The Trinity River basin, with a drainage area of 2,969 square miles is dominated by steep, rugged mountains rising above swift-flowing streams and narrow valleys. The Trinity River basin lies within Humboldt and Trinity counties in the Klamath Mountains in California. Elevations in the basin range from 300 feet above mean sea level at the confluence with the Klamath River to 8,888 feet at the headwaters. A major part of the Trinity River basin is covered by forests. Forested areas are predominantly mixed conifer types, such as fir and pine, which have been extensively developed for marketable timber. The remainder of the basin is covered by woodland (oaks and other hardwoods) and brushland. The Trinity River basin is underlain by a complex assemblage of rocks that include pre-Cenozoic metamorphic rocks of unknown age; Paleozoic and Mesozoic sedimentary and volcanic rocks that in places are strongly metamorphosed; intrusive, ultramafic, and granite rocks of Mesozoic age; and unconsolidated deposits of Cenozoic age.



The project area is underlain by Upper Jurassic marine sediments of the Galice formation, described as phyllitic meta-graywacke and slate. These sediments are overlain by Quaternary river terrace deposits within much of the town limits and along lowland terraces bordering the Trinity River. Rocks consistent with Jurassic sediments are exposed within road cuts along Country Club Drive northeast of Willow Creek.

Division of Mines and Geology Special Publication 42 does not show any Alquist-Priolo earthquake zones within or nearby the project site. California Division of Mine and Geology geologic maps (DMG, 1978) indicate that the closest known fault is the Hennesey Ridge fault which is located approximately 2 miles west of the project site. Humboldt County in general is at risk for strong ground shaking. In the North Coast Ranges, landslides and soil slips are common due to the combination of sheared rocks, shallow soil profile development, steep slopes, and heavy seasonal precipitation (Dyett & Bhatia, 2002. Humboldt County 2025 General Plan Update. Natural Resource and Hazards Report; Pg. 10-9).

The project site is located on APN 522-201-001 directly south of the Trinity River on a site that was historically used for industrial activities. The project is proposed to occur on an existing industrial footprint that is relatively flat with elevations ranging from approximately 533 feet to 550 feet. The northern portion of the site contains a moderately steep slope with riparian vegetation down to the Trinity River and the southern portion of the site contains moderately steep forested slopes up to Country Club Road. Due to the elevation of the proposed project footprint, there is no potential for flooding from the Trinity River. Vegetation surrounding the project site includes hardwoods and conifers, various grasses and shrubs, and riparian vegetation. According the Humboldt County Web GIS mapping, the property contains prime agricultural soils classified as Et2 (Ettersberg loam, 0 to 3 percent slopes, Storie Index Rating of 61 and a Soil Capability Classification of I) in the southeast section of the site. Moderately steep forested hill slopes surround the project site on all sides of the river valley.

#### **Analysis:**

- a) i) Finding: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Divisions of Mines and Geology Special Publication 42. *Less than significant impact.*

Discussion: Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude and nature of fault rupture can vary for different faults or even along different strands of the same fault. Surface rupture can damage or collapse buildings, cause severe damage to roads and pavement structures, and cause failure of overhead as well as underground utilities.

There are no earthquake faults delineated on Alquist Priolo Fault Zone maps within the project area. California Division of Mine and Geology geologic maps (DMG, 1978) indicate that the closest known fault is the Hennesey Ridge fault which is located approximately 2 miles west of the project site. Since the project area is not traversed by a known active fault and is not within 200 feet of an active fault trace, surface fault rupture is not considered to be a significant hazard for the project site.

Therefore, the project will not expose people or structures to substantial adverse effects from a fault rupture.

- a) ii) Finding: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. *Less than significant impact with mitigation incorporated.*

Discussion: Earthquakes on active faults in the region have the capacity to produce a range of

ground shaking intensities in the project area. Ground shaking may affect areas hundreds of miles distant from an earthquake's epicenter. Ground motion during an earthquake is described by the parameters of acceleration and velocity as well as the duration of the shaking. A common measure of ground motion is the PGA. The PGA for a given component of motion is the largest value of horizontal acceleration obtained from a seismograph. PGA is expressed as the percentage of the acceleration due to gravity (g). Moderate earthquake hazard areas are defined as areas with ground accelerations of less than .092g and Violent earthquake hazard areas have ground accelerations of 0.65g to 1.24g. The California Geological Survey, Probabilistic Seismic Hazards Mapping Ground Motion Page ([www.conservation.ca.gov](http://www.conservation.ca.gov)) indicates a maximum peak ground acceleration (PGA) on the order of 0.61g for a seismic event with a 10 percent probability of exceedance in 50 years (design basis earthquake).

Based on the California Geologic Survey earthquake fault zone map, no known faults cross the project site. California Division of Mine and Geology geologic maps (DMG, 1978) indicate that the closest known fault is the Hennesey Ridge fault which is located approximately 2 miles west of the project site. However, the project area is located within a seismically active area of Northern California and some degree of ground motion resulting from seismic activity in the region is expected during the long-term operation of the project.

The State of California provides minimum standards for building design through the California Building Code (CBC). Where no other building codes apply, CBC Chapter 29 regulates excavation, foundations, and retaining walls. The CBC applies to building design and construction in the State and is based on the federal Uniform Building Code (UBC) used widely throughout the country. The CBC has been modified for California conditions with numerous more detailed and/or more stringent regulations. Specific minimum seismic safety and structural design requirements are set forth in CBC Chapter 16. The Code identifies seismic factors that must be considered in structural design. Adherence to county and State seismic building standards will reduce impacts to a less than significant level.

Manhard Consulting prepared a Limited Scope Geologic Hazards Assessment (2017c) for the project, which included digging two test holes at the project site in the areas of the proposed on-site wastewater system and rainwater catchment pond. Based on an analysis of the soils in these areas, the report contains the following recommendations for construction of the buildings and rainwater catchment pond which have been included as Mitigation Measure M-6 for the proposed project:

- (a) All foundations shall be founded a minimum of 24" inches below undisturbed native soils or structural fill compacted to 95% compaction per ASTM D1557.
- (b) Prior to placement of structural fill, all disturbed soils and miscellaneous fills must be removed.
- (c) Prior to construction activities, specific building and pond foundation and fill design investigations and construction details should be developed to refine the required excavation of fill materials and placement of structural fill requirements.
- (d) All structural design shall be in conformance with the requirements of the 2016 California Building Code for seismic design category (SDC) E.

Therefore, with the proposed mitigation measures, the proposed project will not expose people or structures to substantial adverse effects involving strong seismic ground shaking.

- a) iii) Finding: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. *Less than significant impact with mitigation incorporated.*

Discussion: Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The rela-

tively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables and buildings with shallow foundations.

According to the Humboldt County Web GIS system, the project site is not designated as an area subject to liquefaction. Design and construction of the project would incorporate appropriate engineering practices to ensure seismic stability as required by the California Building Code (CBC). In addition, the recommendations from the Limited Scope Geologic Hazards Assessment (2017c) prepared by Manhard Consulting have been included as Mitigation Measure M-6 for the proposed project. Also see discussion under subsection a) ii).

Therefore, with the proposed mitigation measures, the proposed project will not expose people or structures to substantial adverse effects involving seismic-related ground failure, including liquefaction.

- a) iv) Finding: The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. *Less than significant impact.*

Discussion: Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, either triggered by static (i.e., gravity) or dynamic (i.e., earthquake) forces. Earthquake motions can induce significant horizontal and vertical dynamic stresses in slopes that can trigger failure. Earthquake-induced landslides can occur in areas with steep slopes that are susceptible to strong ground motion during an earthquake. The youthful and steep topography of the coast range is known for its potential for landslides.

The project is proposed to occur on an existing industrial footprint that is relatively flat with elevations ranging from approximately 533 feet to 550 feet. The northern portion of the site contains a moderately steep slope with riparian vegetation down to the Trinity River and the southern portion of the site contains moderately steep forested slopes up to Country Club Road. The project site does not contain any areas of known slope instability. Moderately steep forested hill slopes surround the project site on all sides of the river valley.

According to the Humboldt County Web GIS system, the forested hillsides surrounding the project site have been designated as having a stability rating of 2 (moderate instability), due to steep slopes. The project site and surrounding area are rated as having a stability rating of 1 (low instability).

Therefore, the proposed project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides

- b) Finding: The project will not result in substantial soil erosion or the loss of topsoil. *Less than significant impact.*

Discussion: This project proposes the cultivation, processing, and manufacturing of cannabis products. Grading, ground disturbance, and the removal of on-site groundcover and vegetation within the project footprint will occur during construction of the proposed structures, access roads, rainwater catchment pond, stormwater facilities, septic system, utilities, parking areas, and fencing. As described on the Proposed Site Plan, the project will result in approximately 7,500 cubic yards of cut earthwork which will be reused on-site.

Building Code requirements relating to soil stability will be adhered to during construction as part of the Building Permit. Given the relatively flat topography of the project site and that the project's Conditions of Approval stipulate employment of Best Management Practices (BMP's) and the standard erosion control measures of §3432.9 of the Framework Plan, the project is not

expected to result in significant soil erosion or loss of topsoil during the construction phase or for the life of the project.

The project does not involve the removal of any vegetation outside of the project footprint that could result in erosion. Roof runoff will be directed to the rainwater catchment tanks which will pump the water to a pre-treatment pond and surface runoff at the project site will be directed to detention basins that will allow on-site infiltration of stormwater. The potential to impact the hydrology of the drainage features adjacent to the site is discussed in Section 9 (Hydrology and Water Quality).

Therefore, the proposed project will not result in substantial soil erosion or the loss of topsoil.

- c) Finding: The project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. *Less than significant impact with mitigation incorporated.*

Discussion: The project is proposed to occur on an existing industrial footprint that is relatively flat with elevations ranging from approximately 533 feet to 550 feet. The northern portion of the site contains a moderately steep slope with riparian vegetation down to the Trinity River and the southern portion of the site contains moderately steep forested slopes up to Country Club Road. The project site does not contain any areas of known slope instability. Moderately steep forested hill slopes surround the project site on all sides of the river valley.

According to the Humboldt County Web GIS system, the project site and surrounding area are rated as having a stability rating of 1 (low instability) and are not designated as an area subject to liquefaction. Design and construction of the project would incorporate appropriate engineering practices to ensure seismic stability as required by the California Building Code (CBC). In addition, the recommendations from the Limited Scope Geologic Hazards Assessment (2017c) prepared by Manhard Consulting have been included as Mitigation Measure M-6 for the proposed project. Also see discussion under subsections a) ii) through a) iv).

Therefore, with the proposed mitigation measures, the proposed project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

- d) Finding: The project will not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. *Less than significant impact.*

Discussion: Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time due to expansive soils, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

According to the geotechnical report prepared for the Willow Creek Community Services District (WCCSD) Downtown Wastewater Development Project (Crawford & Associates 2015) and the Limited Scope Geologic Hazards Assessment prepared by Manhard Consulting (2017c), the project site (APN 522-201-001) was not identified as having soils with expansive properties.

Therefore, the project will not be located on expansive soils creating substantial risks to life or property.

- e) Finding: The project will not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. *Less than significant impact.*

The project site is located within the Willow Creek Community Services District (WCCSD) which does not have a wastewater treatment system. As such, the proposed project will be served by a new on-site wastewater treatment system. As shown on the Proposed Site Plan, this system will be located approximately between the existing metal building at the site and the proposed greenhouse structure.

According to the Septic Suitability Letter submitted by Manhard Consulting (2016a) to the Humboldt County Division of Environmental Health (DEH), the soils at the project site are capable of supporting on-site wastewater discharge from the proposed cannabis facility. As stated on Page 1 of the letter to County DEH, "*Conditioned upon the complete septic investigation, final septic system design, and the target number of employees, the soils on this lot and available lot area appear to present the availability of a waste treatment solution for the proposed commercial project in accordance with all County and State Codes for septic systems. Special consideration, such as a mounded pressure distribution system may be required to meet separation to ground water requirements.*"

Therefore, the proposed project will not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewer is not available for the disposal of wastewater.

**Applicant Proposed Operation Restrictions:**

GS-1. Construction activities will incorporate Best Management Practices and the standard erosion control measures of Section 3432.9 of the Humboldt County Framework Plan. These measures will be incorporated in all building and grading permit applications, and will be implemented at the time of ground disturbance.

**Mitigation:**

**M-6.** The applicant shall comply with the recommendations from the Manhard Consulting Limited Scope Geologic Hazards Assessment (2017c) which state the following:

- (a) All foundations shall be founded a minimum of 24" inches below undisturbed native soils or structural fill compacted to 95% compaction per ASTM D1557.
- (b) Prior to placement of structural fill, all disturbed soils and miscellaneous fills must be removed.
- (c) Prior to construction activities, specific building and pond foundation and fill design investigations and construction details should be developed to refine the required excavation of fill materials and placement of structural fill requirements.
- (d) All structural design shall be in conformance with the requirements of the 2016 California Building Code for seismic design category (SDC) E.

**Findings:**

- a) i) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Divisions of Mines and Geology Special Publication 42: **Less than significant impact.**
- a) ii) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking: **Less than significant impact with mitigation incorporated.**
- a) iii) The project will not expose people or structures to potential substantial adverse effects, including

the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction: **Less than significant impact with mitigation incorporated.**

a) iv) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides: **Less than significant impact.**

b) The project will not result in substantial soil erosion or the loss of topsoil: **Less than significant impact.**

c) The project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse: **Less than significant impact with mitigation incorporated.**

d) The project will not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property: **Less than significant impact.**

e) The project will not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water: **Less than significant impact.**

**7. GREENHOUSE GAS EMISSIONS.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Setting:**

As a result of revisions to the CEQA Guidelines that became effective in March 2010, lead agencies are obligated to determine whether a project's GHG emissions significantly affect the environment and to impose feasible mitigation to eliminate or substantially lessen any such significant effects (www.ncuaqmd.org). The County of Humboldt completed a draft Climate Action Plan for the General Plan Update in January 2012. The plan contains GHG reduction strategies designed to achieve the goal of limiting greenhouse gas emissions to 1990 emissions levels by 2020. The North Coast Unified Air Quality Management District (NCUAQMD) and Humboldt County have not adopted any thresholds of significance for measuring the impact of GHG emissions generated by a proposed project.

The project parcel (APN 522-201-001) is approximately 41 acres of land that is located directly south of the Trinity River in the Willow Creek area of Humboldt County. Sources of greenhouse gas emissions from the project will occur during short-term construction activities (e.g. equipment) and long-term operation of the project (e.g. HVAC units on structures, vehicle/truck traffic, equipment, and back-up generators). During long-term operation of the project, up to 360 vehicle/truck trips (180 in/180 out) would occur daily from employees, customers, and deliveries, once all phases of the project are complete.

**Analysis:**

a) Finding: The project will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. *Less than significant impact.*

Discussion: There are several unique challenges to analyzing greenhouse gas emissions and climate change largely because of the global nature of climate change. Most environmental analyses examine the "project specific" impacts that a particular project is likely to generate. With regard to global warming, however, it is generally accepted that while the magnitude of global warming effects is substantial, the contribution of an individual project is so small that direct project specific impacts are highly unlikely. Due to the small scale of the proposed project, this section includes a qualitative discussion of potential GHG/climate change impacts with an emphasis on project features which will reduce construction and operational GHG

emissions (see discussion under subsection b) below).

Mobile sources of greenhouse gases from this project will include equipment used during short-term construction and vehicle/truck traffic and light-duty equipment from long-term operation. All construction equipment and commercial trucks are maintained to meet current emissions standards as required by the California Air Resources Board. Since the proposed construction activities will be short-term, they are not anticipated to generate significant greenhouse gas emissions. Up to 360 vehicle/truck trips (180 in/180 out) per day or 131,400 trips per year would be generated by the project during operation once all phases of the project are complete. By comparison, the development of 38 single-family residences would generate 363 vehicle trips per day (9.57 trips per residential unit) or 132,495 vehicle trips per year (ITE, 2008). As described in subsection b) below, the proposed facility will provide a centralized location for nearby agricultural operations to bring their cannabis material for processing and manufacturing and will reduce vehicle miles traveled by employees who would have traveled to more distant rural properties in the area to conduct processing activities. Due to the small scale of the project, greenhouse gas emissions from vehicle/truck traffic and equipment would not be significant from project operation.

Stationary sources of emissions from the project include the proposed cultivation, processing, and manufacturing buildings which will have HVAC and filter systems for air conditioning, odor reduction, and heating. According to NCUAQMD Rule 102, the Air District does not require permits for HVAC systems (NCUAQMD, 2017a). Each building will also have a propane back-up generator that will be used for providing power in the case of a power outage. It is unknown at this time if stationary source permits will be required from the NCUAQMD for the back-up generators, as it is uncertain what size generators will be purchased. NCUAQMD staff has indicated that if the propane generators have engines that are over 162 horse power (h.p.), they will require a stationary source permit (NCUAQMD, 2017b). Propane generators with engines less than 162 h.p. are not regulated by the Air District and they are not concerned about potential greenhouse gas emissions from this type and size of stationary equipment. However, if the applicant proposes to use propane generators that require a permit from the Air District, the requirements of the stationary source permit will place limitations on the use of the generators that will ensure impacts from the generation of greenhouse gas emissions will be less than significant.

Therefore, the proposed project will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

- b) Finding: The project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. *Less than significant impact.*

Discussion: The project proposes a facility that will involve the cultivation, processing, and manufacturing of cannabis products. For the purposes of this analysis, the proposed project was evaluated against the following applicable plans, policies, and regulations:

- 1) Humboldt County Draft Climate Action Plan
- 2) Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO)
- 3) NCUAQMD Particulate Matter Attainment Plan

#### **Humboldt County Draft Climate Action Plan**

Humboldt County prepared a Draft Climate Action Plan prepared in 2012 as part of the General Plan Update which includes a comparison of greenhouse gas emissions from 2006 and 1990. The emissions of carbon dioxide equivalents in unincorporated Humboldt County in 2006 were shown to have declined by approximately a half million metric tons when compared to

1990 levels. This decrease may be attributed to a decline in industrial emissions in Humboldt County since 1990 related to a decline in the lumber industry and closure of several major industrial facilities related to timber processing.

The County's 2012 Draft Climate Action Plan contains strategies for reducing greenhouse gas emissions. This project, as proposed, mitigated, and conditioned, is consistent with the following GHG reduction strategies listed in the County of Humboldt Climate Action Plan:

- *Foster land use intensity near, along with connectivity to, retail and employment centers and services to reduce vehicle miles traveled and increase the efficiency of delivery services through adoption and implementation of focused growth principles and policies.*

Developing a processing and manufacturing facility adjacent to the unincorporated community of Willow Creek will reduce vehicle miles traveled and associated greenhouse gas emissions generated by existing cannabis operations in the project area.

- *Conserve natural lands for carbon sequestration.*

The use of an existing industrial site for cultivation will not require the removal of any trees or significant vegetation that would sequester carbon on the 41-acre property. As discussed in Section 1 (Aesthetics), the project proposes to maintain the existing vegetation surrounding the project site (see Mitigation Measure M-1), which will ensure this vegetation is available for the sequestration of carbon.

- *Reduce length and frequency of vehicle trips.*

Locating this facility in the community of Willow Creek will provide a centralized location for nearby agricultural operations to bring their cannabis material for processing and manufacturing and will reduce vehicle miles traveled by employees who would have traveled to more distant rural properties in the area to conduct processing activities.

- *Promote the revitalization of communities in transition due to the decline of resource-based industries.*

This project will provide a needed facility for agricultural operations in eastern Humboldt County that will help facilitate economic development and the revitalization of the community of Willow Creek.

- *Ensure that land use decisions conserve, enhance, and manage water resources on a sustainable basis to assure sufficient clean water for beneficial uses and future generations.*

Ultimately, the primary source of water for the proposed operation will be rainwater. Rainwater capture is not regulated by the State Water Resource Control Board (SWRCB) or Department of Fish & Wildlife (DFW) and is encouraged as an alternative to surface water and groundwater diversions.

#### **Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO)**

Section 55.4.8.3 of the County's CMMLUO requires indoor cultivation operations to offset their greenhouse gas emissions associated with the generation of electricity necessary to power the operation. As stated in Section 55.4.8.3, "Electrical power for indoor cultivation operations including but not limited to illumination, heating, cooling, and ventilation, shall be provided by on-grid power with 100% renewable source, on-site zero net energy renewable source, or with purchase of carbon offsets of any portion of power not from renewable sources."



As noted in Section 55.4.8.3, there are several methods of off-setting the carbon footprint of proposed indoor cultivation operations. One of the easiest methods that will be available to the proposed project, which receives power from PG&E, will be to participate in the Redwood Coast Energy Authority (RCEA) Community Choice Energy (CCE) Program. This program will allow the proposed project to purchase on-grid power with 100% renewable sources. The RCEA Community Choice Energy program will begin in May 2017. For \$0.01 more per kilowatt-hour (kWh), the proposed project can opt up to Repower+ and offset the carbon footprint of the proposed indoor cultivation activities. Participation in the CCE Repower+ program will allow the proposed project to comply with Section 55.4.8.3 of the County's CMMLUO.

**NCUAQMD Particulate Matter Attainment Plan**

The NCUAQMD prepared a Particulate Matter Attainment Plan, Draft Report, in May 1995 with the goal of achieving and maintaining state ambient air quality standards for PM<sub>10</sub>. This report includes a description of the planning area (North Coast Unified Air District), and emissions inventory, general attainment goals, and a listing of cost-effective control strategies. The NCUAQMD's attainment plan established goals to reduce PM<sub>10</sub> emissions and eliminate the number of days in which standards are exceeded. The plan includes three areas of recommended control strategies to meet these goals: transportation, land use and burning. Control measures for these areas are included in the Attainment Plan. Compliance with the control measures in the Particulate Matter Attainment Plan would not only result in a reduction of PM<sub>10</sub> emissions, but would also result in a reduction of GHG emissions. Control strategies focused on reducing transportation emissions, more efficient land-use patterns, and reducing emissions from burning activities would also reduce the amount of GHG emissions. The project is proposing the following measures consistent with the plan:

- *Burning*

The proposed facility will use forced-air gas heating instead of woodstoves or fireplaces which will significantly reduce GHG emissions generated from heating during long-term operation of the project.

Therefore, the proposed project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

**Applicant Proposed Operating Restrictions:**

GGE-1. Construction equipment will be maintained to meet current emission standards as required by the California Air Resources Board (CARB).

**Findings:**

- a) The project will not generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment: **Less than significant impact.**
- b) The project will not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases: **Less than significant impact.**

**8. HAZARDS AND HAZARDOUS MATERIALS.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident condi-	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

tions involving the release of hazardous materials into the environment?

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are inter-mixed with wildlands?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

**Setting:**

The project proposes the cultivation, processing, and manufacturing of cannabis products. This project does not involve the handling or emissions of acutely hazardous materials, substances or waste. The project site is located in an area of Willow Creek historically known as Flowers Flat. The site is accessed by Country Club Road which goes over the saddle of a ridge that divides Flower's Flat from the commercial district of Willow Creek. Based on review of historical aerial photography, lumber milling activities operated on the project site (APN 522-201-001) from approximately the late 1940's to the late 1970's. The State Water Resources Control Board (SWRCB) Geotracker website identifies the project site (APN 522-201-001) as a closed Leaking Underground Storage Tank (LUST) case (T0602300308) that was granted no further action in September 1996 for two underground storage tanks formerly located adjacent to the existing commercial metal building at the site. Prior site investigations have not identified any other known sources of contamination at the project site.

The closest school to the project site is the Trinity Valley Elementary School which is approximately 0.5 miles northwest of the project site. The closest airport to the project area is the Hoopa Airport north of Willow Creek approximately 7.5 miles via Highway 96. The second closest public airport (to drive to) is the Arcata/Eureka Airport in McKinleyville, approximately 25 aerial miles west of the project area. There is a private airfield at the Mercer Fraser Company Willow Creek Plant north of Willow Creek approximately 0.5 miles northwest of the project site. Moderately steep forested hill slopes surround the project site on all sides of the river valley which are subject to substantial risk from wildland fires.

**Analysis:**

- a) Finding: The project will not create a significant hazard to the public or the environment

through the routine transport, use, or disposal of hazardous materials. *Less than significant impact.*

Discussion: Construction of the proposed project would involve the use of materials that are generally regarded as hazardous, such as gasoline, diesel fuel, hydraulic fluids, paint, and other similar materials. The risks associated with the routine transport, use, and storage of these materials during construction are anticipated to be relatively small. With appropriate handling and disposal practices, there is relatively little potential for an accidental release of hazardous materials during construction, and the likelihood is small that workers and the public would be exposed to health hazards. Storage and handling of materials during construction would employ BMPs and would be subject to provisions of the project Storm Water Pollution Prevention Plan, which is described in greater detail in Section 9 (Hydrology and Water Quality). BMPs would include provisions for safely refueling equipment, and spill response and containment procedures.

The project site will be developed for the cultivation, processing, and manufacturing of cannabis which is a use that typically uses hazardous materials including fertilizers, herbicides, pesticides, petroleum products, as well as vehicle and equipment fluids and lubricants. These materials will be transported to the site and used at the facility. No disposal of hazardous materials will occur as part of the proposed project.

The project proposes to primarily use organic fertilizer products at the facility from companies such as Northern Empire Organics and Soilscape Solutions, which will be administered to the plants through drip irrigation systems. These products would be used within the indoor cultivation building, greenhouse structure, and the outdoor cultivation area. These materials will be stored within the 960 s.f. equipment and materials storage building at the site that is designed with secondary containment.

The project also proposes to apply neem oil and sulfur to the plants with an electrostatic spray system to address pest and mold issues. Pesticide application is normally required to be administered a minimum of 300 feet from sensitive receptors (e.g. residences) in the case of dry pesticides and 200 feet in the case of wet pesticides. Generally, pesticide application should occur at low wind velocities (less than 10 mph). As shown on the Proposed Site Plan and based on a review of aerial photography, application of pesticides in the greenhouse structure and outdoor cultivation area will be a minimum of 300 feet from the closest sensitive receptors which include the caretaker's residence on the project site and an off-site residence to the east of the proposed greenhouse structure. The requirement to maintain appropriate setbacks from nearby residences and only conduct spraying activity at low wind velocities has been included as Operating Restriction AQ-6 for the proposed project in Section 3 (Air Quality).

During long-term operation of the project, fuel will be stored on-site for equipment use in containers designed for fuel storage that includes secondary containment. The fuel will be stored in the 960 s.f. equipment and materials storage building at the site. Lubricants and oils that will be used for equipment will also be stored within the 960 s.f. equipment and material storage building at the site that is designed with secondary containment.

The applicant will be required to file a Hazardous Materials Business Plan with the County Division of Environmental Health for the storage of the various materials described above at the site. The proposed project will also be subject to the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Cultivation Waste Discharge Regulatory Program and the County of Humboldt Medical Marijuana Land Use Ordinance. The NCRWQCB program and County ordinance have "standard conditions" applicable to cannabis operations that address impacts from the storage and use of hazardous materials which include the following requirements:

- Any pesticide or herbicide product application be consistent with product labeling and be managed to ensure that they will not enter or be released into surface or groundwater.
- Petroleum products and other liquid chemicals be stored in containers and under conditions appropriate for the chemical with impervious secondary containment.
- Implementation of spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite.

With appropriate storage, handling, and application practices that comply with the requirements of the NCRWQCB and Humboldt County, it is not anticipated that the use of these materials at the facility will pose a significant hazard.

Therefore, the proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- b) Finding: The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. *Less than significant impact.*

Discussion: The proposed project involves the cultivation, processing, and manufacturing of cannabis products which is a use that typically uses hazardous materials including fertilizers, herbicides, pesticides, petroleum products, as well as vehicle and equipment fluids and lubricants.

As described in subsection a), fertilizers, neem oil, sulfur, lubricants and oils, and diesel will be stored and used at the facility. The fertilizers, sulphur, and neem oil used by the facility will primarily be in 5 gallon containers and stored within the 960 s.f. equipment and materials storage building at the site that is designed with secondary containment. Diesel will be stored on-site for equipment use in containers designed for fuel storage that includes secondary containment. The fuel, lubricants, and oils that will be used for equipment will also be stored within the 960 s.f. equipment and materials storage building at the site.

The applicant will be required to file a Hazardous Materials Business Plan with the County Division of Environmental Health for the storage of the various materials described above at the site. The proposed project will also be subject to the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) Cannabis Cultivation Waste Discharge Regulatory Program and the County of Humboldt Medical Marijuana Land Use Ordinance. The NCRWQCB program and County ordinance have "standard conditions" applicable to cannabis operations that address impacts from the storage and use of hazardous materials which are listed above in subsection a). These include implementation of spill prevention, control, and countermeasures (SPCC) and the maintenance of appropriate cleanup materials onsite.

With appropriate storage, handling, and application practices, it is not anticipated that the use of these materials will pose a significant hazard. In the event of foreseeable upset and accident conditions, it is unlikely that these hazardous materials would be released in a manner that would create a significant hazard to the public or the environment.

Therefore, the proposed project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

- c) Finding: The project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. *No impact.*

Discussion: There are no schools located within one-quarter mile of the project site (APN 522-201-001). The closest school to the project site is the Trinity Valley Elementary School which is approximately 0.5 miles northwest of the project site.

Therefore, the proposed project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- d) Finding: The project will not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. *Less than significant impact.*

Discussion: The State's Hazardous Waste and Substances Sites List (Cortese List, Government Code Section 65962.5) identifies sites with leaking underground fuel tanks, hazardous waste facilities subject to corrective actions, solid waste disposal facilities from which there is a known migration of hazardous waste, and other sites where environmental releases have occurred. According to review of the information available on the SWRCB Geotracker and the DTSC Envirostor websites and at the Humboldt County Department of Environmental Health (DEH), there are no open cases regarding impacted soil and groundwater from LUSTs or other sources located within the project area. All cases were either remediated or closed.

The State Water Resources Control Board (SWRCB) Geotracker website identifies the project site (APN 522-201-001) as a closed Leaking Underground Storage Tank (LUST) case (T0602300308) that was granted no further action in September 1996 for two underground storage tanks formerly located adjacent to the existing commercial metal building at the site.

Therefore, the project is located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, but would not create a significant hazard to the public or the environment.

- e) Finding: The project will not, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area. *No impact.*

The project site is not located within two miles of a public airport or public use airport. The closest airport to the project area is the Hoopa Airport north of Willow Creek approximately 7.5 miles via Highway 96. The second closest public airport (to drive to) is the Arcata/Eureka Airport in McKinleyville, approximately 25 aerial miles west of the project area.

Therefore, the project will not result in a safety hazard for people residing or working in the project area.

- f) Finding: The project will not, for a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area. *Less than significant impact.*

There is a private airfield at the Mercer Fraser Company Willow Creek Plant north of Willow Creek approximately 0.5 miles northwest of the project site. This private airfield is very small in size and receives limited use. The new structures proposed by the project will occur below the existing tree-line elevations surrounding the site and will not interfere with aircraft navigation. The proposed project would not include any activities that would result in a safety hazard for people working or residing in the area.

Therefore, the proposed project will not, for a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.

- g) Finding: The project will not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. *Less than significant impact.*

The project would improve an underutilized industrial site for cannabis uses. The proposed project would use existing roadways (Flowers-McNeil Road and Country Club Road) to access the project site which the Public Works Department has determined are adequate to serve the proposed facility. The project also proposes to improve existing access roads within the project site and construct new roads and parking areas to serve the proposed cannabis uses. The proposed access improvements will improve emergency access and circulation within the project site.

The project will be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space (CALFIRE, 2017). The improvement plans for the proposed project will be reviewed to verify compliance with the County's Fire Safe Ordinance which will ensure that adequate access for emergency response and evacuation is provided. As such, this project will not interfere with any emergency response or evacuation plan.

Therefore, the proposed project will not impair the implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan.

- h) Finding: The project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands. *Less than significant impact.*

Fire protection in Humboldt County is provided by local districts, cities, and CalFire. The project site is within the Willow Creek Fire Protection District. CalFire identifies fire hazard severity zones in State Responsibility Areas (SRA) throughout California. The project area is located in a very high and high fire hazard severity zone within the SRA (CalFire 2007). The County of Humboldt Office of Emergency Services coordinates emergency response in Humboldt County through the Humboldt Operational Area. The Humboldt Operational Area is composed of the County of Humboldt, serving as the lead agency, and all political subdivisions (cities and Special Districts) within the county.

The risk of causing a wildfire would not be significant during construction and operation because most project activity will occur on the existing industrial foot print away from surrounding vegetation. Equipment shall be "fire-safe", i.e. operating under a fire safety plan and equipped with spark arrestors. The access roads shall be maintained in a state such that they are paved or free of vegetation during times of activity.

Fueling of vehicles/equipment during construction activities will occur off-site or be transported and dispensed from pick-up trucks equipped for such a purpose. During long-term operation of the project, fuel will be stored on-site for equipment use in containers designed for fuel storage that includes secondary containment.

As required by fire code, all of the existing and proposed buildings, except the greenhouse structure, will be developed with fire suppression systems. One fire hydrant exists at the project site northeast of the existing commercial metal building. Additional fire hydrants may be required to be installed to serve the other portions of the site per fire code requirements. In addition, the applicant proposes to allow access to the stored rainwater for CDF or local fire departments in the case of an emergency.

The project proposes to conduct butane extraction in the manufacturing building at the site which is a flammable gas. These proposed manufacturing activities will be subject to review and approval by the State Fire Marshall. The Cultivation and Operations plan prepared for the project (EFF, 2017) contains a description of the facility design and standard operating procedures that will be followed for the use of volatile (butane) and non-volatile agents (liquid CO<sub>2</sub>) at the facility to ensure compliance with local and state regulations. Proper design of the facility and implementation of these procedures will ensure that hazards related to use of these materials, including potential explosion and wildland fires, are less than significant.

Therefore, the proposed project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

**Applicant Proposed Operating Restrictions:**

HHM-1. Equipment shall be “fire-safe”, i.e. operating under a fire safety plan and equipped with spark arrestors. The access road shall be paved or maintained in a state such that it is free of vegetation during times of activity. Most project activity will occur away from existing vegetation.

HHM-2. Fueling of vehicles/equipment during construction activities will occur off-site or be transported and dispensed from pick-up trucks equipped for such a purpose. During long-term operation of the project, fuel will be stored on-site for equipment use in containers designed for fuel storage that includes secondary containment.

HHM-3. Hazardous materials including fertilizers, neem oil, sulfur, and lubricants and oils will be stored within the 960 s.f. equipment and materials storage building at the site that is designed with secondary containment.

**Findings:**

a) The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials: **Less than significant impact.**

b) The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment: **Less than significant impact.**

c) The project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school: **No impact.**

d) The project will not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment: **Less than significant impact.**

e) The project will not, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area: **No impact.**

f) The project will not, for a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area: **Less than significant impact.**

g) The project will not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan: **Less than significant impact.**

h) The project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands: **Less than significant impact.**

**9. HYDROLOGY AND WATER QUALITY.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere sub-	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

stantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

- |   |                          |                                     |                                     |                                     |
|---|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| f) Otherwise substantially degrade water quality?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| j) Inundation by seiche, tsunami, or mudflow?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

**Setting:**

This project is located within the Trinity River Watershed in the unincorporated community of Willow Creek. The Trinity River is the largest tributary to the Klamath River, entering at Weitchpec at RM 43. The basin drains an area of 3,000 mi<sup>2</sup> in Northern California, of which about one-fourth is above Lewiston Dam at RM 112. The Willow Creek community is in the Willow Creek Hydrologic Sub-area of the Lower Trinity River Hydrologic Area, located in the Trinity River Hydrologic Unit in Humboldt County. The mean annual rainfall in the community of Willow Creek is 52 inches which primarily falls between October and April.

The project site is located on APN 522-201-001 directly south of the Trinity River on an existing industrial footprint. The project site is relatively flat with elevations ranging from approximately 533 feet to 550 feet. The northern portion of the site contains a moderately steep slope with riparian vegetation down to the Trinity River and the southern portion of the site contains moderately steep forested slopes up to Country Club Road. The site is not connected to a municipal storm drainage system. Stormwater infrastructure at the project site consists of remnants of the former log pond, which is a vegetated basin with 3-parameter wetlands, and several drainage ditches.

According to FEMA Community Panel # 060060 0685 B (Effective Date: July 19, 1982), the approximately 17-acre project footprint is not located within the influence of a 100-year reoccurrence interval (RI) event. Due to the elevation of the proposed project footprint, there is no potential for flooding from the Trinity River. The project is not in an area that is at risk from dam failure, seiche, tsunami or mudflow.



## **Analysis:**

- a) Finding: The project will not violate any water quality standards or waste discharge requirements. *Less than significant impact with mitigation incorporated.*

Discussion: The surface water features on the project site (APN 522-201-001) include the Trinity River, drainage ditches, and remnants of the former log pond. Water quality in the Trinity River watershed is influenced by stormwater runoff from a variety of land uses. It is reasonable to assume that the water quality in the vicinity of the project site is typical of the water quality in other rural communities containing residential, commercial, industrial, and agricultural uses.

Construction of the proposed project at the site will require placement of fill, grading, paving, storage and use of construction materials, and the operation of heavy equipment. Until construction at the site is complete, soil and pavement particulate may become entrained in stormwater resulting in sediment being discharged from the site. In addition, stormwater discharge may include debris, particulate, and petroleum hydrocarbons as a result of improper storage of construction materials, improper disposal of construction wastes, discharges resulting from construction dewatering activities, and spilled petroleum products.

Since the proposed project will disturb more than one acre of the site, the project will be subject to the requirements State Water Resources Control Board (SWRCB) Construction General Permit (CGP). The SWRCB CGP will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) which documents the stormwater dynamics at the site, the BMPs and water quality protection measures that are used, and the frequency of inspections. BMPs are activities or measures determined to be practicable, acceptable to the public, and cost effective in preventing water pollution or reducing the amount of pollution generated by non-point sources. Implementation of the SWPPP will ensure that water quality is protected during construction activities and long-term operation of the project.

The project site is located within the Willow Creek Community Services District (WCCSD) which does not have a wastewater treatment system. As such, the proposed project will be served by a new on-site wastewater treatment system. According to the Septic Suitability Letter submitted by Manhard Consulting (2016a) to the Humboldt County Division of Environmental Health (DEH), the soils at the project site are capable of supporting on-site wastewater discharge from the proposed facility. The on-site wastewater treatment system will be designed to adequately treat the estimated wastewater discharge volume and strength from the proposed facility and will be reviewed for compliance with the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) and Humboldt County Division of Environmental Health (DEH). As such it is not anticipated that the use of these systems for the proposed facility will violate any water quality standards or waste discharge requirements.

The proposed project would increase the amount of impermeable surface within the project site by approximately 8.88 acres, through the construction of new buildings, paved surfaces for access and parking, and lined ponds for rainwater catchment and stormwater pre-treatment. This increase in impermeable surface would directly increase the rate of runoff and the volume generated during storm events. The increase in stormwater runoff will likely increase the presence of sediment and urban pollutants in stormwater runoff. As described in the Preliminary Drainage Report prepared by Manhard Consulting (2017a) for the project, stormwater facilities will be designed to detain stormwater on the project site through LID improvements such as a rainwater catchment pond and catchment tanks, a pre-treatment pond, bioswales, infiltration basins, and detention basins. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge without violating any water quality standards or waste discharge requirements. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing culvert pipe

outfall from the existing vegetated basin (i.e. remnants of the former log pond). The pipe outlet will be armored with rock to provide energy dissipation. This has been included as Mitigation Measure M-7 for the proposed project.

Therefore, the proposed project will not violate any water quality standards or waste discharge requirements.

- b) Finding: The project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). *Less than significant impact.*

Discussion: The proposed project is not anticipated to substantially deplete groundwater supplies or affect the production rate of nearby wells because water sources used for the project will include rainwater capture and use of water service from Willow Creek Community Services District (WCCSD). During Phase 1 of the project, water service from WCCSD will be used for all aspects of the project. WCCSD has indicated that they have the capacity to serve the proposed facility with water service. During Phase 2 of the project, the 3-acre (3 million gallon) rainwater catchment pond will be developed which will be the main source of water for the proposed facility. At full buildout of the project, the WCCSD water service would be used for domestic needs in the existing and proposed structures (e.g. restrooms, drinking water, and cooking in the employee kitchen), and the captured rainwater will be used for irrigation and manufacturing activities.

Therefore, the proposed project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level

- c) Finding: The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. *Less than significant impact with mitigation incorporated.*

Discussion: The surface water features on the project site (APN 522-201-001) include the Trinity River, drainage ditches, and remnants of the former log pond. The project will occur on the elevated portion of the site outside of the Trinity River riparian corridor and does not propose any activities that will alter the course of the Trinity River. The project also does not propose to alter the remnants of the former log pond which are identified in the SHN Wetland Report (2016a) as three-parameter wetlands that are within the jurisdiction of the U.S. Army Corps of Engineers.

Development of the project site will create new impervious surfaces from buildings and pavement and increase the amount of stormwater runoff. As described in subsection a), stormwater facilities will be designed to detain stormwater on the project site through LID improvements such as a rainwater catchment pond and catchment tanks, a pre-treatment pond, bioswales, infiltration basins, and detention basins. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge without resulting in substantial erosion or siltation on- or off-site. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing culvert pipe outfall from the existing vegetated basin (i.e. remnants of the former log pond). The pipe outfall will be armored with rock to provide energy dissipation and prevent erosion. This has been included as Mitigation Measure M-7 for the proposed project.

To prevent overflow of the rainwater catchment pond from occurring when it is full during a

heavy rainfall event, the pond will be designed to overflow to the existing vegetated basin at the site, which ultimately discharges to the Trinity River through an existing culvert pipe outfall that goes under the main site access road (see Proposed Site Plan). As described above, the pipe outlet from the existing vegetated basin will be armored with rock to provide energy dissipation.

Therefore, the proposed project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site

- d) Finding: The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. *Less than significant impact with mitigation incorporated.*

Discussion: The surface water features on the project site (APN 522-201-001) include the Trinity River, drainage ditches, and remnants of the former log pond. The project will occur on the elevated portion of the site outside of the Trinity River riparian corridor and does not propose any activities that will alter the course of the Trinity River. The project also does not propose to alter the remnants of the former log pond which are identified in the SHN Wetland Report (2016a) as three-parameter wetlands that are within the jurisdiction of the U.S. Army Corps of Engineers.

An increase in stormwater runoff will occur due to the increase in impervious surface from the proposed project. As described in subsection a), stormwater facilities will be designed to detain stormwater on the project site through LID improvements such as a rainwater catchment pond and catchment tanks, a pre-treatment pond, bioswales, infiltration basins, and detention basins. Based on the Preliminary Drainage Study (Manhard, 2017) completed for the proposed project, site runoff volume would increase from 28,340 cubic feet to 58,191 cubic feet in the 24-hour 85<sup>th</sup> percentile storm event. Although the stormwater volume will increase with the development of additional impervious surface, the net change in stormwater runoff from the site will decrease to 15,085 cubic feet due to the proposed capacity of the rain catchment pond and the proposed bioswales and detention features (Manhard, 2017; Table 1). As stated in the Preliminary Drainage Report prepared by Manhard Consulting (2017a, Pg. 3) for the project, *"Based on the 85th percentile, 24-hour storm event sufficient detention will occur post construction. Detention volumes are expected to infiltrate at high rates and the use of LID features will minimize peak storm water runoff, improve the quality of runoff, and provide aesthetic improvement to the final development."* The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project is infiltrated into the ground on-site or pre-treated prior to discharge and will not significantly contribute to flooding on- or off-site. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an outfall from the existing vegetated basin (i.e. remnants of the former log pond). The pipe outfall will be armored and anchored as necessary to provide energy dissipation before being discharged into the Trinity River. This has been included as Mitigation Measure M-7 for the proposed project.

To prevent overflow of the rainwater catchment pond from occurring when it is full during a heavy rainfall event, the pond will be designed to overflow to the existing vegetated basin at the site, which ultimately discharges to the Trinity River through an existing culvert pipe outfall that goes under the main site access road (see Proposed Site Plan). As described above, the pipe outlet from the existing vegetated basin will be armored with rock to provide energy dissipation.

Therefore, the proposed project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or

off-site.

- e) Finding: The project will not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. *Less than significant impact with mitigation incorporated.*

Discussion: The project site does not drain to a municipal storm drainage system. The project site currently contains drainage ditches and remnants of the former log pond which capture site drainage.

As discussed in subsection d), an increase in stormwater runoff will occur due to the increase in impervious surface from the proposed project. As described in subsection a), stormwater facilities will be designed to detain stormwater on the project site through LID improvements such as a rainwater catchment pond and water tanks, a pre-treatment pond, bioswales, infiltration basins, and detention basins.

Based on the Preliminary Drainage Study (Manhard, 2017) completed for the proposed project, site runoff volume would increase from 28,340 cubic feet to 58,191 cubic feet in the 24-hour 85<sup>th</sup> percentile storm event. Although the stormwater volume will increase with the development of additional impervious surface, the net change in stormwater runoff from the site will decrease to 15,085 cubic feet due to the proposed capacity of the rain catchment pond and the proposed bioswales and detention features (Manhard, 2017; Table 1). As stated in the Preliminary Drainage Report prepared by Manhard Consulting (2017a, Pg. 3) for the project, "Based on the 85<sup>th</sup> percentile, 24-hour storm event sufficient detention will occur post construction. Detention volumes are expected to infiltrate at high rates and the use of LID features will minimize peak storm water runoff, improve the quality of runoff, and provide aesthetic improvement to the final development." The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project is infiltrated into the ground on-site or pre-treated prior to discharge. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing culvert pipe outfall from the existing vegetated basin (i.e. remnants of the former log pond). The pipe outfall will be armored with rock to provide energy dissipation. This has been included as Mitigation Measure M-7 for the proposed project.

Therefore, project will not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

- f) Finding: The project will not otherwise substantially degrade water quality. *Less than significant impact.*

Discussion: There are no conditions associated with the proposed project that could result in the substantial degradation of water quality beyond what is described in the responses to subsections a) – c) and e).

Therefore, the proposed project would not otherwise substantially degrade water quality.

- g) Finding: The project will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. *No impact.*

Discussion: According to FEMA Community Panel # 060060 0685 B (Effective Date: July 19, 1982), the northern portion of the project site is located within the influence of a 100-year RI event on the Trinity River. However, the proposed project footprint is located on an elevated portion of the site that is located outside of the 100-year flood hazard area. The project pro-

poses a cannabis operation and does not include the development of housing.

Therefore, the proposed project will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

- h) Finding: The project will not place within a 100-year flood hazard area structures that would impede or redirect flood flows. *No impact.*

Discussion: According to FEMA Community Panel # 060060 0685 B (Effective Date: July 19, 1982), the northern portion of the project site is located within the influence of a 100-year RI event on the Trinity River. However, the proposed project footprint is located on an elevated portion of the site that is located outside of the 100-year flood hazard area.

Therefore, the proposed project will not place structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

- i) Finding: The project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. *Less than significant impact with mitigation incorporated.*

No levee or dam construction is associated with the proposed project. As noted previously, the project would not be located in a 100-year flood zone and would not expose people or structures to any other kind of flooding event. The project site is located within the Trinity Dam dam failure inundation area according to the Humboldt County Web GIS system. The County Hazard Mitigation Plan (Tetra Tech, 2014) suggests establishing early warning capability downstream of dams to increase response capability. To ensure the impacts to people at the proposed cannabis facility related to the failure of Trinity Dam are less than significant, the following mitigation shall be required for the project (See M-8 below):

- 1) Notices shall be posted on the project site regarding potential of flooding from the failure of Trinity Dam in a major seismic event. The notices shall state that the property is located in an area subject to inundation by flood waters from Trinity Lake in the event of the failure of Trinity Dam and include maps showing the inundation areas and location of evacuation routes; and
- 2) The premises shall have radio receivers (preferably battery-operated) capable of receiving emergency broadcasts and instructions. The owners and employees of the proposed facility shall monitor such information during flood warning and respond accordingly.

Therefore, the proposed project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

- j) Finding: The project will not result in inundation by seiche, tsunami, or mudflow. *Less than significant impact.*

The project is not in an area that is at risk from seiche, tsunami or mudflow. The project is not located near a large body of water capable of producing a seiche, is not located near the coast in a tsunami inundation area, and is not located next to steep slopes capable of a mudflow event.

Therefore, the proposed project will not result in inundation by seiche, tsunami, or mudflow.

**Applicant Proposed Operation Restrictions:**

HWQ-1. Construction activities will incorporate Best Management Practices and the standard erosion control measures of Section 3432.9 of the Humboldt County Framework Plan. These measures will be incorporated in all building and grading permit applications, and will be implemented at the time of ground disturbance.

HWQ-2. To prevent overflow of the rainwater catchment pond from occurring when it is full during a heavy rainfall event, the pond will be designed to overflow to the existing vegetated basin (i.e. remnants of the former log pond) at the site.

**Mitigation:**

**M-7.** To address the increase in stormwater runoff that will occur due to the increase in impervious surface from the proposed project (8.88 acres), the applicant shall design, construct, and maintain stormwater facilities to detain stormwater on the project site through LID improvements such as a rainwater catchment pond and catchment tanks, a pre-treatment pond, bioswales, infiltration basins, and detention basins. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge without violating any water quality standards or waste discharge requirements. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing culvert pipe outfall from the existing vegetated basin (i.e. remnants of the former log pond). The pipe outlet will be armored with rock to provide energy dissipation.

**M-8.** To ensure the impacts to people at the proposed cannabis facility related to the failure of Trinity Dam are less than significant, the following mitigation shall be required for the project:

- 1) Notices shall be posted on the project site regarding potential of flooding from the failure of Trinity Dam in a major seismic event. The notices shall state that the property is located in an area subject to inundation by flood waters from Trinity Lake in the event of the failure of Trinity Dam and include maps showing the inundation areas and location of evacuation routes; and
- 2) The premises shall have radio receivers (preferably battery-operated) capable of receiving emergency broadcasts and instructions. The owners and employees of the proposed facility shall monitor such information during flood warning and respond accordingly.

**Findings:**

a) The project will not violate any water quality standards or waste discharge requirements: **Less than significant impact with mitigation incorporated.**

b) The project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted): **Less than significant impact.**

c) The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site: **Less than significant impact with mitigation incorporated.**

d) The project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site: **Less than significant impact with mitigation incorporated.**

e) The project will not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff: **Less than significant impact with mitigation incorporated.**

f) The project will not otherwise substantially degrade water quality: **Less than significant impact.**

g) The project will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map: **No impact.**

h) The project will not place within a 100-year flood hazard area structures which would impede or redirect flood flows: **No impact.**

- i) The project will not expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam: **Less than significant impact with mitigation incorporated.**
- j) The project will not result in inundation by seiche, tsunami, or mudflow: **Less than significant impact.**

**10. LAND USE AND PLANNING.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

The project site (APN 522-201-001) is an approximately 41 acre parcel that is located west of Country Club Road within the unincorporated community of Willow Creek on a site that was used historically for industrial activities. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The majority of the site shows evidence of previous disturbances related to industrial activities including graded or paved surfaces. According to the Humboldt County Web GIS mapping, the property contains prime agricultural soils classified as Et2 (Ettersberg loam, 0 to 3 percent slopes, Storie Index Rating of 61 and a Soil Capability Classification of I) in the southeast portion of the site. The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek.

The project site is located within the Community Planning Area for Willow Creek and is zoned Heavy Industrial (MH) and Agricultural General (AG-B-6) and designated Industrial General (IG) and Agricultural Rural (AR). The Willow Creek Community plan was adopted in June 1986. The community of Willow Creek which has a population of 1,710 and approximately 1,108 residential units (2010 U.S. Census).

**Analysis:**

- a) Finding: The project will not physically divide an established community. *No impact.*

Discussion: The project proposes the cultivation, processing, and manufacturing of cannabis products on an underutilized industrial site within the community of Willow Creek. The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. Flowers-McNeil Road provides access to the project site from Country Club Road.

The proposed project will redevelop an underutilized industrial site in the community of Willow Creek that will provide a centralized location for nearby agricultural operations to bring their cannabis material for processing and manufacturing. No new access routes are proposed so it is not anticipated to physically divide an established community.

Therefore, the proposed project would not physically divide an established community.

- b) Finding: The project will not 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. *Less than significant impact.*

Discussion: The project proposes the cultivation, processing, and manufacturing of cannabis products on an underutilized industrial site within the community of Willow Creek. The project site (APN 522-201-001) is zoned Heavy Industrial (MH) and Agricultural General (AG-B-6) and designated Industrial General (IG) and Agricultural Rural (AR). Per the Humboldt County Medical Marijuana Land Use Ordinance, the proposed project will require approval of a Conditional Use Permit (CUP) and Special Permit (SP) for the cultivation, processing, and manufacturing of cannabis products.

In addition, the proposed project would otherwise not conflict with any applicable goals, objectives, and policies of the Humboldt County General Plan and Zoning Ordinance. As discussed throughout this document, in all instances where potentially significant impacts have been identified, mitigation is provided to reduce each impact to less than significant levels. This was necessary in the following sections of this document:

- Aesthetics
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Noise
- Public Services

The analysis contained in this document addressed the potential conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect including, but not limited to, Humboldt County General Plan and Land Use Ordinance, Willow Creek Community Plan (1986), Humboldt County Draft Climate Action Plan (2012), HCAOG Regional Transportation Plan (2014), HCAOG Regional Bicycle Plan (2012), and NCUQMD Particulate Matter (PM10) Draft Attainment Plan (1995).

Therefore, based on the analysis conducted in this document, it was determined that the project was not in conflict with any adopted land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

- c) Finding: The project will not conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan. *No impact.*

Discussion: According to the U.S. Fish & Wildlife Service Environmental Conservation Online System (ECOS), the project site is not located within the boundaries of a Habitat Conservation Plan. Habitat Conservation Plans in Humboldt County include the following: 1) Green Diamond Resource Company California Timberlands & Northern Spotted Owl (formerly Simpson Timber Company); 2) Humboldt Redwood Company (formerly Pacific Lumber, Headwaters); and 3) Regli Estates. These Habitat Conservation Plans primarily apply to forest lands in the County.

According to the California Department of Fish & Wildlife (CDFW) website, the project site is not located in the boundaries of a Natural Community Conservation Plan. The conservation plans for Humboldt County, listed on California Regional Conservation Plans Map on the CDFW website, include the Green Diamond and Humboldt Redwoods Company (previously Pacific Lumber Company) Habitat Conservation Plans.



Therefore, the proposed project will not conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan.

**Findings:**

- a) The project will not physically divide an established community: **No impact.**
- b) The project will not 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: **Less than significant impact.**
- c) The project will not conflict with any applicable habitat conservation plan or natural community conservation plan: **No impact.**

**11. MINERAL RESOURCES.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

The Trinity River contains sand and gravel resources that are mined annually and several quarries exist in the Willow Creek area. For several decades, the area downstream of Big Rock Recreation Area and the project site has been used for aggregate extraction activities. Gravel from this section of the Trinity River site was used to construct sections of Highway 299 and other roads in the Willow Creek area.

**Analysis:**

- a) Finding: The project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. *No impact.*

Discussion: The project site is located on an existing industrial site that is on an elevated flat above the Trinity River. The mineral resources in the Willow Creek area are primarily aggregate deposits in the Trinity River. No known mineral resources have been identified on the project site. The mineral resources available in the Trinity River and Willow Creek area will not be impacted by the location of the project at the project site.

Therefore, the proposed project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

- b) Finding: The project will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. *No impact.*

Discussion: The project site is located on an existing industrial site that is on an elevated flat above the Trinity River. Figure 7-1 (Rock and Mineral Extraction Sites) of the Humboldt County Natural Resources and Hazards report completed for the County General Plan Update, does not identify the project site as a rock and mineral extraction site. No known mineral resources have been identified on the project site.

Therefore, the proposed project will not result in the loss of availability of a locally-important mineral resource site delineated on a local general plan, specific plan or other land use plan.

**Findings:**

- a) The project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state: **No impact.**
- b) The project will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan: **No impact.**

**12. NOISE.** Would the project result in:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground-borne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Setting:**

The project site (APN 522-201-001) is an approximately 41 acre parcel that is located west of Country Club Road within the unincorporated community of Willow Creek on a site that was used historically for industrial activities. The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran’s Park , and the town of Willow Creek. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The Trinity River is located on the northern portion of the project site and the confluence of Willow Creek and the Trinity River is located adjacent to the northwest corner of the property. The northern portion of the site contains a moderately steep slope with riparian vegetation down to the Trinity River and the southern portion of the site contains moderately steep forested slopes up to Country Club Road. Moderately steep forested hill slopes surround the project site on all sides of the river valley.

Ambient noise levels in the vicinity of the project site are elevated due to the proximity of the site to Country Club Road, Highways 299 and 96, nearby agricultural operations and the adjacent Mercer Fraser gravel mining operations.

**Analysis:**

- a) **Finding:** The project will not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. *Less than significant impact with mitigation incorporated.*

**Discussion:** The project proposes the cultivation, processing, and manufacturing of cannabis products on an existing industrial site in the community of Willow Creek.

The noise standards in the Humboldt County General Plan: Framework Plan are based on EPA recommendations. Section 3240 of the General Plan states: *“The Environmental Protection Agency identifies 45 Ldn indoors and 55 Ldn outdoors as the maximum level below which no effects on public health and welfare occur. Ldn is the Day-Night Noise Level. Ldn is the average sound level in decibels, excluding frequencies beyond the range of the human ear, during a 24-hour period with a 10dB weighting applied to nighttime sound levels. A standard construction wood frame house reduces noise transmission by 15dB. Since interior noise levels for residences are not to exceed 45dB, the maximum acceptable exterior noise level for residences is 60dB without any additional insulation being required. Of course, this would vary depending on the land use designation, adjacent uses, distance to noise source, and intervening topography, vegetation, and other buffers.”* Since Ldn is a daily average, allowable noise levels can increase in relation to shorter periods of time. As stated in Section 3240, *“Fences, landscaping, and noise insulation can be used to mitigate the hazards of excessive noise levels.”*

As noted above, the existing County noise standard utilizes an averaging mechanism (dBA Ldn) applicable to activities that generate sound sources averaged over a 24-hour period of time. This type of measurement is commonly used for measuring highway noise or industrial operations. A ten-decibel addition is added to noise levels occurring at nighttime – between 10:00 p.m. and 7:00 a.m. Utilizing a typical standard of 45 dBA Ldn interior noise level allows for a maximum of 60 dBA Ldn for ‘normally acceptable’ exterior levels.

Project-related sounds will primarily be limited to daytime operations, generally Monday through Sunday from 9:00 a.m. to 5:00 p.m. Although the operation is proposed to occur 24 hours per day, there will be very limited activity outside of the peak operating hours of 9:00 a.m. to 5:00 p.m. The project is proposed to occur year round but will have increased activity in the fall. Noise sources that will be generated by this project will include temporary construction, employee vehicle traffic, delivery truck traffic, customer traffic from the plant nursery, equipment use, and the back-up generators.

During the construction phase of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. This noise increase would be of short duration, and would occur during daytime hours. It is anticipated that Phase 1 construction will take approximately 3-4 months, Phase 2 construction will take approximately 6-7 months, and Phase 3 construction will take approximately 8-9 months. Activities involved in construction would generate maximum noise levels, as indicated in Table 1, ranging from 85 to 87 dB at a distance of 50 feet.

**Table 1:** Construction Equipment Noise

Type of Equipment	Maximum Level, dB at 50 feet
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: Cunniff, 1977

Due to the size of the parcel (approximately 41 acres) containing the approximately 17-acre project footprint and surrounding topography, temporary construction noise will be reduced beyond the boundaries of the site. However, to ensure impacts from construction noise levels are reduced to less than significant the following mitigation measure will be included for the project (See M-9 below):

The following shall apply to construction noise from tools and equipment:

- a) The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 a.m. and 5 p.m. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- b) No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- c) All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.

Long-term operation of the cannabis facility is not expected to generate significant noise levels that will exceed the Humboldt County General Plan Noise Element standards. Many of the proposed activities will take place within the existing and new buildings which will significantly reduce noise levels. The project will involve the use of light-duty equipment for cultivation activities that would not result in excessive noise levels. The outdoor cultivation activities would be similar to noise levels currently occurring from surrounding agricultural operations and traffic on Country Club Road.

To ensure the facility has back-up power in the case of a power outage during long-term operation, generators will be installed adjacent to some of the existing and proposed buildings. To buffer noise levels generated by use of the back-up generators, generators will be used that are designed within enclosures that provide noise attenuation. HVAC units and some filter equipment will be installed to minimize odors and dust that may result in some minor noise on the exterior of the buildings. Fans will also be installed in the greenhouse structure and may result in some minor noise levels when in close proximity to the structure.

The project will be conditioned to comply with the County's noise regulations which will ensure that impacts from the proposed cannabis facility will be less than significant. Since the proposed project will be located near existing agricultural and industrial uses and Highways 299 and 96, noise levels generated by the nearby agricultural and industrial activity and traffic on the highways are anticipated to exceed noise levels generated by the proposed cannabis facility during long-term operation.

Therefore, with the proposed mitigation measure, the proposed project will not expose persons to or result in the generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standard of other agencies.

- b) Finding: The project will not expose persons to or generate excessive groundborne vibration or groundborne noise levels. *Less than significant impact.*

Discussion: The closest land uses potentially impacted from groundborne vibration and noise (primarily from the use of heavy equipment during construction activities) is the single-family residential units located to the east of the project site.

Neither the short-term construction activities nor the proposed cannabis facility would be expected to generate significant groundborne noise or vibration. Any uses proposed on adjacent parcels that could result in groundborne noise will be required to be mitigated so that noise levels do not exceed Humboldt County noise standards. Some short-term minor vibrations may

occur during future excavation and construction phases but will be minimized by the same measure that limits hours of construction for noise.

Therefore, the proposed project will not expose persons to or generate excessive groundborne vibration or groundborne noise levels.

- c) Finding: The project will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. *Less than significant impact.*

Discussion: The proposed project is not expected to result in a significant increase in permanent ambient noise levels given the type of use (i.e. cannabis facility) and size of the project (i.e. 17-acre project footprint within a 41 acre parcel). Construction activities will result in short-term increases in ambient noise levels due to the use of heavy equipment which is addressed under subsection d).

Therefore, the proposed project will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

- d) Finding: The project will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. *Less than significant impact with mitigation incorporated.*

Discussion: The proposed project is not expected to result in a significant temporary or periodic increase in ambient noise levels given the type of use (i.e. cannabis facility) and size of the project (i.e. 17-acre project footprint). Construction activities will result in short-term increases in ambient noise levels due to the use of heavy equipment. To ensure impacts from construction noise levels are reduced to less than significant the following mitigation measure will be included for the project (See M-9 below):

The following shall apply to construction noise from tools and equipment:

- a) The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 5 P.M. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- b) No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- c) All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.

To ensure the facility has back-up power in the case of a power outage during long-term operation, generators will be installed adjacent to some of the existing and proposed buildings. To buffer noise levels generated by use of the back-up generators, generators will be used that are designed within enclosures that provide noise attenuation.

Therefore, with the proposed mitigation measure, the proposed project will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

- e) Finding: The project will not, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels. *No impact.*

Discussion: The project site is not located within two miles of a public airport or public use airport. The closest airport to the project area is the Hoopa Airport north of Willow Creek approximately 7.5 miles via Highway 96. The second closest public airport (to drive to) is the Arca-

ta/Eureka Airport in McKinleyville, approximately 25 aerial miles west of the project area.

Therefore, the proposed project will not expose people residing or working in the project area to excessive noise levels.

- f) Finding: The project will not, for a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels. *Less than significant impact.*

Discussion: There is a private airfield at the Mercer Fraser Company Willow Creek Plant north of Willow Creek approximately 0.5 miles northwest of the project site. This private airfield is very small in size and receives limited use. Many of the project activities will occur inside the existing and proposed buildings which will buffer noise levels from private aircraft landing or taking off at the airfield.

Therefore, the proposed project will not expose people residing or working in the project area to excessive noise levels.

**Applicant Proposed Operating Restrictions:**

NO-1. Applicant shall ensure that noise generated by operation of the project shall not exceed 60 dBA Ldn at the exterior of adjacent residential uses.

NO-2. To ensure compliance with the County's 60 dBA Ldn noise standard when the back-up generators are used during power outages, generators will be used that are designed within enclosures that provide noise attenuation.

**Mitigation:**

**M-9.** The following shall apply to construction noise from tools and equipment:

- a) The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 5 P.M. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- b) No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- c) All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.

**Findings:**

- a) The project will not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies: **Less than significant impact with mitigation incorporated.**
- b) The project will not expose persons to or generate excessive groundborne vibration or groundborne noise levels: **Less than significant impact.**
- c) The project will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project: **Less than significant impact.**
- d) The project will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project: **Less than significant impact with mitigation incorporated.**
- e) The project will not, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels: **No impact.**
- f) The project will not, for a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels: **Less than significant impact.**

**13. POPULATION AND HOUSING.** Would the project:

Potentially Significant	Potentially Significant Unless Mitigation	Less Than Significant	No Impact
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		Incorp.	Impact	
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

Humboldt County is a rural county with a large land area and low population density. The 2010 Census reported the county's population to be 134,623, which represents an increase of 8,105 over the population reported in the 2000 Census. The California Department of Finance (DOF) prepares estimates of statewide, county, and city populations for years between the decennial census that are used by state and local government to allocate funding and for planning purposes. The DOF estimates the 2015 population of Humboldt County to be 134,398, which is a decrease of 225 people since the 2010 Census.

The DOF also develops projections of State and county population 50 years beyond the decennial census. Between 2010 and 2020, the Humboldt County population is projected to increase by approximately 2.2%, from 136,056 to 139,033 (an increase of 2,977 people). Between 2020 and 2030, the population is projected to increase by approximately one percent, from 139,033 to 140,608 (an increase of 1,575 people).

The project site is located in the community of Willow Creek which has a population of 1,710 and approximately 1,108 residential units (2010 U.S. Census).

**Analysis:**

- a) Finding: The project will not induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure). *Less than significant impact.*

Discussion: The project proposes the cultivation, processing, and manufacturing of cannabis products. The proposed facility will provide employment for approximately 75 persons once all phases are complete. The proposed facility will provide a centralized location in the community of Willow Creek for the cultivation, processing, and manufacturing of cannabis products and is not anticipated to produce any significant growth inducing impacts. Growth inducing impacts are generally caused by projects that have a direct or indirect affect on economic growth, population growth, or when the project taxes community service facilities which require upgrades beyond the existing remaining capacity.

Therefore, the proposed project will not induce substantial population growth in an area either directly or indirectly.

- b) Finding: The project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. *No impact.*

Discussion: The proposed project will not displace people or existing housing. The existing caretaker's residence on the project site is proposed to remain and will provide housing for an employee of the proposed facility.

Therefore, the proposed project will not displace substantial number of existing housing, neces-

sitating the construction of replacement housing elsewhere.

- c) Finding: The project will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. *No impact.*

Discussion: The proposed project will not displace people or existing housing. The existing caretaker's residence on the project site is proposed to remain and will provide housing for an employee of the proposed facility.

Therefore, the proposed project will not displace substantial number of people, necessitating the construction of replacement housing elsewhere.

**Findings:**

- a) The project will not induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure): **Less than significant impact.**
- b) The project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere: **No impact.**
- c) The project will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere: **No impact.**

**14. PUBLIC SERVICES.**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	<b>Potentially Significant</b>	<b>Potentially Significant Unless Mitigation Incorpor.</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

The project site (APN 522-201-001) is an approximately 41 acre parcel that is located west of Country Club Road within the unincorporated community of Willow Creek on a site that was used historically for industrial activities. The existing access drive, known as Flowers-McNeil Road, is off of Country Club Road. The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence.

Fire protection in Humboldt County is provided by local districts, cities, and CalFire. The project site is within the boundaries of the Willow Creek Fire Protection District (WCFFPD). The Willow Creek Fire Protection District (FPD) was formed in 1959 and provides fire protection services to the unincorporated community of Willow Creek, through the Willow Creek Volunteer Fire Department (VFD). The jurisdictional boundary of the Willow Creek FPD is approximately 6.6 square miles in area. The Willow Creek FPD has one fire station located at 51 Willow Road in Willow Creek. The District's apparatus includes:



two type-2 engines, a type-6 wildland truck, one rescue truck, and one water tender. The District has direct access to an appropriate fire hydrant system that is maintained by the WCCSD. The District maintains an ISO Public Protection Classification rating of 5/9 for residences within five miles of the fire station and within 1,000 feet of a fire hydrant or water source (LAFCo 2013).

The project site is also located within a State Responsibility Area (SRA) which means that fire protection services for wildland fires are provided by the California Department of Forestry and Fire Protection (CALFIRE). CALFIRE has responsibility for enforcement of Fire Safe Standards as required by Public Resources Code (PRC) 4290 and 4291. Also, CALFIRE is the primary command and control dispatch for most local agency fire districts and departments.

The Humboldt County Sheriff's Office is responsible for law enforcement in the unincorporated areas of the County including the community of Willow Creek. The Humboldt County Sheriff's Office provides a variety of public safety services countywide (court and corrections services) and law enforcement services for the unincorporated areas of the County. The California Highway Patrol is responsible for enforcing traffic laws on roadways within the unincorporated areas and on state highways throughout the County. The Sheriff's Office Operations Bureau is made up of seven units under the command of the Undersheriff. The most visible of these units is the Patrol Unit. Sheriff's Deputies assigned to the Patrol Unit are responsible for responding to emergency calls for service, criminal investigations, and crime prevention through neighborhood and beat patrols. Patrol has one main station in Eureka, and substations in Garberville and McKinleyville. The McKinleyville substation patrols the Willow Creek area. According to the Humboldt County General Plan Update Draft EIR, in the more rural areas of the county, like the project area, maximum response times may reach 50 minutes because of longer travel distances, varied topography, available resources, and the location of the Sheriff Deputy on patrol in relation to the incident (Humboldt County 2012).

The closest school to the project site is the Trinity Valley Elementary School which is approximately 0.5 miles northwest of the project site. Trinity Valley Elementary School is in the Klamath-Trinity Joint Unified School District and serves grades K-8.

The project site is located within the Willow Creek Community Services District (WCCSD) which provides water services, park services, recreation facilities, and street lighting. The WCCSD maintains approximately 38 acres of park area consisting of Veteran's Park, Creekside Park, downtown Community Commons park, and the Willow Creek Highway 299 corridor. In addition, Camp Kimtu and Kimtu Beach are also maintained by the WCCSD staff. The closest parks to the project site include Community Commons Park, Veteran's Park, and Creekside Park. Community Commons Park is approximately 1,300 feet to the southwest, Veteran's Park is approximately 1,500 feet to the east, and Creekside Park is approximately 1,700 feet to the west. The Big Rock Recreation Area on Six Rivers National Forest Service property is also approximately 1,800 feet downstream of the project site.

### **Analysis:**

- a) **Finding:** The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for fire protection. *Less than significant impact.*

**Discussion:** The project proposes the cultivation, processing, and manufacturing of cannabis products. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence. The existing metal commercial building is proposed to be used for the processing of cannabis and the existing office is proposed to be used for distribution and transportation activities. The project also proposes the construction of several new buildings including a 17,500 s.f. metal building that will be used for manufacturing, a 160,000 s.f. greenhouse

structure, and a 4-story building with 95,000 s.f. of floor area that will be used for indoor cultivation and as a plant nursery and breeding area.

The project site is within the boundaries of the Willow Creek Fire Protection District (WCFPD). The project site is also located within a State Responsibility Area (SRA) which means that fire protection services for wildland fires are provided by the California Department of Forestry and Fire Protection (CALFIRE). During peak operations, the project will provide employment for approximately 75 persons and will not significantly increase the population in the Willow Creek area. As required by fire code, all of the existing and proposed buildings, except the greenhouse structure, will be developed with fire suppression systems. One fire hydrant exists at the project site northeast of the existing commercial metal building. Additional fire hydrants may be required to be installed to serve the other portions of the site per fire code requirements. In addition, the applicant proposes to allow access to the stored rainwater for CDF or local fire departments in the case of an emergency.

The project will be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space. The improvement plans for the proposed project will be reviewed to verify compliance with the County's Fire Safe Ordinance.

The project proposes to conduct butane extraction in the manufacturing building at the site which is a flammable gas. These proposed manufacturing activities will be subject to review and approval by the State Fire Marshall. The Cultivation and Operations plan prepared for the project (EFF, 2017) contains a description of the facility design and standard operating procedures that will be followed for the use of volatile (butane) and non-volatile agents (liquid CO<sub>2</sub>) at the facility to ensure compliance with local and state regulations. Proper design of the facility and implementation of these procedures will ensure that hazards related to use of these materials, including potential explosion and fires, are less than significant.

Due to the nature of the proposed cannabis uses and required compliance with fire code requirements, it is not anticipated that the project will result in a significant increase in the number of calls-for-service to which the WCFPD responds. As such, the project will not result in the need for new or physically altered fire protection facilities.

Therefore, impacts to fire protection services from the proposed project are considered less than significant.

- b) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for police protection. *Less than significant impact with mitigation incorporated.*

Discussion: The project proposes the cultivation, processing, and manufacturing of cannabis products. The Humboldt County Sheriff's Office is responsible for law enforcement in the unincorporated areas of the County including the community of Willow Creek. The Sheriff's Department McKinleyville substation patrols the Willow Creek area. According to the Humboldt County General Plan Update Draft EIR, in the more rural areas of the county, like the project area, maximum response times may reach 50 minutes because of longer travel distances, varied topography, available resources, and the location of the Sheriff Deputy on patrol in relation to the incident (Humboldt County 2012).

Due to the nature of the proposed cannabis facility, there is the potential for security to be an issue and place a greater demand on law enforcement services provided by the County Sheriff's Department. To address potential security issues, the applicant will implement the detailed security plan contained in the Cultivation and Operations plan prepared for the project (EFF, 2017). Implementation of the security plan measures will minimize impacts on local law enforcement. This has been included as Mitigation Measure M-10 for the proposed project. As such, the project will not result in the need for new or physically altered law enforcement facilities.

Therefore, with the proposed mitigation, impacts to police services from the proposed project are considered less than significant.

- c) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services schools. *No impact.*

Discussion: The closest school to the project site is the Trinity Valley Elementary School which is approximately 0.5 miles northwest of the project site. Trinity Valley Elementary School is in the Klamath-Trinity Joint Unified School District and serves grades K-8. The project proposes the cultivation, processing, and manufacturing of cannabis products. During peak operations, the project will provide employment for approximately 75 persons and will not significantly increase the population in the Willow Creek area (~1,710 residents per 2010 Census). Since the project does not propose residential development and will not significantly increase the population in the Willow Creek area, the project would not create a need for new schools or increase any school population.

Therefore, impacts to local schools from the proposed project are considered less than significant.

- d) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for parks. *Less than significant impact.*

Discussion: The project site is located within the Willow Creek Community Services District (WCCSD) which provides water services, park services, recreation facilities, and street lighting. The WCCSD maintains approximately 38 acres of park area consisting of Veteran's Park, Creekside Park, downtown Community Commons park, and the Willow Creek Highway 299 corridor. In addition, Camp Kimtu and Kimtu Beach are also maintained by the WCCSD staff. The closest parks to the project site include Community Commons Park, Veteran's Park, and Creekside Park. Community Commons Park is approximately 1,300 feet to the southwest, Veteran's Park is approximately 1,500 feet to the east, and Creekside Park is approximately 1,700 feet to the west. The Big Rock Recreation Area on Six Rivers National Forest Service property is also approximately 1,800 feet downstream of the project site.

The project proposes the cultivation, processing, and manufacturing of cannabis products. During peak operations, the project will provide employment for approximately 75 persons and will not significantly increase the population in the Willow Creek area (~1,710 residents per 2010 Census). Since the project does not propose residential development and will not significantly increase the population in the Willow Creek area, the project would not significantly increase the demand for public parks.

Therefore, impacts to local public parks from the proposed project are considered less than significant.

- e) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for other public facilities. *No impact.*

Discussion: The project proposes the cultivation, processing, and manufacturing of cannabis products. During peak operations, the project will provide employment for approximately 75 persons and will not significantly increase the population in the Willow Creek area (~1,710 residents per 2010 Census). Since the project does not propose residential development and will not significantly increase the population in the Willow Creek area, the project would not significantly increase the demand for other public facilities including public health services and library services.

Therefore, impacts to other public facilities from the proposed project are considered less than significant.

**Mitigation:**

**M-10.** The applicant shall implement the detailed security plan contained in the Cultivation and Operations Plan prepared for the project (EFF, 2017). Implementation of the security plan measures will minimize impacts on local law enforcement service provided by the County Sheriff's Department.

**Findings:**

- a) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for fire protection: **Less than significant impact.**
- b) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for police protection: **Less than significant impact with mitigation incorporated.**
- c) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services schools: **No impact.**
- d) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for parks: **Less than significant impact.**
- e) The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for other public facilities: **No impact.**

**15. RECREATION.**

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Setting:**

The project site (APN 522-201-001) is an approximately 41 acre parcel that is located west of Country Club Road within the unincorporated community of Willow Creek on a site that was used historically for industrial activities. The existing access drive, known as Flowers-McNeil Road, is off of Country Club Road. The subject parcel is surrounded by agricultural land, rural residential and commercial uses, mining operations, Veteran's Park, and the town of Willow Creek. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence.

The project site is located within the Willow Creek Community Services District (WCCSD) which provides water services, park services, recreation facilities, and street lighting. The WCCSD maintains more than 38 acres of park area consisting of Veteran's Park, Creekside Park, downtown Community Commons, and the Willow Creek Hwy 299 corridor. In addition, Camp Kimtu and Kimtu Beach are also maintained by WCCSD staff.

Veteran's Park is the oldest park in WCCSD's system. It is a 17-acre complex that consists of one softball field, one soccer/utility field, picnic area, playground, volleyball area, tennis court, and two horseshoe pits. Reservations may be obtained through the WCCSD office for picnics, softball tournaments, soccer games, and special events such as weddings, reunions, and birthday parties. Veteran's Park is located at 100 Kimtu Road en-route to Kimtu Beach. Creekside Park, located at the end of Willow Road, consists of a toddler playground, a small picnic and barbecue area, and the 18 hole Steelhead Disc Golf Course. The Creekside Loop Trail was created in 2008 as a moderate walking path circling Creekside Park. The Community Commons area is a 1.5 acre site at the junction of Highway 299 and Highway 96 and includes a visitor's center kiosk, bigfoot statue and Willow Creek China Flat Museum. The WCCSD maintains and operates Camp Kimtu and Kimtu Beach along the bank of the Trinity River. The campground has nine tent camping sites along the river bank of Kimtu Beach.

The closest parks to the project site include Community Commons Park, Veteran's Park, and Creekside Park. Community Commons Park is approximately 1,300 feet to the southwest, Veteran's Park is approximately 1,500 feet to the east, and Creekside Park is approximately 1,700 feet to the west. The Big Rock Recreation Area on Six Rivers National Forest Service property is also approximately 1,800 feet downstream of the project site.

**Analysis:**

a) Finding: The project will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. *Less than significant impact.*

Discussion: The project proposes the improvement of an underutilized industrial site for the cultivation, processing, and manufacturing of cannabis products. During peak operations, the

project will provide employment for approximately 75 persons and will not significantly increase the population in the Willow Creek area (~1,710 residents per 2010 Census). Since the project does not propose residential development and will not significantly increase the population in the Willow Creek area, the project would not significantly increase the demand for public parks.

- b) Finding: The project will not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. *Less than significant impact.*

Discussion: The project proposes the improvement of an underutilized industrial site for the cultivation, processing, and manufacturing of cannabis products. The project does not include recreational facilities and will not require the construction or expansion of recreational facilities. The project will provide employment for approximately 75 persons and will not significantly increase the population in the Willow Creek area (~1,710 residents per 2010 Census). Since the project does not propose residential development and will not significantly increase the population in the Willow Creek area, the project would not significantly increase the demand for public parks.

**Findings:**

- a) The project will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated: **Less than significant impact.**
- b) The project will not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment: **Less than significant impact.**

**16. TRANSPORTATION/TRAFFIC.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

**Setting:**

The project parcel (APN 522-201-001) is approximately 41 acres of land that is located directly adjacent to the Trinity River in the Willow Creek area of Humboldt County. The project site is accessed from Country Club Road which is a two-lane County roadway that is over 24 feet in width. Country Club Road is identified as a Major Collector by CalTrans (2011) and provides access to rural residential, agricultural, commercial, recreational, public facility, and industrial uses in the Willow Creek area. The existing access road to the project site is off Country Club Road and is in good condition. The access road is known as Flowers-McNeill Road which is a roadway that is currently utilized to access the project site, some rural residences, and an adjacent mini-storage business. Flower-McNeill Road connects with Country Club Road approximately 430 feet east of the project site. Flowers-McNeill Road is paved from the intersection with Country Club Road to several hundred feet into the project site. These roads will be used to connect the project site with Highway 299 which is an approximately 0.7 mile drive from the site.

State Highways 96 and 299 pass through the Willow Creek area, both of which fall under the jurisdiction of the California Department of Transportation (Caltrans). Highway 96 extends north and adjoins Highway 299 as it enters the Willow Creek community. Highway 299 runs northwest to southeast through Willow Creek. Both highways provide the main rural arterial routes for entering and exiting Willow Creek, with Highway 299 providing access from the west, south, and east, and Highway 96 providing access from the north.

Currently, Willow Creek possesses one classified bikeway. The bikeway is a Class II bike lane located on Highway 299 extending approximately 0.3 miles from Willow Road to Willow Way. The Humboldt County Regional Bicycle Plan identifies a proposed future Class I bike path along Highway 96 in Willow Creek. The proposed Class I bike path would be approximately 0.9 miles in length from Highway 299 to Trinity Valley Elementary School (HCAOG 2012). Additionally, both the Humboldt County Regional Transportation Plan and Regional Bicycle Plan identify future Class III bicycle routes along Highways 96 and 299 in the Willow Creek area (HCAOG 2012 and 2014).

The Willow Creek Transit System is the main transit system available to the Willow Creek community. This transit system provides trips between areas of the Hoopa Reservation, Arcata, and Orleans, as well as Weaverville located in Trinity County and Redding in Shasta County. The Humboldt Transit Authority controls the fixed-route Willow Creek Transit System as it transports passengers between Willow Creek and the Arcata Transit system along Highway 299. In January 2003 Klamath Trinity Non-Emergency Transportation (K-T NeT) was introduced as a nonprofit, community-based organization in rural northeastern Humboldt County. This transit system offers two fixed-route services that expand from Willow Creek to areas located northward along Highways 96 and 169. K-T NeT actively schedules the Hoopa-Willow Creek service to link with the Willow Creek Transit System.

The nearest airport to the project site is the Hoopa Airport, which is located approximately 7 miles north of the project site. The second closest public airport (to drive to) is the Arcata/Eureka Airport in McKinleyville, approximately 25 aerial miles west of the project area. The project site is not located within land use compatibility zones established for any public use airports. There is a private airfield at the Mercer Fraser Company Willow Creek Plant north of Willow Creek approximately 0.5 miles northwest of the project site.

**Analysis:**

- a) Finding: The project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all

modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. *Less than significant impact.*

Discussion: The project site will be accessed by Country Club Road which is classified as a Major Collector by the California Department of Transportation (See attached map 2C44). Country Club Road is a two lane County roadway that is over 24 feet in width. As defined in the CalTrans Highway Design Manual, "Collector Road--A route that serves travel of primarily intra-county rather than statewide importance in rural areas or a route that serves both land access and traffic circulation within a residential neighborhood, as well as commercial and industrial area in urban and suburban areas." Humboldt County Public Works Department requires that roads used for truck traffic must meet Category 4 road standards in being at least 18 feet in width when 2-way traffic is expected. As discussed above, Country Club Road meets these standards.

The existing access road to the project site is off Country Club Road and is in good condition. The access road is known as Flowers-McNeill Road which is a roadway that is currently utilized to access the project site, some rural residences, and an adjacent mini-storage business. Flower-McNeill Road connects with Country Club Road approximately 430 feet east of the project site. Flowers-McNeill Road is currently paved from the intersection with Country Club Road to several hundred feet into the project site.

Construction traffic for the project would result in a short-term increase in construction-related vehicle trips on Highway 96 and Highway 299, as well as local roadways in Willow Creek including Country Club Road and Flowers-McNeill Road. Construction would result in vehicle trips by construction workers and haul-truck trips for delivery and disposal of construction materials and spoils to and from construction areas. Due to their short-term nature, construction activities would not result in substantial adverse effects or conflicts with the local roadway system.

Vehicle/truck traffic generated by long-term operation of the project is estimated to generate up to 360 vehicle/truck trips per day. This will include 10 truck trips (5 in/5 out) from deliveries, 300 employee vehicle trips (4 trips per day per employee), and 50 vehicle/truck trips from the retail nursery (25 in/25 out). These numbers take into consideration cannabis material and supplies being imported to the site and cannabis material being exported from the site.

Traffic counts were taken in October/November 2016 by the County Public Works Department which measured an Average Daily Traffic (ADT) of 1,815 vehicles on Country Club Road approximately 120 feet south of Flowers-McNeill Road. The 2013 annual average daily traffic reported for Highway 96 and Highway 299 at their Willow Creek junction was 2,750 and 7,700, respectively (Caltrans 2013).

Table 3-1 (Street & Highway Classification System) of the City of Eureka General Plan Transportation & Circulation Element lists the design capacity for collectors as up to 12,000 Average Daily Volume (ADV) and the capacity for local streets as up to 5,000 ADV. Since the Humboldt County General Plan does not contain any specific thresholds for roadway capacity, a threshold of 5,000 vehicles per day was used to evaluate potential impacts on Country Club Road based on the road designation (Major Collector), design (two lane roadway with over 24 foot width), and the most recently available traffic data (1,815 ADT).

As described above, it is estimated that traffic from long-term operation of the project is estimated to generate up to 360 vehicle/truck trips per day. This would result in an ADT of 2,175 when combined with the most recently available County traffic data for Country Club Road. The amount of vehicle/truck traffic proposed by the project would be a minor contribution to traffic on Country Club Road considering the designation (Major Collector), the most recently available traffic data (1,815 ADT), and the threshold of 5,000 vehicle trips per day. Considering



that Country Club Road is capable of handling more vehicles per day, no significant impact from the minor amount of additional traffic generated by this project would be expected.

Humboldt County Public Works Department did not raise any concerns about traffic impacts or the capacity of Country Club Road in their referral comments submitted for this project. As stated in the 06/10/16 (revised 01/24/17) referral comment letter from Deputy Director Robert W. Bronkall, "The County roadway serving the subject property is adequate to accommodate the proposed use." The Public Works comments also made the following statement concerning the existing driveway apron that connects to Flowers-McNeil Road, "The existing driveway apron (encroachment) that connects to the County road meets County standards and no improvements to the encroachment are necessary."

An analysis of potential impacts to pedestrian, bicycle, and transit facilities is discussed below under subsection f).

Therefore, the proposed project will not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

- b) Finding: The project will not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. *Less than significant impact.*

Discussion: Humboldt County is considered rural and does not have a Congestion Management Agency or an adopted Congestion Management Program. The Humboldt County Association of Governments (HCAOG) is the regional transportation planning agency for Humboldt County. Under its authority as the Regional Transportation Planning Agency (RTPA) for Humboldt County, HCAOG adopts and submits an updated Regional Transportation Plan to the California Transportation Commission and Caltrans every five years. The Regional Transportation Plan is a long-range (20-year) transportation planning document for Humboldt County. The most recent five-year update of the RTP was adopted in 2014. The Regional Transportation Plan does not currently establish vehicular level of service criteria for County roadways in the Willow Creek area.

Therefore, the proposed project will not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

- c) Finding: The project will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. *No impact.*

Discussion: The nearest airport to the project site is the Hoopa Airport, which is located approximately 7 miles north of the project site. The second closest public airport (to drive to) is the Arcata/Eureka Airport in McKinleyville, approximately 25 aerial miles west of the project area. The project site is not located within land use compatibility zones established for any public use airports. There is a private airfield at the Mercer Fraser Company Willow Creek Plant north of Willow Creek approximately 0.5 miles northwest of the project site. This private airfield is very small in size and receives limited use.

This project will not cause an increase in air traffic patterns, since air travel will not be a means of transportation used for any aspect of this project. Due to the project's size (provide em-

ployment for 75 persons), type of use (cannabis facility), and location (7 miles to the nearest public use airport), there is limited potential to impact air traffic patterns.

Therefore, the project will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

- d) Finding: The project will not substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). *Less than significant impact.*

Discussion: The project would improve an underutilized industrial site for cannabis uses in the Community of Willow Creek. The proposed project would use existing roadways (Flowers-McNeil Road and Country Club Road) to access the project site which the Public Works Department has determined are adequate to serve the proposed facility. The project also proposes to improve existing access roads within the project site and construct new roads and parking areas so serve the proposed cannabis uses.

As stated in the 06/10/16 (revised 01/24/17) referral comment letter from Deputy Director Robert W. Bronkall, "The County roadway serving the subject property is adequate to accommodate the proposed use." The Public Works comments also made the following statement concerning the existing driveway apron that connects to Flowers-McNeil Road, "The existing driveway apron (encroachment) that connects to the County road meets County standards and no improvements to the encroachment are necessary." The Public Works Department also stated in their referral comments that the applicant's civil engineer needs to evaluate the intersection of Flowers-McNeil Road and Country Club Road to determine if any improvements are necessary to accommodate the proposed use.

All proposed transportation improvements to accommodate the project will be reviewed by and constructed to the standards of the County Engineer and Public Works Department to ensure that no hazardous design features will be developed as part of the project.

The proposed cannabis cultivation activities will occur entirely within the project site which has one entrance that will be used for access. As such, the proposed project will not result in traffic from farm equipment on nearby public roadways. Agricultural uses also occur to the north and east of the project site which may generate traffic from trucks and farm equipment on Country Club Road. Most of this traffic occurs to the east of the project site and is anticipated to cause limited conflict with the traffic that will be generated by the proposed project.

Therefore, the proposed project will not substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment).

- e) Finding: The project will not result in inadequate emergency access. *Less than significant impact.*

Discussion: The project would improve an underutilized industrial site for cannabis uses. The proposed project would use existing roadways (Flowers-McNeil Road and Country Club Road) to access the project site which the Public Works Department has determined are adequate to serve the proposed facility. The project also proposes to improve existing access roads within the project site and construct new roads and parking areas to serve the proposed cannabis uses.

The project will be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements,

and setback distances for maintaining defensible space (CALFIRE, 2017). The improvement plans for the proposed project will be reviewed to verify compliance with the County's Fire Safe Ordinance which will ensure that adequate access for emergency vehicles is provided.

Therefore, the proposed project will not result in inadequate emergency access.

- f) **Finding:** The project will not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. *Less than significant impact.*

**Discussion:** The Humboldt County General Plan Update Circulation Element (2013) contains policies that support public transit. As stated on page 7-5 of the Circulation Element, "*Increased use of public transportation will reduce air pollution, greenhouse gas emissions, traffic congestion, parking demand, energy consumption and the cost of personal transportation.*"

The Willow Creek Transit System is the main transit system available to the Willow Creek community. This transit system provides trips between areas of the Hoopa Reservation, Arcata, and Orleans, as well as Weaverville located in Trinity County and Redding in Shasta County. A multi-line bus stop for the Redwood Transit System, Klamath Trinity-NET, and Trinity Transit is located at the junction of Highways 96 and 299. The multi-line bus stop is located on the southbound lane of Highway 96. The project will employ 75 persons who may use public transit to get to and from the proposed facility. The distance from the nearest bus stop, at the junction of Highway 96 and 299, is an approximate 0.8 mile walk or bike ride from the proposed facility. Due to the proposed number of employees and the distance to the nearest bus stop, the number of employees that commute using public transit may be limited.

The Humboldt County General Plan Update Circulation Element (2013) contains policies that support improvements that accommodate bicycles, pedestrians, and the mobility-challenged population. In the County, these improvements primarily include sidewalks, crosswalks, trails, and bicycle lanes. As stated on page 7-6 of the Circulation Element, "*Development of bicycle and pedestrian facilities can reduce vehicle miles traveled, enhance communities, increase the opportunities for an active and therefore healthy lifestyle, and reduce greenhouse gas emissions.*"

Currently, Willow Creek possess one classified bikeway. The bikeway is a Class II bike lane located on Highway 299 extending approximately 0.3 miles from Willow Road to Willow Way. The Humboldt County Regional Bicycle Plan identifies a proposed future Class I bike path along Highway 96 in Willow Creek. The proposed Class I bike path would be approximately 0.9 miles in length from Highway 299 to Trinity Valley Elementary School (HCAOG, 2012). Additionally, both the Humboldt County Regional Transportation Plan and Regional Bicycle Plan identify future Class III bicycle routes along Highways 96 and 299 in the Willow Creek area (HCAOG 2012 and 2014). Since the proposed project does not propose alterations to Highway 96 and 299, it would not prevent the development of the Class I and III bicycle routes proposed in the Regional Bicycle Plan. In addition, since the project will not result in a significant increase in traffic levels in the Willow Creek area, it would not substantially increase the exposure of bicyclists and pedestrians to vehicle conflict areas.

Therefore, the proposed project will not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

**Findings:**

- a) The project will not conflict with an applicable plan, ordinance or policy establishing measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation sys-

tem, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit: **Less than significant impact.**

b) The project will not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways: **Less than significant impact.**

c) The project will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks: **No impact.**

d) The project will not substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment): **Less than significant impact.**

e) The project will not result in inadequate emergency access: **Less than significant impact.**

f) The project will not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities: **Less than significant impact.**

**17. TRIBAL CULTURAL RESOURCES.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code §5020.1 (k)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting:**

The project site (APN 522-201-001) is an approximately 41 acre parcel directly south of the Trinity River within the unincorporated community of Willow Creek on a site that was used in the past for agriculture, lumber milling, residential, and as a machinist and welding shop. Vegetation surrounding the project site includes hardwoods, conifers, and riparian vegetation. The site is located near the confluence of Willow Creek and the Trinity River.

The project area is within the ethnographic territory of the Tsnungwe Tribe. This Tribe inhabited the land along the Trinity River from their border with the Hoopa to the north, the Chimariko to the east, the Whilkut to the west, and the Wintun to the south. Although, no Tsnungwe villages or specific use areas are known within the specific project area, there are several named Tsnungwe sites in the vicinity (Baumhoff 1958; Gibbs 1852; Benson personal communication to Verwayen 2011 and Roscoe 2016).

**Analysis:**

a) Finding: The project will not cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5. *Less than significant impact with mitigation incorporated.*

Discussion: The project area is within the ethnographic territory of the Tsnungwe Tribe. This Tribe inhabited the land along the Trinity River from their border with the Hoopa to the north, the Chimariko to the east, the Whilkut to the west, and the Wintun to the south. Although, no Tsnungwe villages or specific use areas are known within the specific project area, there are several named Tsnungwe sites in the vicinity (Baumhoff 1958; Gibbs 1852; Benson personal

communication to Verwayen 2011 and Roscoe 2016). However, due to the parcels location at a significant bend in the Trinity River and adjacent to the confluence of the Trinity River and Willow Creek, it was requested that a Cultural Resources Investigation be conducted for the proposed project.

A Cultural Resources Investigation (November 2016) was completed by Jamie Roscoe & Associates which concluded on Page 28:

*"The investigation concludes that no historical resources, as defined in CEQA, Article 4, 15064.5(a), were identified in the project area. This supports a finding that the proposed project will not cause a substantial adverse change in the significance of an historical resource (Public Resources Code, Section 21084.1). This investigation constitutes a reasonable and good faith effort to identify historical resources in and near the project. The proposed project is recommended to proceed, on the conditions of adhering to the project design and the predetermined cultivation area.*

*Although unlikely given the identification effort, the proposed project activities do have the potential to inadvertently uncover subsurface archaeological material. In the event that materials or remains are unearthed, the following pages offer recommendations that would ensure potential project impacts on the inadvertently discovered historical resources are eliminated or reduced to less than significant levels.*

### **5.1 Protocols for Inadvertent Discoveries**

#### ***Inadvertent Discovery of Archaeological Material***

*The following provides means of responding to the circumstances of a significant discovery during the cultural monitoring of the final implementation of the proposed agricultural development within the project parcel. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.*

Additionally, as part of the Jamie Roscoe & Associates Cultural Resources Investigation, a site visit was conducted with Bob Benson of the Tsnungwe Council. During the site visit the project plans were reviewed and Mr. Benson indicated that the Tribe had no concerns about the project's impact on known archaeological resources. The inadvertent discovery protocol recommended in the Cultural Resources Investigation has been included as Mitigation Measure M-5 for the project (see Section 5 – Cultural Resources).

With the proposed mitigation measures, the project will not cause a substantial adverse change in the significance of an archaeological resource.

- b) Finding: The project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. *Less than significant impact with mitigation incorporated.*

Discussion: As required by AB 52, the County of Humboldt sent requests for formal consultation to the Tsnungwe Council and Hoopa Valley Tribe. The County did not receive requests for consultation from the Tsnungwe Council or Hoopa Valley Tribe. However, due to the parcels location at a significant bend in the Trinity River and adjacent to the confluence of the Trinity River and Willow Creek, the County requested that a Cultural Resources Investigation be conducted for the proposed project. Based on this request, a Cultural Resources Investigation (November 2016) was completed by Jamie Roscoe & Associates for the proposed project. As part of the

Jamie Roscoe & Associates Cultural Resources Investigation, a site visit was conducted with Bob Benson of the Tsnungwe Council. During the site visit the project plans were reviewed and Mr. Benson indicated that the Tribe had no concerns about the project's impact on known archaeological resources.

Upon review of the Cultural Resources Investigation and comments from the Tsnungwe Council, the County of Humboldt determined that the proposed project will not cause a substantial adverse change in the significance of a known tribal cultural resource. However, due to the potential to uncover tribal cultural resources during project construction activities and long term operation, an inadvertent discovery protocol has been included as Mitigation Measure M-5 for the proposed project in Section 5 (Cultural Resources) of this document.

With the proposed mitigation measures, the proposed project will not cause a substantial adverse change in the significance of a tribal cultural resource.

**Mitigation:**

Same as Mitigation Measure **M-5**.

**Findings:**

a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code §5020.1 (k): **Less than significant impact with mitigation incorporated.**

b) Cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1: **Less than significant impact with mitigation incorporated.**

**18. UTILITIES AND SERVICE SYSTEMS.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- g) Comply with federal, state, and local statutes and regulations related to solid waste?

**Setting:**

The project site (APN 522-201-001) is an approximately 41 acre parcel that is located west of Country Club Road within the unincorporated community of Willow Creek on a site that was used historically for industrial activities. The project parcel is currently developed with three structures including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence.

The project site is located within the Willow Creek Community Services District (WCCSD) which provides water services, park services, recreation facilities, and street lighting. Sources of water that will be used by the proposed project include the following: 1) rainwater which will be captured in the new 3-million gallon rainwater catchment pond; and 2) the existing water service from WCCSD. Wastewater treatment at the site consists of on-site wastewater treatment systems (i.e. septic tanks). Stormwater facilities at the site consist of various on-site drainage swales, detention basins, and remnants of the former log pond. Solid waste and recyclables collection in the Willow Creek area is provided by Tom's Trash which is located on Highway 299 to the south of Willow Creek. Solid waste is primarily transported to Anderson Landfill in Anderson, CA. Pacific Gas & Electric (PG&E) provides electricity and natural gas to the Willow Creek area.

**Analysis:**

- a) Finding: The project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. *Less than significant impact.*

Discussion: The proposed project would improve an underutilized industrial site for use as a cannabis facility that will include cultivation, processing, and manufacturing activities. Wastewater discharge from the proposed facility will occur from the following sources: 1) restrooms, sinks, and showers in the existing and proposed buildings; 2) extraction in the manufacturing building that will discharge water containing some very fine plant material; and 3) floor drains from the indoor cultivation, nursery, and breeding building. The proposed outdoor and greenhouse cultivation activities will not produce wastewater discharge since the irrigation water and fertilizers will be administered at specific agronomic rates that will allow maximum uptake by the plants and prevent excess water beyond the root zone.

The project site is located within the Willow Creek Community Services District (WCCSD) which does not have a wastewater treatment system. As such, the proposed project will be served by an on-site wastewater treatment system. As shown on the Proposed Site Plan, this system will be located between the existing metal building at the site and the proposed greenhouse structure. This system will be designed to adequately treat the estimated wastewater discharge volume and strength from the proposed facility and will be reviewed for compliance with the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) and Humboldt County Division of Environmental Health (DEH). As such it is not anticipated that the proposed facility will exceed the wastewater treatment requirements of the NCRWQCB.

Any surface or stormwater runoff from the site is addressed in Section 9 (Hydrology & Water Quality) under subsections a), c), e), and f).

Therefore, the proposed project will not exceed wastewater treatment requirement of the applicable Regional Water Quality Control

- b) Finding: The project will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause sig-

nificant environmental effects. *Less than significant impact.*

Discussion: Water will be used by the proposed cannabis facility for several reasons including: 1) irrigation of cannabis plants; 2) restrooms, sinks, and showers; and 3) watering of landscaping at the site. The proposed project will be served by the following sources of water: 1) rainwater which will be captured in a new 3-million gallon rainwater catchment pond; and 2) the existing water service from WCCSD. During Phase 1 of the project, water service from WCCSD will be used for all aspects of the project. WCCSD has indicated that they have the capacity to serve the proposed facility with water service. During Phase 2 of the project, the 3-acre (3 million gallon) rainwater catchment pond will be developed which will be the main source of water for the proposed facility. At full buildout of the project, the WCCSD water service would be used for domestic needs in the existing and proposed structures (e.g. restrooms, drinking water, and cooking in the employee kitchen), and the captured rainwater will be used for irrigation and manufacturing activities.

The project site is located within the Willow Creek Community Services District (WCCSD) which does not have a wastewater treatment system. As such, the proposed project will be served by a new on-site wastewater treatment system. As shown on the Proposed Site Plan, this system will be located between the existing metal building at the site and the proposed greenhouse structure.

The installation of the rainwater catchment system and on-site wastewater treatment systems, as proposed by the project, would result in physical impacts to the surface and subsurface of the project site. These impacts are considered to be part of the project's construction phase and are evaluated throughout this document. In instances where significant impacts have been identified for the project's construction phase and long-term operation, mitigation measures have been included to reduce the impacts to less than significant levels. As such, additional mitigation measures beyond those identified throughout this document would not be required.

Therefore, the proposed project will not result in significant environmental effects due to the construction of new water or wastewater treatment facilities or the expansion of existing facilities.

- c) Finding: The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. *Less than significant impact.*

Discussion: The proposed project would increase the amount of impermeable surface within the project site, through the construction of new buildings, paved surfaces for access and parking, and lined ponds for rainwater catchment and stormwater pre-treatment. This increase in impermeable surface would directly increase the rate of runoff and the volume generated during storm events.

To address the increase in stormwater runoff that will occur due to the increase in impervious surface from the proposed project, the applicant shall design stormwater facilities to detain stormwater on the project site through LID improvements such as a rainwater catchment pond and catchment tanks, a pre-treatment pond, bioswales, infiltration basins, and detention basins. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing pipe culvert outfall from the existing vegetated basin (i.e. remnants of the former log pond). The pipe outfall will be armored with rock to provide energy dissipation.



The installation of on-site stormwater facilities, as proposed by the project, would result in physical impacts to the surface and subsurface of the project site. These impacts are considered to be part of the project's construction phase and are evaluated throughout this document. In instances where significant impacts have been identified for the project's construction phase and long-term operation, mitigation measures have been included to reduce the impacts to less than significant levels. As such, additional mitigation measures beyond those identified throughout this document would not be required.

Therefore, the proposed project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- d) Finding: The project will not have insufficient water supplies available to serve the project from existing entitlements and resources (i.e., new or expanded entitlements are needed). *Less than significant impact.*

Discussion: Water will be used by the proposed cannabis facility for several reasons including: 1) irrigation of cannabis plants; 2) restrooms, sinks, and showers; and 3) watering of landscaping at the site. The proposed project will be served by the following sources of water: 1) rainwater which will be captured in a new 3-million gallon rainwater catchment pond; and 2) the existing water service from WCCSD.

During Phase 1 of the project, water service from WCCSD will be used for all aspects of the project. WCCSD has indicated that they have the capacity to serve the proposed facility with water service. During Phase 2 of the project, the 3-acre (3 million gallon) rainwater catchment pond will be developed which will be the main source of water for the proposed facility. At full buildout of the project, the WCCSD water service would be used for domestic needs in the existing and proposed structures (e.g. restrooms, drinking water, and cooking in the employee kitchen), and the captured rainwater will be used for irrigation and manufacturing activities. These sources of water will provide more than enough water for the proposed cannabis facility.

Therefore, the proposed project will have sufficient water supplies available to serve the project from existing entitlements and resources.

- e) Finding: The project will not result in a determination by the wastewater treatment provider which services or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. *No impact.*

Discussion: The project site is located within the Willow Creek Community Services District (WCCSD) which does not have a wastewater treatment system. Due to this, the proposed project will be served by on-site wastewater treatment systems that will be designed to adequately treat the estimated wastewater discharge volume and strength from the proposed facility and will be reviewed for compliance with the requirements of the North Coast Regional Water Quality Control Board (NCRWQCB) and Humboldt County Division of Environmental Health (DEH).

Therefore, the proposed project will not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

- f) Finding: The project will not be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs. *Less than significant impact.*

Discussion: Solid waste generated by the proposed cannabis facility will include the following: 1) plant material, nutrient supplement and soil containers, etc. generated from the cultivation, nursery, and breeding activities; 2) plant material generated from the processing activities; and

3) typical office and domestic solid waste generated by the employees.

Solid waste and recyclables collection in the Willow Creek area is provided by Tom's Trash which is located on Highway 299 to the south of Willow Creek. Solid waste and recyclables are then transported to Humboldt Sanitation in McKinleyville, CA who contracts with Bettendorf Trucking to have it transported to the Dry Creek Landfill located at 6260 Dry Creek Road, Eagle Point, Oregon. The Dry Creek Landfill is located in Jackson County, Oregon and receives approximately 900 tons of solid waste per day. The Dry Creek Landfill has a total capacity of 28,400,000 cubic yards and is projected to close in 2074 (Rogue Disposal & Recycling 2016).

Therefore, the proposed project will be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

- g) Finding: The project will not violate any federal, state, and local statutes and regulations related to solid waste. *Less than significant impact.*

Discussion: The California Integrated Waste Management Act of 1989 (Public Resources Code Division 30), enacted through Assembly Bill (AB) 939 and modified by subsequent legislation, required all California cities and counties to implement programs to divert waste from landfills (Public Resources Code Section 41780). Compliance with AB 939 is determined by the Department of Resources, Recycling, and Recovery (Cal Recycle), formerly known as the California Integrated Waste Management Board (CIWMB). Each county is required to prepare and submit an Integrated Waste Management Plan for expected solid waste generation within the county to the CIWMB. In 2012, the unincorporated area of Humboldt County met or exceeded the waste diversion mandate of 50 percent set by the Integrated Waste Management Act of 1989 (Humboldt County, 2014).

The proposed project would comply with all federal, state, and local statutes related to solid waste, including AB 939. This would include compliance with the Humboldt Waste Management Authority's recycling, hazardous waste, and composting programs in the county to comply with AB 939. Other waste diversion methods specific to the proposed facility include the following: 1) the stalks and stems from the cannabis plants will be delivered to Restalk, LLC who will recycle and repurpose the plant material into packaging for the applicant's cannabis products; 2) other green waste and plant material that has been used in the manufacturing process will be composted on-site; and 3) all soil used for cultivation activities will be reused with no soil disposal occurring during long-term operation of the project.

As described in the Cultivation and Operations Plan prepared for the project, the applicant proposes to use Korean Natural Farming technology to reuse and build soil with sustainably harvested and certified materials. The applicant will purchase the base soil material for the first year of cultivation. After the first year, the applicant will use a combination of re-amending the soil with organic nutrients and fermentation farming techniques. The soil will be treated like a living organism, and the biology in the soil will be kept alive by planting cover crops in the off-season. As part of this process, other green waste and plant material from the manufacturing activities will be composted on-site. These techniques will ensure a decreased cost for soil and fertilizers every year and a reduction in the amount of waste the cultivation activity produces (EFF, 2017; Pgs. 62-63). As shown on the Proposed Site Plan, the soils will be repurposed for use in the 10,000 square foot soil remediation area in the southeast corner of the project site.

Therefore, the proposed project will not violate any federal, state, and local statutes and regulations related to solid waste.

**Findings:**

- a) The project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board: **Less than significant impact.**

b) The project will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects: **Less than significant impact.**

c) The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects: **Less than significant impact.**

d) The project will not have insufficient water supplies available to serve the project from existing entitlements and resources (i.e., new or expanded entitlements are needed): **Less than significant impact.**

e) The project will not result in a determination by the wastewater treatment provide which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments: **No impact.**

f) The project will not be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs: **Less than significant impact.**

g) The project will not violate any federal, state, and local statutes and regulations related to solid waste: **Less than significant impact.**

**19. MANDATORY FINDINGS OF SIGNIFICANCE.** Would the project:

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) The project will not have impacts that are individually limited, but cumulatively considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) The project is not of a type or located in an area that will cause substantial adverse effects on human beings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting:**

The project information provided for each of the topics above has been reviewed for all actions associated with it; during both temporary construction and long-term operation. Based on the project description and its location, the proposed project will not result in any significant impacts with the incorporated operating restrictions, mitigation measures, as well as those standards and requirements of other regulating resource agencies.

**Analysis:**

a) Finding: The project will not have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. *Less than significant impact with mitigation incorporated.*

Discussion: All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants

and animal species, and historical and prehistorical resources were evaluated as part of the analysis in this document. Where impacts were determined to be potentially significant, mitigation measures have been imposed to reduce those impacts to less than significant levels. Accordingly, with incorporation of the mitigation measures imposed throughout this document, the proposed project would not substantially degrade the quality of the environment and impacts would be less than significant.

**Mitigation:**

All Mitigation Measures discussed in this document shall apply (See Section 20 – Discussion of Mitigation Measures, Monitoring, and Reporting Program).

- b) Finding: The project will not 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). *Less than significant impact with mitigation incorporated.*

Discussion: As discussed throughout this document, implementation of the proposed project has the potential to result in impacts to the environment that are individually limited, but cumulatively considerable, including impacts to Biological Resources, Cultural Resources, Hydrology and Water Quality, and Public Services.

In all instances where the project has the potential to contribute to cumulatively considerable impacts to the environment (including the resources listed above) mitigation measures have been imposed to reduce the potential effects to less than significant levels. As such, with incorporation of the mitigation measures imposed throughout this document, the proposed project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant.

**Mitigation:**

Mitigation Measures M-2 through M-5, M-7, M-8, and M-10 shall apply.

- c) Finding: The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. *Less than significant impact with mitigation incorporated.*

Discussion: The proposed project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this document. In instances where the proposed project has the potential to result in direct or indirect adverse effects to human beings, including impacts to Geology and Soils, Hydrology and Water Quality, Noise, and Public Services, mitigation measures have been applied to reduce the impact to below a level of significance. With required implementation of mitigation measures identified in this document, construction and operation of the proposed project would not involve any activities that would result in environmental effects which would cause substantial adverse effects on human beings.

**Mitigation:**

Mitigation Measures M-6, M-8, M-9, and M-10 shall apply.

**20. DISCUSSION OF MITIGATION MEASURES, MONITORING, AND REPORTING PROGRAM**

The Department found that the project could result in potentially significant adverse impacts unless mitigation measures are required. A list of Mitigation that addresses and mitigates potentially significant adverse impacts to a level of non-significance follows.

Mitigation:

**M-1.** Existing vegetation surrounding the project site will be retained to maintain a visual buffer from off-site areas. The width of the buffer shall not be less than 50 feet. Specifically the riparian corridors and buffers along the Trinity River will be retained and not disturbed. The minimum width of this buffer is 100 feet from the stream transition line pursuant to HCC) Section 314-61.1 et seq.

**M-2.** To minimize potential impacts to special status species that may exist at the project site, the applicant shall adhere to the recommendations from the SHN Natural Resources Assessment (2016b).

**M-3.** To prevent impacts to wildlife species including amphibians and reptiles during the term of the project, water pumps will be used for the operation that contain screens meeting the CDFW fish screening criteria ([http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin\\_ScreenCriteria.asp](http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp)).

**M-4.** The applicant shall replace any riparian vegetation, at a 3:1 ratio, that is impacted by replacement and armoring of the existing culvert pipe outfall that drains stormwater from the existing vegetated basin (i.e. remnants of the former log pond) to the Trinity River. The replacement of riparian vegetation will occur at appropriate locations on the project site and could include the enhancement of existing wetland and riparian areas at the site. If applicable, a mitigation plan will be prepared and submitted to regulatory agencies for review and concurrence prior to replacement of the culvert.

**M-5.** The following provides means of responding to the circumstances of a significant discovery during the cultural monitoring of the final implementation of the proposed agricultural development within the project parcel. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

In the event that paleontological resources are discovered, work shall be stopped within 20 meters of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find.

If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

**M-6.** The applicant shall comply with the recommendations from the Manhard Consulting Limited Scope Geologic Hazards Assessment (2017c) which state the following:

(a) All foundations shall be founded a minimum of 24" inches below undisturbed native soils or structural fill compacted to 95% compaction per ASTM D1557.

(b) Prior to placement of structural fill, all disturbed soils and miscellaneous fills must be removed.

(c) Prior to construction activities, specific building and pond foundation and fill design investigations and construction details should be developed to refine the required excavation of fill materials and placement of structural fill requirements.

(d) All structural design shall be in conformance with the requirements of the 2016 California Building Code for seismic design category (SDC) E.

**M-7.** To address the increase in stormwater runoff that will occur due to the increase in impervious surface from the proposed project (8.88 acres), the applicant shall design, construct, and maintain stormwater facilities to detain stormwater on the project site through LID improvements such as a rainwater catchment pond and catchment tanks, a pre-treatment pond, bioswales, infiltration basins, and detention basins. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge without violating any water quality standards or waste discharge requirements. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing culvert pipe outfall from the existing vegetated basin (i.e. remnants of the former log pond). The pipe outlet will be armored with rock to provide energy dissipation.

**M-8.** To ensure the impacts to people at the proposed cannabis facility related to the failure of Trinity Dam are less than significant, the following mitigation shall be required for the project:

- 1) Notices shall be posted on the project site regarding potential of flooding from the failure of Trinity Dam in a major seismic event. The notices shall state that the property is located in an area subject to inundation by flood waters from Trinity Lake in the event of the failure of Trinity Dam and include maps showing the inundation areas and location of evacuation routes; and
- 2) The premises shall have radio receivers (preferably battery-operated) capable of receiving emergency broadcasts and instructions. The owners and employees of the proposed facility shall monitor such information during flood warning and respond accordingly.

**M-9.** The following shall apply to construction noise from tools and equipment:

- a) The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 5 P.M. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- b) No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- c) All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.

**M-10.** The applicant shall implement the detailed security plan contained in the Cultivation and Operations Plan prepared for the project (EFF, 2017). Implementation of the security plan measures will minimize impacts on local law enforcement service provided by the County Sheriff's Department.

A Mitigation and Monitoring Report is attached.

## **21. EARLIER ANALYSES.**

Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 16063(c)(3)(D). In this case a discussion should identify the following on attached sheets:

a) Earlier analyses used. Identify earlier analyses and state where they are available for review.

1. Humboldt County General Plan & EIR

2. Humboldt County Zoning Ordinance
3. GHD. 2015. Willow Creek Community Services District. Downtown Wastewater Development Project. Draft Environmental Impact Report. SCH#2015012014. June 2015.

Items 1-3 are available for review at Humboldt County Planning Division.

The following documents in Section 22, available at the Planning and Building Department, have adequately analyzed one or more effects of the project. Earlier analysis has been used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (CEQA Guidelines Section 15063 (c)(3)(D)).

b) Impacts Adequately Addressed. Some of the effects from the above checklist were within the scope of and adequately analyzed in the document(s) listed in Section 22, pursuant to applicable legal standards.

c) Mitigation Measures. It was not necessary to include mitigation measures, which were incorporated or refined from the document(s) described above (21. a) to reduce effects that are "Less than Significant with Mitigation Incorporated,"

## **22. SOURCE/REFERENCE LIST**

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**HUMBOLDT COUNTY PLANNING & BUILDING DEPARTMENT  
MITIGATION MONITORING REPORT**

**For The Emerald Family, LLC Conditional Use Permit and Special Permit**

APNs 522-201-001 and 522-491-016; Case Nos.: CUP16-022 and SP16-032; Apps No. 10406

**Project:** Emerald Family, LLC is applying for a Conditional Use Permit and Special Permit for cannabis cultivation, processing, nursery, and manufacturing facilities in accordance with Humboldt County Code Section 314-55.4 of Chapter 4 of Division I of Title III, Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The business is proposed to operate on an approximately 17-acre portion of a 41-acre parcel which was used in the past for agriculture, lumber milling, residential, and as a machinist and welding shop. The property currently contains three buildings including a 20,300 square foot metal commercial building, an 890 square foot office, and an approximately 775 square foot residence.

The project proposes to develop the site for cannabis uses in three phases which are listed on the Proposed Site Plan (Sheet C0). As described on the Proposed Site Plan:

**Phase 1**

It is proposed to construct or modify the following improvements for Phase I of the project:

- Existing Building "A": The existing 23,000 s.f. commercial metal building will be rehabilitated and used for processing activities by the applicant; and
- Proposed Cultivation Area: A 3-acre portion of the site is proposed to be used for greenhouse cultivation by the applicant. Approximately 10 metal hoop greenhouse structures (3,000 s.f. each) will be placed in the 3-acre cultivation area. During Phase 1 of the project, the area proposed for development of Greenhouse Building "C" in Phase 2 of the project (~4-acres), will also be used by the applicant for outdoor and greenhouse cultivation. Approximately two metal hoop greenhouse structures (3,000 s.f. each) will be placed on the western edge of the ~4-acre area and the remainder of the area will be used for "full sun" outdoor cultivation. The total area of greenhouse and outdoor cultivation during Phase 1 of the project will be approximately 7-acres.

**Phase 2**

Phase 2 of the project will require separate land use permit approval prior to initiation. It is proposed to construct or modify the following improvements for Phase 2 of the project:

- Existing Building "B": The existing 890 s.f. office building will be rehabilitated and leased for distribution and transportation activities;
- Proposed Greenhouse Building "C": A 160,000 s.f. greenhouse with eight (8) 20,000 s.f. rooms is proposed to be constructed and used for mixed light cultivation by the applicant. Development of this structure will reduce the greenhouse and outdoor cultivation area used in Phase 1 of the project from ~7-acres to 3-acres; Proposed Building "D": A 17,500 s.f. metal building is proposed to be constructed and used for manufacturing activities by the applicant;
- Rainwater Catchment Pond: An approximately 3 million gallon rain water catchment pond is proposed to be constructed on the western edge of the site that will be used as the main water supply for the cannabis facility. The rainwater catchment system will also include tanks, piping, pumps, and filters to capture, transport, and filter the rainwater. This pond will be designed to overflow into the existing vegetated basin at the site (i.e. remnants of the former log pond) (see Stormwater Management and Water Sources discussion below); and
- Pre-Treatment Pond: An approximately 1 million gallon pre-treatment pond is proposed to be constructed and used as part of the stormwater system (see Proposed Site Plan). Roof runoff from most of the existing and proposed structures at the site (except Existing Building "B" and the equipment storage building) will ultimately be pumped to the pre-treatment pond. This pond will be designed to overflow into the rainwater catchment pond (see stormwater management discussion below).

### **Phase 3**

Phase 3 of the project will require separate land use permit approval prior to initiation. It is proposed to construct or modify the following improvements for Phase 3 of the project:

- Proposed Building "E": A 4-story building that will contain a 10,000 s.f. nursery area and 10,000 s.f. breeding area on the 1<sup>st</sup> floor and 25,000 s.f. of indoor cultivation on the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> floors (total = 95,000). The nursery and breeding areas are proposed to be used by the applicant and the 2<sup>nd</sup> – 4<sup>th</sup> floors will be leased.

### **Hours/Days of Operation and Number of Employees**

The proposed cannabis facility will operate year-round, with peak activity during the fall months. The facility will operate 24 hours per day with the peak hours occurring from 9 a.m. to 5 p.m. There will be at least one security guard on site at all times and limited manufacturing activities will also occur in 8 hour shifts outside of the peak hours. It is anticipated that approximately 5 employees will be on-site outside of the peak operating hours. The maximum number of employees during Phases 1 and 2 of the project will be 50 employees. During Phase 3, the maximum number will increase to 75 employees.

### **Access/Parking**

The project site is accessed from Country Club Road which is a two-lane County roadway that is over 24 feet in width. Country Club Road is identified as a Major Collector by CalTrans (2011) and provides access to rural residential, agricultural, commercial, recreational, public facility, and industrial uses in the Willow Creek area. The existing access road to the project site is off Country Club Road and is in good condition. The access road is known as Flowers-McNeill Road which is a roadway that is currently utilized to access the project site, some rural residences, and an adjacent mini-storage business. Flower-McNeill Road connects with Country Club Road approximately 430 feet east of the project site. Flowers-McNeill Road is paved from the intersection with Country Club Road to several hundred feet into the project site. These roads will be used to connect the project site with Highway 299 which is an approximately 0.7 mile drive from the site.

As shown on the Proposed Site Plan, the project proposes to develop several internal access roads and parking areas to serve the facility. All of the internal access roads are proposed to be paved, with the exception of one small road section on the west side of the Proposed Greenhouse Building "C," that will be rocked with gravel. Also, the existing unpaved access road to the proposed rainwater catchment pond area will not be improved as part of the project. As shown on the Proposed Site Plan, the project proposes to develop 131 on-site parking spaces within four areas (Zones A-D) at the site. The full buildout of the project will result in approximately 3.25 acres of pavement and concrete at the site which will primarily be for vehicular/equipment access and parking.

### **Traffic**

During Phases 1 and 2, the proposed facility will generate up to 260 vehicle/truck trips per day. This will include 10 truck trips (5 in/5 out) from deliveries, 200 employee vehicle trips (4 trips per day per employee), and 50 vehicle/truck trips from the retail nursery (25 in/25 out). During Phase 3, the proposed facility will generate up to 360 vehicle trips per day. This will include 10 truck trips (5 in/5 out) from deliveries, 300 employee vehicle trips (4 trips per day per employee), and 50 vehicle/truck trips from the retail nursery (25 in/25 out). Truck trips will primarily occur from the import of unprocessed cannabis material and supplies necessary for cultivation and manufacturing as well as the export of packaged cannabis products.

### **Landscaping**

As shown on the Landscape Plan (Sheet No. L0) prepared by Manhard Consulting (2016b), the project proposes the installation of landscaping in an around the main parking areas (Zones A and B) and stormwater features at the entrance to the site. The Landscape Plan contains a Plant List of the plant species that will be installed to ornament the site which includes several native trees and shrubs. In addition, it is proposed to plant native species within and around the low impact development (LID) features that will be installed as part of the stormwater system, including the pre-treatment and rainwater catchment ponds.

## **Lighting**

The project site currently contains existing outdoor lighting around the commercial metal building and office. The new buildings proposed at the site will have perimeter lighting installed for security purposes. There will also be outdoor lighting in the main parking area and at the entrance gate. All new outdoor lighting will be the minimum lumens required for security purposes, directed downward, and shielded to prevent lighting spillover onto adjacent properties.

The applicant proposes to use mixed lighting for cultivation which means that at certain times of the year artificial lighting will be used in the greenhouse structure (see Proposed Site Plan). To ensure that light does not escape from the structure at night, the illuminated area within the greenhouse structure will be covered with breathable woven poly tarping when the artificial lighting is in use. The tarp cover will be part of an automated system that will pull the cover over the illuminated area prior to sunset and remove it after sunrise.

## **Stormwater Management**

Development of the proposed cannabis facility will create additional impervious surface and result in an increase in stormwater runoff. As described in the Preliminary Drainage Report prepared by Manhard Consulting (2017a), the project proposes to capture stormwater on-site through a variety of site design measures including catchment tanks, bioswales, detention basins, a pre-treatment pond, and a rainwater catchment pond.

The proposed stormwater features are dispersed between the proposed structures and paved surfaces and are routed in sequence. All runoff from the proposed structures will be diverted to the pre-treatment pond which overflows into the rainwater catchment pond for irrigations storage. The rainwater catchment pond will be designed to overflow to the existing vegetated basin (i.e. remnants of the former log pond). Some of the surface runoff from existing and proposed paved surfaces will also be directed, after pre-treatment, to the existing vegetated basin at the site. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing culvert pipe outfall from the existing vegetated basin to the Trinity River. Use of the existing outfall will require replacement of the culvert pipe under the main access road at the site (see Proposed Site Plan). The culvert pipe outlet will be armored with rock to provide energy dissipation (also see discussion under Riparian Habitat and Wetlands below).

During the 85th percentile, 24-hour storm event, sufficient stormwater detention will occur post construction. Detention volumes are expected to infiltrate at high rates and the use of LID features will minimize peak storm water runoff, improve the quality of runoff, and provide aesthetic improvement to the final development.

The stormwater system design described in the Preliminary Drainage Report (Manhard, 2017) is for the full buildout of the project (i.e. all 3 phases). The majority of the stormwater system will be constructed as part of Phase 1. The exceptions are the pre-treatment pond and rainwater catchment pond, which will be constructed as part of Phase 2 of the project. During Phase 1, stormwater will be directed, after pre-treatment, to the existing vegetated basin at the site.

## **Riparian Habitat and Wetlands**

Riparian habitat at the site primarily exists on the northern portion of the site along the Trinity River. The project has been designed to maintain a 150-foot setback from the Trinity River as recommended by California Department of Fish and Wildlife (CDFW). This exceeds the 100-foot setback requirements of Section 314-61.1 (Streamside Management Area Ordinance) of the Humboldt County Zoning Regulations for areas outside of Urban Development and Expansion Areas.

To protect this riparian habitat area during construction activities, it is proposed to install and maintain temporary chain link fencing on the edge of the 150-foot setback from the Trinity River. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Department. To protect this riparian habitat area during long-term opera-

tion of the project, it is proposed to install and maintain wildlife friendly split-rail fencing on the edge of the 150-foot setback from the Trinity River. The fencing will be installed at the completion of the construction phase once the temporary chain link fencing is removed.

According to the wetland delineation report prepared by SHN Consulting Engineers & Geologists (2016a), approximately 3,353 square feet of 3-parameter wetlands occur at the project site in the area where the former mill pond existed. Based on a follow up site visit with the Army Corps of Engineers on 03/14/17, approximately 2,407 square feet of "Other Water of the U.S." were also identified at the project site based on the presence of an Ordinary High Water Mark (OHWM). In total, 5,760 square feet of Waters of the U.S. have been identified at the site. The project does not propose any activities that will have an adverse effect on the federally protected (3-parameter) wetlands identified in the wetland delineation report (SHN 2016a). As shown on the Proposed Site Plan, the project will maintain an approximately 50 foot setback from the delineated jurisdictional areas at the site. The applicant is applying for a Special Permit to reduce the required 100-foot wetland setback to 50 feet.

To protect the delineated jurisdictional area during construction activities, it is proposed to install and maintain temporary chain link fencing on the edge of the proposed 50-foot setback. The fencing will be installed prior to the beginning of construction activities and will be removed after the final inspection is completed by the Building Department. To protect the delineated jurisdictional area during long-term operation of the project, it is proposed to install and maintain wildlife friendly split-rail fencing on the edge of the proposed 50-foot setback. The fencing will be installed at the completion of the construction phase once the temporary chain link fencing is removed.

As part of development of the stormwater system at the project site, the culvert pipe outlet from the existing vegetated basin to the Trinity River will need to be replaced. This culvert is currently in disrepair and will be replaced with a culvert of similar size. After replacement of the culvert pipe, the outlet will be armored with rock to provide energy dissipation. This activity will occur outside of the 150-setback from the Trinity River but will occur within the Army Corps jurisdictional area that was identified by the presence of an OHWM at the site visit on 03/14/17. A Nationwide Permit will be required by the Army Corps for some of these maintenance activities, and additional permitting may be required from other regulatory agencies. It is estimated that up to 300 s.f. of riparian vegetation could be impacted by replacement of the culvert and the armoring of the outlet. Any removal of riparian vegetation from these maintenance activities will be replaced at a 3:1 ratio at an appropriate location on the project site. This could include the enhancement of existing wetland and riparian areas on the project site. If applicable, a mitigation plan will be prepared and submitted to regulatory agencies for review and concurrence prior to replacement of the culvert.

### **Water Sources**

Water sources for the project will include water service from the Willow Creek Community Services District (WCCSD) and the capture of rainwater. During Phase 1 of the project, water service from WCCSD will be used for all aspects of the project. During Phase 2 of the project, the 3-acre (3 million gallon) rainwater catchment pond will be developed which will be the main source of water for the proposed facility. At full buildout of the project, the WCCSD water service would be used for domestic needs in the existing and proposed structures (e.g. restrooms, drinking water, and cooking in the employee kitchen), and the captured rainwater will be used for irrigation and manufacturing activities.

### **On-site Wastewater System**

The project site is located within the Willow Creek Community Services District (WCCSD) which does not have a wastewater treatment system. As such, the proposed project will be served by a new on-site wastewater treatment system. As shown on the Proposed Site Plan, this system will be located between the existing metal building at the site and the proposed greenhouse structure. According to the Septic Suitability Letter submitted by Manhard Consulting (2016a) to the Humboldt County Division of Environmental Health (DEH), the soils at the project site are capable of supporting on-site wastewater discharge from the proposed cannabis facility.

**Electrical Service**

The proposed cannabis facility will use an existing electrical service from Pacific Gas & Electric (PG&E). As noted above, Phase 3 of the project will involve the development of a four-story building which will include approximately 75,000 square feet of indoor cultivation.

Section 55.4.8.3 of the County's CMMLUO requires indoor cultivation operations to offset their greenhouse gas emissions associated with the generation of electricity necessary to power the operation. As stated in Section 55.4.8.3, "Electrical power for indoor cultivation operations including but not limited to illumination, heating, cooling, and ventilation, shall be provided by on-grid power with 100% renewable source, on-site zero net energy renewable source, or with purchase of carbon offsets of any portion of power not from renewable sources."

As noted in Section 55.4.8.3, there are several methods of off-setting the carbon footprint of proposed indoor cultivation operations. One of the easiest methods that will be available to the proposed project, which receives power from PG&E, will be to participate in the Redwood Coast Energy Authority (RCEA) Community Choice Energy (CCE) Program. This program will allow the proposed project to purchase on-grid power with 100% renewable sources. The RCEA Community Choice Energy program will begin in May 2017. For \$0.01 more per kilowatt-hour (kWh), the proposed project can opt up to Repower+ and offset the carbon footprint of the proposed indoor cultivation activities. Participation in the CCE Repower+ program will allow the proposed project to comply with Section 55.4.8.3 of the County's CMMLUO.

**Project Location:** The project site is located in Humboldt County, in the Willow Creek area, 500 feet west of the intersection of Flower-McNeil Road and Country Club Road, on the property known as 131 Flower-McNeil Road, and further described as Assessor's Parcel Number (APN) 522-201-001. SW ¼ of Section 28 and NW ¼ of Section 33, Township 07 North, Range 05 East.

**Application Number:** 10406    **Case Numbers:** CUP16-022 and SP16-032

**Assessor Parcel Numbers:** 522-201-001 and 522-491-016

Mitigation measures were incorporated into conditions of project approval for the above referenced project. The following is a list of these measures and a verification form that the conditions have been met. For conditions that require on-going monitoring, attach the Monitoring Form for Continuing Requirements for subsequent verifications.

**Mitigation Measures:**

**M-1.** Existing vegetation surrounding the project site will be retained to maintain a visual buffer from off-site areas. The width of the buffer shall not be less than 50 feet. Specifically the riparian corridors and buffers along the Trinity River will be retained and not disturbed. The minimum width of this buffer is 100 feet from the stream transition line pursuant to HCC) Section 314-61.1 et seq.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	
During construction activity and project operations.	Continuous		HCP&BD**			

**M-2.** To minimize potential impacts to special status species that may exist at the project site, the applicant shall adhere to the recommendations from the SHN Natural Resources Assessment (2016b).

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	



Prior to issuance of the building permit, during construction activity, and during project operations.	Once		HCP&BD** and CDFW*		
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**M-3.** To prevent impacts to wildlife species including amphibians, and reptiles during the term of the project, water pumps will be used for the operation that contain screens meeting the CDFW fish screening criteria ([http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin\\_ScreenCriteria.asp](http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp)).

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	
Prior to the building permit final inspection.	Once		HCP&BD** and CDFW*			

**M-4.** The applicant shall replace any riparian vegetation, at a 3:1 ratio, that is impacted by replacement and armoring of the existing culvert pipe outfall that drains stormwater from the existing vegetated basin (i.e. remnants of the former log pond) to the Trinity River. The replacement of riparian vegetation will occur at appropriate locations on the project site and could include the enhancement of existing wetland and riparian areas at the site. If applicable, a mitigation plan will be prepared and submitted to regulatory agencies for review and concurrence prior to replacement of the culvert.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	
Prior to issuance of the building permit, during construction activity, and during project operations.	Once		HCP&BD** and CDFW*			

**M-5.** The following provides means of responding to the circumstances of a significant discovery during the cultural monitoring of the final implementation of the proposed agricultural development within the project parcel. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

In the event that paleontological resources are discovered, work shall be stopped within 20 meters of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find.

If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human re-

mains (Public Resources Code, Section 7050.5). The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	
During construction activity and project operations.	Continuous		HCP&BD**			

**M-6.** The applicant shall comply with the recommendations from the Manhard Consulting Limited Scope Geologic Hazards Assessment (2017c) which state the following:

- (a) All foundations shall be founded a minimum of 24" inches below undisturbed native soils or structural fill compacted to 95% compaction per ASTM D1557.
- (b) Prior to placement of structural fill, all disturbed soils and miscellaneous fills must be removed.
- (c) Prior to construction activities, specific building and pond foundation and fill design investigations and construction details should be developed to refine the required excavation of fill materials and placement of structural fill requirements.
- (d) All structural design shall be in conformance with the requirements of the 2016 California Building Code for seismic design category (SDC) E.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	
Prior to the issuance of building and/or grading permits for the project.	Once		HCP&BD**			

**M-7.** To address the increase in stormwater runoff that will occur due to the increase in impervious surface from the proposed project (8.88 acres), the applicant shall design, construct, and maintain stormwater facilities to detain stormwater on the project site through LID improvements such as a rainwater catchment pond and catchment tanks, a pre-treatment pond, bioswales, infiltration basins, and detention basins. The proposed stormwater improvements will ensure that additional stormwater runoff from the proposed project infiltrates into the ground on-site or is pre-treated prior to discharge without violating any water quality standards or waste discharge requirements. The final discharge from the area for all stormwater that does not infiltrate, evaporate or is consumed, will be discharged after pre-treatment through an existing culvert pipe outfall from the existing vegetated basin (i.e. remnants of the former log pond). The pipe outlet will be armored with rock to provide energy dissipation.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	

Prior to the building permit final inspection.	Once		HCP&BD**		
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**M-8.** To ensure the impacts to people at the proposed cannabis facility related to the failure of Trinity Dam are less than significant, the following mitigation shall be required for the project:

- 1) Notices shall be posted on the project site regarding potential of flooding from the failure of Trinity Dam in a major seismic event. The notices shall state that the property is located in an area subject to inundation by flood waters from Trinity Lake in the event of the failure of Trinity Dam and include maps showing the inundation areas and location of evacuation routes; and
- 2) The premises shall have radio receivers (preferably battery-operated) capable of receiving emergency broadcasts and instructions. The owners and employees of the proposed facility shall monitor such information during flood warning and respond accordingly.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	
During project operations.	Ongoing		HCP&BD**			

**M-9.** The following shall apply to construction noise from tools and equipment:

- a) The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 5 P.M. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- b) No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- c) All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	
During construction activities.	Ongoing		HCP&BD**			

**M-10.** The applicant shall implement the detailed security plan contained in the Cultivation and Operations Plan prepared for the project (EFF, 2017). Implementation of the security plan measures will minimize impacts on local law enforcement service provided by the County Sheriff's Department.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance		Comments / Action Taken
				Yes	No	
During project operations.	Ongoing		HCP&BD**			

\* CDFW = California Department of Fish & Wildlife

\*\* HCP&BD = Humboldt County Planning and Building Department