MITIGATION MONITORING REPORT

Record Number: PLN-2022-18036

Assessor Parcel Numbers: 222-084-004-000 and 222-085-002-000

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 ongoing monitoring, attach the Monitoring Form for Continuing Requirements for subsequent verifications.

Mitigation Measures:

Biological Resources

BIO-1: Discharge of sediment will be controlled and minimized with the implementation of best management practices (BMPs) on all disturbed soils that have the potential to discharge into area watercourses. Applicable BMPs include, but are not limited to, installation of silt fences, straw wattles, and placement of seed-free rice straw. BMPs will be installed at all access points to the work sites, which will minimize the potential for sediment delivery and deleterious effects on salmonids.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations (ongoing)	Applicant		HCP&BD*	Inspection report	

BIO-2 - Crossing upgrades and point of diversion installation will be constructed when intermittent watercourses are dry between June 1 and October 15.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During project construction	Applicant		HCP&BD* in consultation with CDFW	Inspection report	

BIO-3: To reduce the risk of amphibian entrapment, the Project will follow the Fish Screening Criteria for Salmonids in Appendix S of the California Salmonid Stream Habitat Restoration Manual (Flosi et. al 2010),as well as NOAA Restoration Center/Army Corps of Engineers programmatic biological opinion requirements for all diversion and outflow structures.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During project construction	Applicant		HCP&BD* in consultation with CDFW	Inspection report	

BIO-4: A visual observation survey of the Project areas will be conducted within two weeks prior to the start of construction to determine if any special status amphibians are present.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
Prior to construction	Applicant		HCP&BD* in consultation with CDFW	Inspection report	

BIO-5: If special status amphibians are present, then a qualified biologist will be present immediately prior to the start of construction to remove any amphibians and relocate them to suitable habitat.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
D\Prior to construction and during project construction	Applicant		HCP&BD* in consultation with CDFW	Inspection report	

BIO-6: The Project manager or qualified designee will conduct daily morning inspections of the area slated for work to determine if special status amphibians entered the areas overnight. Any individuals will be captured and relocated prior to the start of the day's work.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
Daily during project construction	Applicant		HCP&BD* in consultation with CDFW	Inspection report	

BIO-7: Terrestrial woody debris will be left in place to the greatest extent practicable during operations within the riparian areas.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During project construction	Applicant		HCP&BD* in consultation with CDFW	Inspection report	

BIO-8: To support final design, a qualified biologist will conduct a detailed assessment of conditions downstream from the proposed point of flow release to the confluence of mainstem Sproul Creek, to determine the habitat suitability for special status amphibians and the potential for Project impacts. In addition to assessing habitat suitability, the survey will also evaluate the observed distribution of special status amphibian species. The qualified biologist will work with CDFW staff prior to the assessment to develop a study plan including survey timing, extent, and protocols. Findings and recommendations will be summarized in a technical memorandum that will be included as an appendix to the Project's Biological Resources Technical Report. A draft of the memo will be submitted to CDFW for review and comment prior to being finalized.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
Prior to issuance of the grading permit	Applicant		HCP&BD* in consultation with CDFW	To be submitted before issuance of grading permit.	

BIO-9: The 90% and 100% project design will incorporate revisions based on the findings and recommendation from the amphibian habitat assessment (BIO-8). Design revisions may include relocation of the primary point of flow release to reduce anticipated impacts, and/or installation of multiple points of release that promote hyporheic flow and natural cooling of the released water.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
Prior to issuance of the grading permit	Applicant		HCP&BD* in consultation with CDFW	To be submitted before issuance of grading permit.	

BIO-10: During final design and permitting, an operations and management plan will be developed that identifies approaches and protocols for avoidance of impacts to special status amphibians including a monitoring plan. The operations and management plan will contain a decision matrix tool identifying the conditions for flow release and variations in discharge rate based on receiving water conditions.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken

Prior to issuance of grading permit	Applicant		HCP&BD* in consultation with CDFW	To be submitted before issuance of grading permit.	

BIO-11: During project operations, adaptive management of the flow releases will be conducted to avoid impacts to special status amphibians based on monitoring results. The project will have temperature thresholds to avoid discharging water that is warmer than the receiving waters, when increases in temperature may result in negative effects on potentially present special status species based on the realized niche temperature ranges described in Welsh and Hodgson (2008). The project will also avoid discharging water that results in raising water temperatures to harmful levels between the point of release and the confluence of La Doo Creek and West Fork Sproul Creek. Water warmer than the receiving waters may be released when the resulting augmentation does not result in temperatures above optimal levels.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
For the life of the project	Applicant		HCP&BD* in consultation with CDFW	Reporting to be submitted annually.	

BIO-12: Following project implementation, effectiveness monitoring will be conducted for a minimum of five years to evaluate project success. Monitoring will occur on a monthly time step from the point of discharge down to the confluence of Sproul Creek. Wet/dry mapping will be done before, during and after augmentation to assess project effects on the amount of wetted channel. A qualified biologist will also evaluate broad-level changes in distribution and relative abundance of special status species.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
For five years following implementation of project.	Applicant		HCP&BD* in consultation with CDFW	Reporting to be submitted annually	

BIO-13: A pre-construction nesting bird survey will be conducted during the breeding season and within two weeks of the start of construction. Appropriate buffers will be established around all active nests within the Project area.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
Prior to construction.	Applicant		HCP&BD* in consultation with CDFW	Inspection report	

BIO-14: A vegetation assessment will be conducted in the spring months during the final design phase of the project to determine whether the project will impact the *California oatgrass* sensitive natural community. If it is determined that the California oatgrass sensitive natural community is present within the pond and fill area footprints, the Project's revegetation plan will be updated to mitigate the impact by increasing California oatgrass cover within the project footprint or in suitable areas adjacent to the project footprint.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
Prior to construction.	Applicant		HCP&BD* in consultation with CDFW	Assessment to be submitted prior to grading permit.	

BIO-15: Planting of seedlings shall begin after December 1, or when sufficient rainfall has occurred to ensure the best chance of survival of the seedlings, but in no case after April 1.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During project construction	Applicant		HCP&BD*	Inspection report	

BIO-16 - Disturbed and compacted areas shall be re-vegetated with a diversity of native plant species that mimics native communities. Unless otherwise specified, the standard for success is 80 percent survival of plantings or 80 percent ground cover for broadcast planting of seed after a period of 3 years.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During project construction	Applicant		HCP&BD* in consultation with CDFW	Inspection report	

BIO-17 - To ensure that the spread or introduction of invasive exotic plants shall be avoided to the maximum extent possible, equipment shall be cleaned of all dirt, mud, and plant material prior to entering a work site. When possible, invasive exotic plants at the work site shall be removed. Areas disturbed by project activities will be restored and planted with native plants.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During project construction	Applicant		HCP&BD*	Inspection report	

BIO-18 - Mulching and seeding shall be done on all exposed soil which may deliver sediment to a stream. Soils exposed by project operations shall be mulched to prevent sediment runoff and transport. Mulches shall be applied so that not less than 90% of the disturbed areas are covered. All mulches, except hydro-mulch, shall be applied in a layer not less than two (2) inches deep. Where feasible, all mulches shall be kneaded or tracked-in with track marks parallel to the contour, and tackified as necessary to prevent excessive movement. All exposed soils and fills, including the downstream face of the road prism adjacent to the outlet of culverts, shall be reseeded with a mix of native grasses common to the area, free from seeds of noxious or invasive weed species, and applied at a rate which will ensure establishment.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During project construction	Applicant		HCP&BD*	Inspection report	

Cultural Resources

CUL-1: Inadvertent Discovery Protocol

Inadvertent Discovery of Cultural Resources - If cultural resources are encountered during construction activities, all onsite work shall cease in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist will be retained to evaluate and assess the significance of the discovery, and develop and implement an avoidance or mitigation plan, as appropriate. For discoveries known or likely to be associated with Native American heritage (prehistoric sites and select historic period sites), the tribes listed in Section 6.2 and those that the County has on file shall also be contacted immediately to evaluate the discovery and, in consultation with the project proponent, the County, and consulting archaeologist, develop a treatment plan in any instance where significant impacts cannot be avoided. Prehistoric materials which could be encountered include obsidian and chert debitage or formal tools, grinding implements, (e.g., pestles, handstones, bowl mortars, slabs), locally darkened midden, deposits of shell, faunal remains, and human burials. Historic archaeological discoveries may include nineteenth century building foundations, structural remains, or concentrations of artifacts made of glass, ceramics, metal or other materials found in buried pits, wells or privies.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant and, if necessary, a qualified professional archaeologist		HCP&BD* in consultation with Tribal governments as necessary	If needed, the qualified professional archaeologist will prepare a Compliance Report.	

CUL-2: Inadvertent Discovery Protocol Human Remains

Inadvertent Discovery of Human Remains - If human remains are discovered during project construction, work shall stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent human remains (Public Resources Code, Section 7050.5). The county coroner shall 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 Native American heritage Commission (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 shall 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	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant and, if necessary, a qualified professional archaeologist		HCP&BD* in consultation with Tribal governments as necessary	If needed, the qualified professional archaeologist will prepare a Compliance Report.	

CR-3: Procedures for treatment of an inadvertent discovery of human remains:

a) Immediately following discovery of known or potential human remains all ground-disturbing activities at the point of discovery shall be halted.

b) No material remains shall be removed from the discovery site, a reasonable exclusion zone shall be cordoned off.

c) The property owner shall be notified and the Permittee Project Manager shall contact the county coroner.

d) The Permittee shall retain the services of a professional archaeologist to immediately examine the find and assist the process.

e) All ground-disturbing construction activities in the discovery site exclusion area shall be suspended.

f) The discovery site shall be secured to protect the remains from desecration or disturbance, with 24-hour surveillance, if prudent.

g) Discovery of Native American remains is a very sensitive issue, and all project personnel shall hold any information about such a discovery in confidence and divulge it only on a need-to-know basis, as determined by the CDFW.

h) The coroner has two working days to examine the remains after being notified. If the remains are Native American, the coroner has 24 hours to notify the NAHC in Sacramento (telephone 916/653-4082).

i) The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) of the deceased Native American.

j) The MLD may, with the permission of the landowner, or their representative, inspect the site of the discovered Native American remains and may recommend to the landowner and Permittee means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site (Public Resource Code, Section 5097.98(a)). The recommendation may include the scientific removal and non-

destructive or destructive analysis of human remains and items associated with Native American burials.

k) Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner or his/her authorized representative rejects the recommendation of the MLD and mediation between the parties by the NAHC fails to provide measures acceptable to the landowner, the landowner or his/her authorized representatives shall re-inter the human remains and associated grave offerings with appropriate dignity on the property in a location not subject to further subsurface disturbance in accordance with Public Resource Code, Section 5097.98(e).

l) Following final treatment measures, the Permittee shall ensure that a report is prepared that describes the circumstances, nature and location of the discovery, its treatment, including results of analysis (if permitted), and final disposition, including a confidential map showing the reburial location. Appended to the report shall be a formal record about the discovery site prepared to current California standards on DPR 523 form(s). Permittee shall ensure that report copies are distributed to the appropriate California Historic Information Center, NAHC, and MLD.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant and, if necessary, a qualified professional archaeologist		HCP&BD* in consultation with Tribal governments as necessary	If needed, the qualified professional archaeologist will prepare a Compliance Report.	

Geology and Soils

GEO-1: Work sites shall be winterized at the end of each day during the work period when rainfall greater than 1/2 inch is forecasted to minimize the eroding of unfinished excavations. Winterization procedures shall be supervised by a professional trained in erosion control techniques and involve taking necessary measures to minimize erosion on unfinished work surfaces. Winterization includes the following: smoothing unfinished surfaces to allow water to freely drain across them without concentration or ponding; compacting unfinished surfaces where concentrated runoff may flow with an excavator bucket or similar tool, to minimize surface erosion and the formation of rills; and installation of culverts, silt fences, and other erosion control devices where necessary to convey concentrated water across unfinished surfaces, and trap exposed sediment before it leaves the work site.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

GEO-2: Effective erosion control measures shall be in-place at all times during construction. Construction shall not begin until all temporary erosion controls (i.e., straw bales or silt fences that are effectively keyed-in) are in place down slope or down stream of project activities within the riparian area. Erosion control measures shall be maintained throughout the construction period. If continued erosion is likely to occur after construction is completed, then appropriate erosion prevention measures shall be implemented and maintained until erosion has subsided.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

GEO-3: An adequate supply of erosion control materials (gravel, straw bales, shovels, etc.) shall be maintained onsite to facilitate a quick response to unanticipated storm events or emergencies.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

GEO-4: Upon project completion, all exposed soil present in and around the project site shall be stabilized within 7 days. Soils exposed by project operations shall be mulched to prevent sediment runoff and transport. Mulches shall be applied so that not less than 90% of the disturbed areas are covered. All mulches, except hydro-mulch, shall be applied in a layer not less than two (2) inches deep. Where feasible, all mulches shall be kneaded or tracked-in with track marks parallel to the contour, and tackified as necessary to prevent excessive movement. All exposed soils and fills, including the downstream face of the road prism adjacent to the outlet of culverts, shall be reseeded with a mix of native grasses common to the area, free from seeds of noxious or invasive weed species, and applied at a rate which will ensure establishment.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
After completion of ground disturbing activities.	Applicant		HCP&BD*	Inspection report	

GEO-5: Inadvertent Discovery of Unique Paleontological Resources or Unique Geologic Features – If unique paleontological resources or unique geologic features are discovered during project construction, work shall stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie the features. State laws relating to such discoveries will be followed to document findings and work will only proceed after authorization by all relevant jurisdictions.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operation	Applicant		HCP&BD*	Inspection report	

Hazards and Hazardous Materials

HAZ-1: Heavy equipment that will be used in these activities will be in good condition and will be inspected for leakage of coolant and petroleum products and repaired, if necessary, before work is started.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

HAZ-2: When operating vehicles in wetted portions of the stream channel, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, the responsible party shall, at a minimum, do the following:

a) All equipment shall be cleaned to remove external oil, grease, dirt, or mud. Wash sites shall be located in upland locations so that dirty wash water does not flow into the stream channel or adjacent wetlands;
b) Check and maintain on a daily basis any vehicles to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life, wildlife, or riparian habitat;
c) Take precautions to minimize the number of passes through the stream and to avoid increasing the turbidity of the water to a level that is deleterious to aquatic life; and
d) Allow the work area to rest to allow the water to clear after each individual pass of the vehicle that causes a plume of turbidity above background levels, resuming work only after the stream has reached the original background turbidity levels.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

HAZ-3: All equipment operators shall be trained in the procedures to be taken should an accident occur. Prior to the onset of work, the Permittee shall prepare a Spill Prevention/Response plan to help avoid spills and allow a prompt and effective response should an accidental spill occur. All workers shall be informed of the importance of preventing spills. Operators shall have spill clean-up supplies on site and be knowledgeable in their proper deployment.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

HAZ-4: Absorbent materials designed to clean up leaks of hydraulic fluid and other contaminants will be stored in the cab of all heavy equipment operating in or near a stream to provide spill containment and cleanup in case of an accidental spill. In the event of a spill, work shall cease immediately. Clean-up of all spills shall begin immediately. The responsible party shall notify the State Office of Emergency Services at 1-800-852-7550 and the CDFW immediately after any spill occurs and shall consult with the CDFW regarding clean-up procedures.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

HAZ-5: All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 65 feet from any riparian habitat or water body and place fuel absorbent mats under pump while fueling. The USACE and the CDFW will ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the Permittee shall prepare a plan to allow a prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

HAZ-6: Location of staging/storage areas for equipment, materials, fuels, lubricants, and solvents, will be located outside of the streams high water channel and associated riparian area. The number

of access routes, number and size of staging areas, and the total area of the work site's activity shall be limited to the minimum necessary to complete the restoration action. To avoid contamination of habitat during restoration activities, trash will be contained, removed, and disposed of throughout the project.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

HAZ-7: Petroleum products, fresh cement/concrete, and other deleterious materials shall not enter the stream channel.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

HAZ-8: Stationary equipment such as motors, pumps, generators, compressors, and welders, located within the dry portion of the stream channel or adjacent to the stream, will be positioned over drip-pans.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

Hydrology and Water Quality

HYD-1: Project operations will be adaptively managed based on flow, temperature and aquatic habitat monitoring results. These monitoring results will be presented to regulatory agency staff on an annual basis and/or as required by final permit conditions. In coordination with regulatory agency staff, the project team will adapt project operations as necessary to optimize aquatic habitat benefits resulting from the project while reducing impacts to a less than significant level. This may include changes to diversion timing/rates, changes to flow release timing/rates, and/or other changes to project operations.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

Noise

NOISE-1: To reduce the possibility of the construction noise and vibrations becoming an annoyance to sensitive receptors near the Project, exterior construction activity shall be confined to the weekday hours of 7:00 am to 7:00 pm or until sunset, whichever is later, and weekend hours of 8:00 am to 6:00 pm or until sunset, whichever is later. No heavy equipment construction activities shall be allowed on Sundays or holidays.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

NOISE 2: Construction equipment shall be properly maintained and equipped with noise control devices, such as mufflers and shrouds, in accordance with manufacturers' specifications.

Implementation Time Frame	Party Responsible for Implementation	Date Verified	To Be Verified By	Form of Verification	Comments / Action Taken
During construction activity and project operations	Applicant		HCP&BD*	Inspection report	

* HCP&BD = Humboldt County Planning and Building Department