

9.0 INVENTORY OF MITIGATION MEASURES

AESTHETICS

- MM 5.1-1: Prior to issuance of a grading permit, the project applicant shall submit an updated landscape plan for review and approval by the City of Redding Development Services Department. The updated landscape plan shall incorporate reasonable and feasible landscaping and architectural features that would screen the proposed buildings from public views along the Sacramento River.
- MM 5.1-2a: Prior to issuance of a grading permit, the project applicant shall submit an updated photometric plan for review and approval by the City of Redding Development Services Department. The updated photometric plan shall be based on final site improvement plans and demonstrate that all exterior illumination is shielded and directed away from adjacent residents and the Henderson Open Space and that lighting does not exceed standards and requirements of RMC §18.40.090, at the property line of the proposed project.
- MM 5.1-2b: Prior to issuance of an occupancy permit, the project applicant shall provide an “As-built Photometric Verification Study” demonstrating compliance with applicable standards and requirements of the RMC §18.40.090. A permit to occupy shall not be issued if lighting exceeds the standards and requirements of the code. Appropriate changes may include the relocation of light standards, additional shielding and other mechanisms acceptable to the City of Redding Development Services Department.

AIR QUALITY

- MM 5.2-1: Prior to issuance of a grading permit, the project applicant shall submit a grading plan for review and approval by the City of Redding Development Services Department. The following specifications shall be included to reduce short-term air quality impacts attributable to the onsite and offsite construction activities identified in Section 3.0, PROJECT DESCRIPTION, and improvements noted in **MM 5.14-1**, **MM 5.14-3**, and **MM 5.14-4** in Section 5.14, TRAFFIC AND CIRCULATION:
- During all construction activities, all diesel-fueled construction equipment, including but not limited to rubber-tired dozers, graders, scrapers, excavators, asphalt paving equipment, cranes, and tractors, shall be California Air Resources Board (CARB) Tier 4 interim or better as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations.
 - During all construction activities, all architectural coatings applied shall contain a low content of volatile organic compounds (VOC) (i.e., 100 grams/liter) as required by the Green Building Code and as adopted by the City of Redding.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. Equipment maintenance records shall be kept onsite and made available upon request by the City of Redding or Shasta County AQMD.
- All material excavated, stockpiled, or graded shall be sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day.
- All unpaved areas (including unpaved roads) with vehicle traffic shall be watered periodically or have dust palliatives applied for stabilization of dust emissions.
- All onsite vehicles shall be limited to a speed of 15 miles per hour on unpaved roads.
- All land clearing, grading, earth-moving, or excavation activities on the project site shall be suspended when sustained winds are expected to exceed 20 miles per hour.
- All portions of the development site which have been stripped of vegetation by construction activities and left inactive for more than ten days shall be seeded and/or watered until a suitable grass cover is established.
- All trucks hauling dirt, sand, soil, or loose material shall be covered or shall maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision will be enforced by local law enforcement agencies.
- All material transported offsite shall be either sufficiently watered or securely covered to prevent a public nuisance.
- Wheel washers shall be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip.
- Prior to final occupancy, the applicant shall re-establish ground cover on the construction site through seeding and watering.
- Off-road construction equipment shall not be left idling for periods longer than 5 minutes when not in use.

BIOLOGICAL RESOURCES

MM 5.3-1a: To prevent direct mortality of bats roosting beneath the roof flashing of the small room connecting the two existing onsite buildings, the following measures shall be implemented prior to building demolition:

- A qualified bat biologist (one possessing a Memorandum of Understanding with CDFW for work with bats) shall either conduct, or supervise, the humane eviction of bats from the onsite structures. Work may consist of installation of appropriate blockage materials and one-way exits at the roof flashing and wood fascia or partial dismantling of the structure in a controlled fashion to eliminate bat roosting habitat.
- Humane bat eviction shall only be conducted within seasonal periods of bat activity during which specific temperature and precipitation criteria are met. Eviction may be conducted between about March 15th (or after evening temperatures rise above 45°F) and April 30th, or between August 15th and about October 1st (or before evening temperatures fall below 45°F); no eviction work shall be conducted if more than ½-inch of rainfall has occurred within the preceding 24 hours.

MM 5.3-1b: To avoid the take of colonial bats potentially roosting onsite, removal of Tree B-1 and B-2 as identified on EIR Figure 5.3-2, IDENTIFIED BAT ROOSTING HABITATS, shall be conducted utilizing the following two-step tree removal process during specified seasonal periods:

- Removal of bat habitat trees shall be conducted over two consecutive days. All work shall be conducted or supervised by a qualified bat biologist. On the first day, non-habitat features of the trees (e.g., branches without cavities, crevices, or exfoliating bark) shall be removed with chainsaws and be chipped onsite to create high levels of noise and vibration. On the following day, the trees shall be removed from the site.
- Two-step removal shall only be conducted within seasonal periods of bat activity during which specific temperature and precipitation criteria are met. Tree removal may be conducted between about March 15th (or after evening temperatures rise above 45°F) and April 30th, or between August 15th and about October 1st (or before evening temperatures fall below 45°F); no eviction work shall be conducted if more than ½-inch of rainfall has occurred within the proceeding 24 hours.

MM 5.3-1c: Removal of trees with a diameter at breast height (dbh) of 10 inches or greater shall only be conducted within seasonal periods of bat activity during which specific temperature and precipitation criteria are met. Removal of such trees may be conducted between about March 15th (or after evening temperatures rise above 45°F) and April 30th or between August 15th and about October 1st (or before evening

temperatures fall below 45°F); no eviction work shall be conducted if more than ½-inch of rainfall has occurred within the preceding 24 hours.

One to two days prior to removal of trees with a dbh of 10 inches or greater, smaller trees and shrubs shall be removed using chainsaws to create noise and vibration disturbance. Additionally, the cuttings shall be chipped onsite to further increase noise and vibration levels. Subsequently, trees larger than 10 inches dbh shall be removed, beginning with smaller trees first.

MM 5.3-1d: Prior to the initiation of vegetation removal and project construction, the project applicant shall retain a biologist to conduct a pre-construction survey to confirm presence/absence of the western pond turtle onsite. The survey shall be conducted by a qualified biologist (one deemed acceptable by CDFW staff) and shall consist of at least one survey of the project site conducted a maximum of one week prior to the start of vegetation removal. If earth-disturbing construction activities are not initiated immediately following vegetation removal, then a second survey for western pond turtles shall be conducted a maximum of one week prior to the start of earth-disturbing construction activities. If a western pond turtle is found, the biologist shall move it to a safe location within similar habitat. If a western pond turtle nest is found, the biologist shall flag the site and determine if project activities can avoid affecting the nest. If the nest cannot be avoided, it will be excavated and re-buried at a suitable location outside of the active construction zone by a qualified biologist.

MM 5.3-1e: To the extent feasible, vegetation removal and initiation of intensive site construction activities should occur before January 1st or after August 31st to avoid impacts on nesting bald eagles and migratory birds. If vegetation removal or initiation/re-initiation of intensive site construction occurs during the nesting season, a nesting survey shall be conducted by a qualified biologist (one deemed acceptable by CDFW staff) to identify active nests in and adjacent to the work area. The survey shall be conducted no more than one week prior to the beginning of the onsite activity. If nesting birds are found, the nest shall not be disturbed until after the young have fledged. Further, to prevent nest abandonment and mortality of chicks and eggs, no vegetation removal or construction activities shall occur within 500 feet of an active nest (or no closer than 660 feet from an active bald eagle nest), unless a smaller buffer distance is approved by a qualified biologist.

MM 5.3-1f: Grading plans prepared by the project applicant shall note the following construction specifications designed to avoid the introduction and spread of weeds:

- Using only certified weed-free erosion control materials, mulch, and seed.
- Precluding the use of rice straw in riparian areas.
- Limiting any import or export of fill material to material known to be weed free.
- Requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility prior to entering the County. If the equipment has most recently been used within the County, cleaning is not required.

- Requiring the construction contractor to thoroughly wash all equipment at a commercial wash facility immediately upon termination of its use at the project site.
- The project contractor shall continuously comply with the above stated measures throughout the duration of onsite and offsite construction activities.

MM 5.3-1g: Prior to the issuance of a building permit, the project applicant shall provide written evidence from a licensed architect that the proposed onsite buildings have been designed with features that serve to minimize bird strikes, such as those described in the San Francisco Planning Department's *Standards for Bird Safe Buildings* (e.g., bird friendly glazing selections, building and fenestration strategies, and/or lighting methods). To ensure compliance, this measure shall be completed to the satisfaction of the City of Redding Development Services Director.

MM 5.3-2a: Direct impacts to riparian habitat and work under the riparian canopy shall be minimized to the extent feasible. Grading plans prepared by the project applicant shall note the following construction specifications designed to avoid to minimize the loss of riparian habitat as well as indirect effects on riparian habitat include the following:

- Erect construction fencing along the outer edges of the construction zone as delineated on EIR Figure 5.3-3, TEMPORARY CONSTRUCTION FENCING LOCATIONS, to prevent accidental entry into riparian habitat and/or under riparian canopy. The fencing shall be regularly inspected and maintained throughout the duration of construction, and shall be removed upon completion of construction.
- Where work must occur under the canopy of riparian vegetation planned for retention, the lower branches of the trees shall be pruned (not broken) as needed to allow access under the canopy.
- Stockpile equipment and materials outside of riparian canopy, in designated staging areas.

MM 5.3-2b: Prior to the issuance of a grading permit the project applicant shall submit to the City of Redding Development Services Director a planting plan and implementation schedule that addresses the following riparian habitat mitigation:

- 20 Fremont cottonwood trees and one valley oak replaced at no less than a 3:1 ratio for a total of 63 trees. Planting should occur as close to the project site as possible and be in close proximity to the Sacramento River or to a large perennial stream. A vegetation planting and management plan shall be prepared that identifies the planting area size and location, mitigation site protections (e.g., conservation easement or deed restrictions), planting objectives in terms of acreage or number of plants by species, planting and maintenance methods, success criteria, duration of monitoring, corrective actions to be taken if success criteria are not met, and reporting requirements. The plan shall be reviewed and approved by the City of

Redding and the applicant shall be responsible for ensuring that the planting plan is fully implemented; or

- Purchase riparian habitat credits at the Stillwater Plains Mitigation Bank at a 3:1 ratio.

CULTURAL RESOURCES

- MM 5.4-1a: In the event that cultural resources including paleontological resources are inadvertently discovered during the project activities, work shall be halted in that area within 100 feet (30 meters) of the find until a qualified archaeologist (36 CFR Part 61) can assess the significance of the find (i.e., whether it includes any historical resources, unique archaeological resources, tribal cultural resources, or unique paleontological resources). Construction activities could continue in other areas. If the discovery proves to include historical resources, unique archaeological resources, and/or unique paleontological resources, additional work, such as data recovery excavation, may be warranted and would be discussed in consultation with Dignity Health or their authorized representative, the City, or any other relevant regulatory agency. This stipulation does not apply to those cultural resources evaluated and determined not Historical Resources/Historic Properties.
- MM 5.4-1b: Should any previously unevaluated prehistoric artifacts, midden soils, human remains, etc. be encountered, the project applicant shall notify the Native American community, specifically, the Wintu Tribe.
- MM 5.4-1c: Prior to the issuance of a grading permit and/or action that would permit project site disturbance (whichever occurs first), the project applicant shall provide written evidence to the City of Redding Development Services Department that the project applicant has retained a tribal (Wintu) monitor to be present during construction, specifically during initial ground disturbance, in the instance that any prehistoric artifacts, midden soils, or human remains are encountered.
- MM 5.4-1d: If human remains are discovered during development of the project, as per State law, all activity within 50 feet of the discovery shall cease immediately, the Contractor shall immediately notify the Shasta County Coroner's Office, and a qualified archaeologist and Native American monitor shall be contacted. Should the Coroner determine the human remains to be Native American, the Native American Heritage Commission shall be contacted pursuant to Public Resources Code §5097.98. Public Resources Code §5097.98(c) specifically states: "The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods."
- MM 5.4-1e: In the event that the project plan changes to include areas not surveyed, additional archaeological reconnaissance may be required.

GEOLOGY AND SOILS

No mitigation measures are required.

GREENHOUSE GASES AND CLIMATE CHANGE

MM 5.6-1: Dignity Health shall prepare and implement a Greenhouse Gas Reduction Plan (GGRP) that contains specific design features and actions to be implemented by the project prior to year 2035, and quantify the emission reductions associated with those features and actions. The GGRP shall demonstrate achievement of a project emissions inventory that is less than the 2035 threshold of 1.7 metric tons of carbon dioxide equivalent (CO₂e) per service population by year 2035. The emissions inventory must be prepared using model(s) and methodology accepted by the Shasta County Air Quality Management District. The GGRP shall be submitted to the City for approval prior to the issuance of grading permits. The GGRP may be updated after City approval to account for emission reductions associated with new regulations, as applicable. Any updates to the GGRP must be submitted to the City for approval. Specific measures may include (but are not limited to):

- Implement a voluntary trip reduction program for all employees.
- Implement a voluntary ride sharing program for all employees.
- Provide a Commute Trip Reduction subsidy for employees consistent with California Air Pollution Control Officer's Association's Greenhouse Gas Measure TRT-4 (CAPCOA 2010).
- Utilize high pressure sodium cutoff lights in outdoor lighted areas.
- Use Energy Star energy efficient fans and refrigerators.
- Utilize 100 percent renewable energy through a community choice aggregate (CCA), buy into 100 percent renewable from the local energy utility, or onsite generation, or a combination thereof.
- Generate at least 15 percent of the project's energy demand through onsite renewable energy.
- Use 100 percent electric lawnmowers and leafblowers.
- Purchase verifiable greenhouse gas offsets.

The bullet points listed above are provided as a guide and can be substituted with other measures when shown to achieve the same result of reducing annual emissions to less than 1.7 MT CO₂e per service population by year 2035.

HAZARDS AND HAZARDOUS MATERIALS

MM 5.7-1: Prior to the issuance of a demolition or grading permit (whichever occurs first), the project applicant shall complete to the satisfaction of the City of Redding Development Services Department asbestos sampling and analysis to determine the presence of Asbestos Containing Materials (ACM) in existing construction building materials left onsite or within existing buildings. Existing construction materials are considered concrete, mortar, roofing materials, drywall and other known building materials that may contain asbestos.

Work shall be overseen by a Certified Asbestos Consultant, or other appropriately trained and certified professional licensed by the California Contractors State Licensing Board. Materials collected and sampled shall be tested by a laboratory certified by the State Water Resources Control Board, Environmental Laboratory Accreditation Program (ELAP). If wastes are discovered containing 1 percent or greater levels of ACM, an asbestos abatement program shall be prepared by a qualified professional to guide the removal and disposal of the ACM.

Asbestos waste shall be handled as a hazardous waste in accordance with CCR, Title 22, §66262.11(b)(2) and disposed of at an appropriately licensed landfill site approved for hazardous waste by the California Water Resources Control Board. Hazardous asbestos waste shall be transported by a registered hazardous waste transporter and accompanied by a uniform hazardous waste manifest. Final documentation and reporting shall be provided to the City of Redding Development Services Department.

HYDROLOGY AND WATER QUALITY

MM 5.8-1a: Prior to any ground-disturbing activities begin, the contractor shall apply for and maintain coverage under the General Construction Storm Water Permit. The contractor shall prepare and implement a SWPPP, including an erosion control plan that includes erosion control measures and construction waste containment measures to ensure that waters of the United States and the State are protected during and after project construction. The SWPPP shall include site design measures to minimize offsite stormwater runoff that might otherwise affect surrounding habitats. The Central Valley RWQCB will review and monitor the effectiveness of the SWPPP through mandatory reporting by the City and the contractor as required.

The SWPPP shall be prepared with the following objectives: (a) identify all pollutant sources, including sources of sediment, that may affect the quality of stormwater discharges from the construction of the project; (b) identify BMPs that effectively reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction to the Best Available Technology/Best Control Technology standard; (c) provide calculations and design details as well as BMP controls for site run-on that are complete and correct; (d) identify project discharge points and receiving waters; and (e) provide stabilization BMPs to reduce or eliminate pollutants following construction.

The contractor shall implement the SWPPP, including all BMPs, and perform inspections of all BMPs during construction. Potential SWPPP BMPs could include, but would not be limited to the following:

- Preserve existing vegetation where possible;
- Surface roughening of final grades to prevent erosion, decrease run-off, increase infiltration, and aid in vegetation establishment;
- Riparian buffers or filter strips along the perimeter of the disturbed area to intercept pollutants prior to offsite discharge;

- Placing fiber rolls around onsite drain inlets to prevent sediment and construction-related debris from entering inlets;
- Placing fiber rolls along down-gradient disturbed areas of the site to reduce runoff flow velocities and prevent sediment from leaving the site;
- Placing silt fences down-gradient of disturbed areas to slow down runoff and retain sediment;
- Stabilizing the construction entrance to reduce the tracking of mud and dirt onto public roads by construction vehicles;
- Staging excavated and stored construction materials and soil stockpiles in stable areas and covering materials to prevent erosion; and
- Stabilizing temporary construction entrances to limit transport/introduction of invasive species and control fugitive dust emissions.

MM 5.8-1b: Prior to issuance of a grading permit, the project applicant shall submit a final post construction stormwater management plan to the City concurrent with site improvement plans. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing conditions, the effects of the proposed improvements, all appropriate calculations, watershed maps, changes in flows and patterns, and proposed on- and offsite improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used during construction, as well as long-term post-construction water quality measures.

LAND USE AND PLANNING

No mitigation measures are required.

NOISE

MM 5.10-1a: In addition to permitted hours of operation, project grading and construction plans shall note the following noise control measures to be implemented by the project contractor throughout the duration of onsite and offsite construction activities. The plans shall be subject to the review and concurrence of the City of Redding Development Services Department:

- Fixed construction equipment such as compressors and generators shall be placed the greatest possible distance from sensitive receptors, but no closer than 200 feet from existing residences.

MM 5.10-1b: In addition to permitted hours of operation, project grading and construction plans shall note the following with regards to construction vehicle traffic. The plans shall be subject to the review and concurrence of the City of Redding Development Services Department and implemented by the project contractor throughout the duration of onsite and offsite construction activities:

- During all project-related construction activities, construction vehicle parking, material delivery trucks, and heavy trucks used for soil or materials hauling shall be required to avoid local residential streets, including but not limited to, Parkview Avenue and Wilshire Drive.

MM 5.10-2a: Prior to issuance of a building permit, the project applicant shall provide to the satisfaction of the City of Redding Development Services Department, either an acoustical analysis that demonstrates that operational noise levels from the use of emergency generators do not exceed 75 dBA Leq, or manufacturer's data that demonstrates that the emergency generators do not exceed 75 dBA Leq, as measured at a distance of 23 feet from the generator.

MM 5.10-2b: As a condition of project approval, all onsite generators shall be exercised during daytime hours only; weekdays between 7:00 AM and 10:00 PM.

MM 5.10-2c: Prior to issuance of an occupancy permit, the City of Redding Development Services Department shall verify through final plan check that all HVAC equipment are roof-mounted and screened by parapets or other acceptable mechanical screening.

POPULATION AND HOUSING

No mitigation measures are required.

PUBLIC SERVICES

No mitigation measures are required.

RECREATION

No mitigation measures are required.

TRAFFIC AND CIRCULATION

MM 5.14-1: Prior to prior to Certificate of Occupancy for the first building the following improvements shall be completed by the project applicant to the satisfaction of the City of Redding Public Works Department:

- *Hartnell Avenue & Cypress Avenue (Intersection #10)*. Construct a southbound left turn pocket; construct a southbound thru/right lane; and convert intersection to an eight phase traffic signal.

MM 5.14-2: Prior to commencement of any construction activities, the project applicant shall submit a Traffic Management Plan (TMP) to the City of Redding Public Works Department. The TMP shall address temporary safety and traffic concerns along Henderson Road (South), Parkview Avenue (Open Space Access), Henderson Road (North), Parkview Avenue

(South) and along the site's northern interface with Cypress Avenue and eastern interface with Hartnell Avenue. At a minimum, the TMP shall include plans clearly denoting any proposed lane closures, proposed vehicle/bicyclist/pedestrian rerouting plans, and a traffic signage plan to ensure adequate circulation during the short-term construction process. The TMP shall be subject to review and approval by the City of Redding City Engineer. In addition, if temporary road or lane closures are determined necessary, notification shall be provided to the Redding Fire Department and Police Department.

MM 5.14-3: *Hartnell Avenue & Cobblestone Shopping Center (Main Driveway) (Intersection #8)*. Prior to prior to Certificate of Occupancy for the first building the following improvements shall be completed by the project applicant to the satisfaction of the City of Redding Public Works Department:

- Restripe southbound left turn lane to a two-way left turn lane.
- Restripe eastbound left/thru/right to a left/thru and right turn pocket.

MM 5.14-4: *Hartnell Avenue & Cypress Avenue (Intersection #10)*. Prior to prior to Certificate of Occupancy for the first building project applicant shall pay the pro-rated cost share representing 33% of the cost of constructing the following intersection improvements: Construct dual left turn pockets for the westbound approach; and expand southbound Hartnell Avenue to accommodate dual left turns from Cypress Avenue. The fee shall be established based on an engineer's cost estimate of the improvements prepared by the project applicant and approved by the City of Redding Public Works Department.

TRIBAL CULTURAL RESOURCES

Implement **MM 5.4-1a** through **MM 5.4-1d** in Section 5.4, CULTURAL RESOURCES.

UTILITIES AND SERVICE SYSTEMS

No mitigation measures are required.

ENERGY CONSUMPTION

No mitigation measures are required.