Summary of Significant Impacts and Mitigation Measures

The following is a summary of the significant impacts and mitigation measures addressed within Spieker Senior Continuing Care Community Project EIR. The project description and full discussion of impacts and mitigation measures can be found in Section 2.0 Project Description and Section 3.0 Environmental Setting, Impacts, and Mitigation.

Impact	Mitigation Measures	
Aesthetics		
Impact AES-4: The project would 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 with Mitigation Incorporated)	 MM AES-4.1: A lighting plan for any proposed exterior lighting shall be submitted to the Contra Costa County Department of Conservation and Development, Community Development Division for review and approval and include the following: a) Exterior lighting must be directed downward and away from adjacent properties and public/private right-of way to prevent glare or excessive light spillover. Lighting bulbs must be limited to low intensity lights, including lighting for identification purposes. b) No free standing light poles (except those used within building interior courtyards and for internal roadway lighting) will be allowed within the project site. Landscaping lights must be limited to ground-level for walking/safety purposes. c) If any lighting is proposed for the construction staging area, lighting must also be directed downward and away from adjacent properties. Lighting intensity may not be greater than what is reasonably required to safely illuminate the staging area. 	
Air Quality		
Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant Impact with Mitigation Incorporated)	 MM AIR-1.1: Enhanced BAAQMD Best Management Practices: The project shall implement the Bay Area Air Quality Management District's (BAAQMD's) recommended best management practices (BMPs) and additional measures to reduce construction equipment exhaust emissions. These measures shall include the following: a) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered three times a day and at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content shall be verified by lab samples or moisture probe. b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered. c) All visible mud or dirt track-out onto adjacent public roads shall be removed using a wet power vacuum street sweepers at 	

- least once per day. The use of dry power sweeping shall be prohibited.
- d) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- e) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- f) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- g) Use interior coatings with no more than 88 grams per liter volatile organic compounds (VOC) (i.e., ROG) and exterior coatings with no more than 132 grams per liter VOC (i.e., ROG) to reduce daily emissions by at least 12 percent. Coating must also meet or exceed BAAQMD requirements (i.e., Regulation 8, Rule 3: Architectural Coatings). Alternatively, the project could submit a plan to demonstrate that overall VOC content of architectural coatings would be at least 12 percent below BAAQMD requirements.
- h) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph and visible dust extends beyond site boundaries.
- j) Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction adjacent to sensitive receptors. Wind breaks should have at maximum 50 percent air porosity.
- k) Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- m) Avoid tracking of visible soil material on to public roadways by employing the following measures if necessary: (1) Site

- accesses to a distance of 100 feet from public paved roads shall be treated with a six to 12-inch compacted layer of wood chips, mulch, or gravel and (2) washing truck tires and construction equipment prior to leaving the site.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

MM AIR-1.2: Selection of Construction Equipment: Prior to the issuance of any demolition, grading, and/or building permits, the project applicant shall retain a qualified consultant to develop a plan demonstrating that the off-road equipment used onsite to construct the project would achieve a fleet-wide average 72 percent reduction in diesel particulate matter (DPM) exhaust emissions or greater and a fleet-wide average 16 percent reduction in NO_X or greater. This is the minimum reduction required to reduce the project impacts (i.e., NO_X emissions and cancer risk) to a less than significant level. The feasible plan to achieve this reduction would include the following:

a) All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall, at a minimum, meet U.S. Environmental Protection Agency (EPA) particulate matter emissions standards for Tier 4 interim engines. Where Tier 4 equipment is not available, exceptions could be made for equipment that includes California Air Resources Board (CARB)-certified Level 3 Diesel Particulate Filters or equivalent. Equipment that is electrically powered or uses non-diesel fuels would also meet this requirement.

Biological Resources

Impact BIO-1: The project would 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. (Less than Significant Impact with Mitigation Incorporated)

MM BIO-1.1: Pre-Construction Bat Surveys: A pre-activity survey for roosting bats shall be conducted at the two valley oaks (Quercus lobata) that support suitable roost habitat near the northeastern and southeastern corners of the project site within 30 days prior to the onset of ground-disturbing activities. A qualified biologist will conduct a survey to look for evidence of bat use within suitable habitat. If evidence of use is observed, or if high-quality roost sites are present in areas where evidence of bat use might not be detectable (such as a tree cavity), an evening visual survey combined with a nighttime acoustic survey shall be conducted to determine if roosting bats are present and to identify the specific location of such bats. If no roosting bats are located, project work can continue as planned.

If a maternity roost is detected, a disturbance-free buffer zone (determined by a qualified biologist) shall be implemented during the maternity roost season (March 15–August 31). No project-related activities shall take place within the buffer during the maternity season.

If an active non-breeding bat roost is located, project work shall be redesigned to avoid removal or disturbance of the occupied tree. No buffer from the roost shall be necessary during the nonmaternity season (September 1–March 14). If the roost tree itself must be removed, bats shall be passively excluded from roost habitat with one-way devices, or trees will be removed using a two-step tree removal process. The two-step process shall be initiated if exclusion with one-way devices is not feasible due to height of the roost. For the two-step process, trees shall be removed over a two-day period. On day 1, all non-suitable limbs shall be removed, and on day 2, the remainder of the tree shall be removed. Removing trees in this way creates disturbance that encourages bats to vacate the tree before the potential habitat is removed. Either method shall be monitored by a qualified biologist with knowledge of bat ecology and experience with bat exclusion methods.

MM BIO-1.2: <u>Burrowing Owl Surveys</u>: Pre-construction surveys for western burrowing owl shall be conducted in accordance with the March 7, 2012 CDFW Staff Report on Burrowing Owl Mitigation. If preconstruction surveys find active nests avoidance and minimization guidelines must be developed prior to the start of construction in accordance with the March 7, 2012, CDFW memo, and through consultation with CDFW.

MM BIO-1.3: Avoidance and Nesting Inhibition: To the extent feasible, construction activities (or at least the commencement of such activities) shall be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code shall be avoided. The nesting season for most birds in Contra Costa County extends from February 1 through August 31.

If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project shall be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this

vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.

MM BIO-1.4: <u>Pre-Construction Bird Surveys</u>: If not possible to schedule construction activities between September 1 and January 31, pre-construction nesting bird surveys shall be completed by a qualified biologist no more than seven days before construction begins. During this survey, the biologist or ornithologist shall inspect all trees and other possible nesting habitats in and within 250 feet of the project boundary.

If an active nest is found in an area that would be disturbed by construction, the biologist shall designate an adequate buffer zone (typically 300 feet for raptors and 100 feet for other species) to be established around the nest, in consultation with the California Department of Fish and Wildlife (CDFW). The buffer would ensure that nests shall not be disturbed until the young have fledged (left the nest), the nest is vacated, and there is no evidence of second nesting attempts.

The applicant shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of the County Department of Conservation and Development, prior to the removal of trees and issuance of a grading permit or demolition permit.

Impact BIO-2: The project would 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 CDFW or USFWS. (Less than Significant Impact with Mitigation Incorporated)

MM BIO-2.1: Avoidance and Minimization: Prior to the start of construction the project shall clearly delineate riparian habitat to be avoided with fencing around the dripline of the riparian canopy. The project shall avoid further indirect impacts to riparian habitat by implementing the following measures during construction:

- Existing native vegetation shall be retained by removing only as much vegetation as necessary to accommodate the new road.
- b) Temporary disturbance or removal of riparian vegetation shall not exceed the minimum necessary to complete the work.
- c) Exposed soil shall be controlled by stabilizing slopes (e.g., with erosion control blankets) and protecting channels (e.g., using silt fences or straw wattles).
- d) The project shall stabilize the site ingress/egress locations.

MM BIO-2.2: Compensatory Mitigation for Permanent Loss of Riparian Habitat: For areas that are not able to be avoided, the project

shall restore or enhance an equivalent area at a 2:1 (mitigation:impact) ratio, on an acreage basis (or as otherwise directed by a regulatory agency with regulatory authority over impacts to riparian habitat on the site). Prior to issuance of a grading permit, the applicant shall prepare a Riparian and Aquatic Habitat and Monitoring Plan (Riparian and Aquatic HMMP) for aquatic and riparian habitat creation as a means of compensatory mitigation. The Riparian and Aquatic HMMP shall be prepared by a qualified restoration ecologist and shall provide, at a minimum, the following items:

- a) Habitat impacts summary and proposed habitat mitigation actions.
- b) Goals of the restoration to achieve no net loss.
- c) The location of the mitigation sites and existing site conditions.
- d) Mitigation design including:
 - o Proposed site construction schedule.
 - Description of existing and proposed soils, hydrology, geomorphology and geotechnical stability.
 - Site preparation and grading plan.
 - o Invasive species eradication plan.
 - o Soil amendments and other site preparation.
 - Planting plan (plant procurement/propagation/installation).
 - Maintenance plan.
- e) Monitoring measures, and performance and success criteria. At a minimum, success criteria shall include at least 70 percent cover by native, woody riparian vegetation by year five.
- f) Monitoring methods, duration, and schedule.
- g) Contingency measures and remedial actions.
- h) Reporting measures.

The mitigation shall be deemed complete and the applicant released from further responsibilities when the final success criteria have been met, or when the mitigation is deemed complete as determined by applicable regulatory/resource agencies.

Impact BIO-3: The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal,

MM BIO-3.1: Construction Best Management Practices: The central drainage and associated seasonal wetlands that are to be avoided by the project design will be protected from construction activities through implementation of best management practices (BMPs) such as installing silt fencing between jurisdictional waters and project related

filling, hydrological interruption, or other means. (Less than Significant Impact with Mitigation Incorporated)

activities, locating staging and laydown areas away from potentially jurisdictional features, and isolating construction work areas from any identified jurisdictional features. In addition, site stormwater treatment features must be designed consistent with the California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit as described above and shall be placed in locations to treat runoff from the developed portion of the site before entering avoided wetlands. To the extent feasible, existing site drainage patterns in the vicinity of avoided wetlands shall be preserved to prevent indirect alterations to surface hydrology that may contribute to supporting the wetlands.

MM BIO-3.2: Compensatory Mitigation for Permanent Loss of Wetlands: To compensate for the perennial drainage and seasonal wetlands that will be permanently impacted by extension of Kinross Drive to the project site, the project proponent shall implement one of the following, in agreement with United States Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) as per permit requirements.

- a) Acquisition of equivalent wetlands and waters at a nearby site at a ratio of 2:1, on an acreage basis;
- b) Purchase of mitigation credits at a mitigation bank;
- c) Enhancement of seasonal wetlands and the perennial drainage to be preserved in the central portion of the site, as well as creation of seasonal wetland habitat in the bioretention facilities proposed on site, at a ratio of 2:1, on an acreage basis:
- d) An alternative to be agreed upon with the USACE and RWQCB.

Cultural Resources

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. (Less than Significant Impact with Mitigation Incorporated)

MM CUL-2.1: Construction Worker Training: Worker Awareness Training for cultural resources shall be provided to members of the construction excavation and grading team. Training shall consist of the preparation of an alert sheet that would provide guidance and procedures in the event of an unexpected discovery of cultural materials with photographs of typical artifact that shall be exposed coupled with a briefing of the construction crew.

MM CUL-2.2: <u>Undiscovered Archaeological Resources:</u> If evidence of an archaeological site or other suspected cultural resource as defined by CEQA Guideline Section 15064.5, including darkened soil

representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, worked bone, fired clay vessels, faunal bone, hearths, storage pits, or burials) is discovered during construction related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted and the County's Planning Manager shall be notified. The project sponsor shall hire a qualified archaeologist to conduct a field investigation. The County's Planning Manager shall consult with the archaeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by a qualified archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-J) form and filed with the NWIC.

MM CUL-2.3: Report of Archaeological Resources: If archaeological resources are identified, a final report summarizing the discovery of cultural materials shall be submitted to the County's Planning Manager prior to issuance of certificate of occupancy. This report shall contain a description of the mitigation program that was implemented and its results, including a description of the monitoring and testing program, a list of the resources found and conclusion, and a description of the disposition/curation of the resources.

Impact CUL-3: The project would not disturb any human remains, including those interred outside of dedicated cemeteries. (Less than Significant Impact with Mitigation Incorporated) MM CUL-3.1: Human Remains: If human remains are discovered during project construction, all ground-disturbing activity within 100 feet of the resources shall be halted and the County's Planning Manager and the Contra Costa County coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project sponsor shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains. Contra Costa County shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project sponsor shall implement approved mitigation, to be verified by Contra Costa County, before the

resumption of ground-disturbing activities within 100 feet of where the remains were discovered.

Geology and Soils

Impact GEO-1: The project would not directly or indirectly cause 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; strong seismic ground shaking; seismicrelated ground failure, including liquefaction; or landslides. (Less than **Significant Impact with Mitigation Incorporated**)

MM GEO-1.1: <u>Design-level Geotechnical Compliance:</u> The applicant shall prepare a site-specific, design-level geotechnical investigation for the project. The design-level geotechnical report shall include, but not be limited to, the following considerations:

- a) The 2019 CBC classification of the site as being located in Site Class B or C shall be determined. Building foundations, retaining walls, and structural framing requirements will be impacted by the Site Classification.
- b) The central portion of the site is underlain by artificial fill and colluvial soils that are more than 17 feet deep. The liquefaction potential of these underlying soils shall be evaluated.
- c) More detailed evaluation of the excavation characteristics of the sandstone and claystone bedrock underlying the site shall be performed. The excavation characteristics of the bedrock will impact cut grading and excavations for underground utilities and foundations.
- d) Final recommendations for grading shall be provided, including permanent and temporary slope inclinations, differential fill thickness for building pads, fill construction, and the extent of colluvial and artificial soil removal.
- e) The impacts from the onsite expansive soils on proposed structures, pavements, and flatwork shall be addressed.
- f) The design and construction of valley drains and subdrains in fill keyways and benches shall be addressed.
- g) Potential water seepage through rock fractures, daylighting from cut slopes and into utility trenches shall be assessed.
- h) Pseudostatic seismic loads will need to be incorporated into the design of retaining walls which will be more than six feet tall, as specified in the CBC.

All recommendations by the engineering geologist and/or geotechnical engineer shall be incorporated into the final design. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the project design phase, shall be incorporated in the project, all foundations and other project structures must comply with the performance standards set forth in the California Building Code. The final seismic considerations for the site shall be submitted to and approved of by the Contra Costa

	Department of Conservation and Development prior to issuance of grading and building permits.
Impact GEO-3: The project would 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)	See mitigation measure MM GEO-1.1 above.
Impact GEO-4: The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. (Less than Significant Impact with Mitigation Incorporated)	See mitigation measure MM GEO-1.1 above.
Impact GEO-6: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. (Less than Significant Impact with Mitigation Incorporated)	MM GEO-6.1: Paleontological Monitoring. Construction activities involving excavation or other soil disturbance within the project site shall be required to retain a qualified Paleontological Monitor as defined by the Society for Vertebrate Paleontology (SVP) (2010) equipped with necessary tools and supplies to monitor all excavation, trenching, or other ground disturbance. Monitoring will entail the visual inspection of excavated or graded areas and trench sidewalls. In the event that a paleontological resource is discovered, the monitor will have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and collected. Prior to beginning construction activities, the Principal Paleontologist shall attend a preconstruction meeting to identify specific areas on the project site where paleontological monitoring will be required and shall provide training to construction personnel on how to identify potentially significant fossils. The Principal Paleontologist will periodically assess monitoring results and if no significant fossils have been exposed after fifty percent of excavation, the Principal Paleontologist may determine that monitoring is no longer necessary.

MM GEO-6.2: Inadvertent Discovery of Fossils. If fossils are discovered during excavation, the Principal Paleontologist or his/her designated representative will make a preliminary taxonomic identification and determine if the find is significant. For significant/ potentially significant fossil finds, the Paleontologist shall provide a written recommendation to the Contra Costa Department of Conservation and Development if further action is required, and provide recommended measures for any further evaluation, fossil collection, or protection of the resource. Any subsequent paleontologic work shall be approved by the Contra Costa Department of Conservation and Development and completed as quickly as possible to avoid damage to the fossils and delays in construction schedules. At a minimum, for significant fossils, the paleontological staff will assign a unique field number to each specimen identified; photograph the specimen and its geographic and stratigraphic context along with a scale near the specimen and its field number clearly visible in closeups; record the location using a global positioning system (GPS), record the field number and associated specimen data (identification by taxon and element, etc.) and corresponding geologic and geographic site data (location, elevation, etc.) in the field notes and in a daily monitoring report; stabilize and prepare all fossils for identification, and identify to lowest taxonomic level.

Upon completion of fieldwork, all significant fossils collected shall be prepared to a point ready for curation. Preparation shall include the careful removal of excess matrix from fossil materials and stabilizing and repairing specimens, as necessary. Following laboratory work, all fossil specimens will be identified to the lowest taxonomic level, cataloged, analyzed, and delivered to an accredited museum repository for permanent curation and storage. The cost of curation is assessed by the repository and is the responsibility of the project proponent.

A report to be submitted to the repository museum documenting the results of the paleontological mitigation monitoring efforts associated with the project shall be prepared by the Principal Paleontologist. The report shall include a summary of the field and laboratory methods, an overview of the project site geology and paleontology, a list of taxa recovered, an analysis of fossils recovered and their scientific significance, and recommendations.

Hazards and Hazardous Materials

Impact HAZ-2: The project would not create a significant hazard to the public or the

MM HAZ-2.1: Conduct Asbestos and Lead Surveys Prior to Demolition. Prior to the issuance of demolition permits for the two existing residences and associated structures, the applicant shall retain

environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant Impact with Mitigation Incorporated) a licensed professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials and lead-based paint, and these materials shall be characterized for asbestos and lead by a reliable method. All activities involving asbestos-containing materials and lead-based paint shall be conducted in accordance with governmental regulations, and all removal shall be conducted by properly licensed abatement contractors.

MM HAZ-2.2: PCB Screening Assessment. Prior to the issuance of demolition permits for the existing residences and associated structures, the applicant shall submit a PCB Screening Assessment Form with their permit application. If on-site buildings do contain PCBs that exceed threshold limits, the project applicant shall follow applicable federal and state laws, which may include reporting to such agencies as the EPA, RWQCB, and DTSC, who may require additional sampling and abatement of PCBs consistent with state and federal requirements.

Hydrology and Water Quality

Impact HYD-3: The project would 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 through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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; or impede or redirect flood flows. (Less than **Significant Impact with Mitigation Incorporated**)

MM HYD-3.1: In accordance with Division 914 of the Contra Costa County Ordinance Code, the project applicant shall collect and convey all stormwater entering and/or originating on this property, without diversion and within an adequate storm drainage facility, to a natural watercourse having definable bed and banks, or to an existing adequate public storm drainage system that conveys the stormwater to a natural watercourse. Any proposed diversions of the watershed shall be subject to hearing body approval. Prior to issuance of a grading permit, the applicant shall submit improvement plans for proposed drainage improvements, and a drainage report with hydrology and hydraulic calculations to the Engineering Services Division of the Public Works Department and the Contra Costa County Flood Control and Water Conservation District for review and approval that demonstrates the adequacy of the on-site drainage system and the downstream drainage system. The applicant shall verify the adequacy at any downstream drainage facility accepting stormwater from this project prior to discharging runoff. If the downstream system(s) is not adequate to handle the Existing Plus Project condition for the required design storm, improvements shall be constructed to make the system adequate. The applicant shall obtain access rights to make any necessary improvements to off-site facilities.

Noise

Impact NOI-1: The project would result in generation of a substantial temporary increase in ambient noise levels and would not result in generation of a substantial permanent increase in ambient noise levels, with mitigation incorporated, in the vicinity of the project 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) **MM NOI-1.1:** A Construction Noise Management Plan shall be prepared by the construction contractor and implemented prior to the start of and throughout construction to reduce noise impacts on the nearby existing land uses. The plan shall establish the procedures the contractor will take to reasonably minimize construction noise at the nearby existing land uses. The plan shall include, but not be limited to, the following measures to reduce construction noise levels as low as practical:

- a) Restrict noise-generating activities including construction traffic at the construction site or in areas adjacent to the construction site to the hours of 8:00 a.m. to 5:30 p.m., Monday through Friday, with no construction allowed on Federal and State weekends and holidays.
- Potential contractors shall be requested to submit information on their noise management procedures and demonstrate a successful track record of construction noise management on prior projects.
- c) The selected contractor will equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- d) The selected contractor will prohibit unnecessary idling of internal combustion engines.
- e) The selected contractor will locate stationary noise generating equipment such as air compressors or portable power generators as far as practical from sensitive receptors.
- f) The selected contractor will utilize "quiet" air compressors and other stationary noise sources where technology exists.
- g) The selected contractor shall limit the allowable hours for the delivery of materials or equipment to the site and truck traffic coming to and from the site for any purpose to Monday through Friday between 8:00 a.m. and 5:30 p.m.
- h) The selected contractor will establish construction staging areas and material stockpiles at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction to a distance of at least 75 feet, as is feasible.
- i) The selected contractor will designate a project liaison that will be responsible for responding to noise complaints during

the construction phase. The name and phone number of the liaison will be conspicuously posted at construction areas and on all advanced notifications. This person will take steps to resolve complaints, including periodic noise monitoring, if necessary. Results of noise monitoring will be presented at regular project meetings with the project contractor, and the liaison will coordinate with the contractor to modify any construction activities that generated excessive noise levels to the extent feasible.

- j) The selected contractor will hold a preconstruction meeting with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, construction schedule, and noise coordinator) are completed.
- k) Prior to the initiating of each phase of the project (e.g. grading, construction) neighboring property owners within 300 feet of construction activity shall be notified in writing of the construction schedule and at least 2 weeks prior to loud noise-generating activities. Notification will include the nature and estimated duration of the activity.
- A qualified acoustical professional shall be retained to address noise concerns, and if needed, to determine if construction noise levels at adjacent property lines are consistent with the findings of the certified EIR. Corrective actions shall be taken to reduce construction noise if inconsistencies are identified. Temporary noise barriers could be considered during construction phases involving earth moving equipment (e.g., grading operations) where they would be effective in reducing the construction noise impact, when directly adjoining sensitive receptors, such as at the Seven Hills School. An eight-foot plywood noise barrier could reduce noise levels by at least 5 dBA.

MM NOI-1.2: Prior to the issuance of building permits, mechanical equipment shall be selected and designed to reduce impacts on surrounding uses to meet 50 dBA Leq during daytime hours and 40 dBA Leq during nighttime hours. A qualified acoustical consultant shall be retained by the project applicant to review mechanical noise as the equipment systems are selected in order to determine specific noise reduction measures necessary to reduce noise to comply with the noise limits at all adjacent noise sensitive land uses. Noise reduction measures could include, but are not limited to, locating equipment away from noise sensitive locations, selection of equipment that emits low noise levels and/or installation of noise barriers such as enclosures and parapet walls to block the line of sight between the noise source

and the nearest receptors. If properly designed and controlled, the combined worst-case noise level due to the operation of on-site noise sources including the project parking lots, mechanical equipment, and maintenance building operations would not be substantially increased with the project and would remain below the 60 dBA Ldn noise and land use compatibility thresholds established for residential land uses by Contra Costa County and the City of Walnut Creek.

Impact NOI-2: The project would not result in generation of excessive groundborne vibration or groundborne noise levels. (Less than Significant Impact with Mitigation Incorporated)

MM NOI-2.1: The project shall implement the following measures to minimize vibration impacts from construction activities:

- a) Avoid the use of vibratory rollers and other heavy construction equipment within 20 feet of existing structures.
- b) Place operating equipment on the construction site as far as possible from vibration sensitive receptors.
- c) Use smaller equipment within 20 feet of the perimeter property lines adjoining off site structures to minimize vibration levels below the limits.
- d) Select demolition methods not involving impact tools within 100 feet of the perimeter property lines adjoining off-site structures
- e) Avoid dropping heavy objects or materials near vibration sensitive locations.
- f) A list of all heavy construction equipment to be used for this project known to produce high vibration levels (tracked vehicles, vibratory compaction, jackhammers, hoe rams, etc.) shall be submitted to the County by the contractor. This list shall be used to identify equipment and activities that would potentially generate substantial vibration and to define the level of effort required for continuous vibration monitoring.

Tribal Cultural Resources

Impact TCR-1: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). (Less than Significant Impact with Mitigation Incorporated)

See mitigation measures MM CUL-2.1 and MM CUL-3.1 above.

Impact TCR-2: The project	
would not cause a substantial	
adverse change in the	
significance of a tribal	
cultural resource that is	
determined by the lead	
agency, in its discretion and	
supported by substantial	
evidence, to be significant	
pursuant to criteria set forth	
in subdivision (c) of Public	
Resources Code Section	
5024.1. (Less than	
Significant Impact with	
Mitigation Incorporated)	

See mitigation measures MM CUL-2.1 and MM CUL-3.1 above.