

CALIFORNIA ENVIRONMENTAL QUALITY ACT STATEMENT OF FINDINGS

The Department of Toxic Substances Control (DTSC) has issued Findings for this project pursuant to the California Environmental Quality Act (CEQA; California Public Resources Code, Division 13, Section 21081) and implementing Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15091 et seq.)

A. PROJECT SUBJECT TO DTSC APPROVAL

PROJECT TITLE: Revised Removal Action Work Plan, Phase I Area, Central Administration Center at Cole Campus		SITE CODING: 204326
PROJECT ADDRESS: 1011 Union Street	CITY: Oakland	COUNTY: Alameda
PROJECT SPONSOR: Oakland Unified School District	CONTACT: Elena Comrie	PHONE/ EMAIL: ecomrie@cumming-group.com (510) 906-2123
Approval Action Under Consideration by DTSC:		
<input checked="" type="checkbox"/> Removal Action Workplan <input type="checkbox"/> Interim Removal <input type="checkbox"/> Initial Permit Issuance <input type="checkbox"/> Permit Re-Issuance <input type="checkbox"/> Corrective Measure Study/Statement of Basis <input type="checkbox"/> Permit Modification <input type="checkbox"/> Closure Plan <input type="checkbox"/> Remedial Action Plan <input type="checkbox"/> Regulations <input type="checkbox"/> Other (specify):		
STATUTORY AUTHORITY:		
<input type="checkbox"/> California H&SC, Chap. 6.5 <input checked="" type="checkbox"/> California H&SC, Chap. 6.8 <input type="checkbox"/> Other (specify):		
<p>PROJECT DESCRIPTION: The project involves approval of a Revised Removal Action Workplan (RAW) for the Phase I Area, Central Administration Center at Cole Campus (site). The RAW was prepared to remediate soil impacted by chemicals of concern (COCs) in the northern portion of the site based on Department of Toxic Substances Control (DTSC) Preliminary Environmental Assessment (PEA) Further Action Letter. The purpose of the RAW is to reduce the potential risk to human health and the environment from the COCs (lead and arsenic in soil) through excavation and offsite disposal.</p> <p><u>Background:</u> The project site is located at 1011 Union Street in the City of Oakland and is currently developed with a two-story former elementary school building, a former cafeteria building, a storage building, a playground, and two parking lots. The site is bound by residential uses to the west and east, the Oakland Housing Authority and nearby residential to the south, and by Wade Johnson Park and California Cereal Products facility to the north. The site is being considered for redevelopment into a central administration building and parking lot as part of a phased redevelopment. Phase 1 of the redevelopment, which is covered in the RAW, will involve demolition and removal of a one-story former school cafeteria building and construction of a 54,000 square foot single story administration building. The area surrounding the administration building will include bioretention basins, landscaping, a cement walkway, a basketball court, and an asphalt parking lot.</p> <p>Site assessments conducted between 2019 and 2022 identified the presence of COCs at the site including arsenic and lead in soils. The presence of these contaminants could impact future onsite occupants. Therefore, the RAW was prepared to identify measures to mitigate potential human exposure to COCs present in the subsurface.</p> <p><u>Project Activities:</u> The RAW was developed to address the presence of COC-impacted soil at the site with concentrations of lead and arsenic above their respective screening levels through excavation and offsite disposal. As presented in the PEA, five areas of concern (AOCs) were assessed for the Phase 1 area of the site. Several samples for lead and arsenic exceeded the residential DTSC screening level of 80 milligrams per kilogram (mg/kg) for lead in soil and exceeded the site-specific background concentration of 12.93 mg/kg for arsenic in soil.</p> <p>Lead impacted soil extends approximately 2 feet below ground surface (bgs). Arsenic exceeds site specific background concentrations in 0.5-foot samples but does not exceed site specific background concentrations in any 2-foot samples.</p>		

Based on the results of the PEA, planned excavation in the Phase 1 area of the site will occur to a maximum depth of 2.5 feet bgs. To support construction activities, an additional 1.5 feet (4 feet bgs total) will be excavated separately from the footprint of the proposed new administrative building. Based on the preliminary lateral extent and depths of lead- and arsenic-impacted soil, the total volume of impacted soil to be excavated and removed from the Phase 1 area of the site is estimated to be approximately 5,770 cubic yards (cy) total.

As described and discussed in the RAW, cleanup of contaminated soils would involve the following activities:

- Demolish and remove existing building structures and foundations;
- Pre-characterize soil waste by collecting in-situ soil samples at discreet depths;
- Excavate approximately 5,770 cy of impacted soil and direct load pre-characterized soil into trucks;
- Excavate, segregate, and off-site removal of approximately 2,350 cy of non-impacted soil from the proposed new building footprint area;
- Collect confirmation soil samples from the excavation areas and compare confirmation data to the cleanup goals. If needed, excavate additional volume of soil until the cleanup goals are met;
- Select and obtain landfill approval for soil disposal;
- Load, transport, and dispose of the excavated soil to the appropriate disposal facility; and
- Backfill impacted-soil excavation areas with approximately 5,770 cy of certified clean fill material.

A backhoe or excavator will be used to remove contaminated soil from the AOCs and the excavated soil will be direct loaded onto trucks. Pre-characterizing the soils for disposal will be completed so that the contaminated soil may be directly transported to a disposal facility, which will reduce the need to stockpile soil on site. However, if needed, soil will be temporarily stored at staging areas on-site until off-site transportation and disposal can be accomplished. If needed, excavated soil will be placed inside the designated stockpile area on an impermeable barrier (plastic sheeting) and covered with additional plastic sheeting to prevent dust migration and/or run-off during rain events. Any staging area will be located in the secured exclusion zone and water will be used to control any fugitive dust when contaminated soil is moved. Impacted soil and non-impacted soil will be segregated and managed accordingly.

An air monitoring professional will monitor dust levels at the site and will have the authority to stop-work if on-site activities generate dust levels in excess of the California ambient air quality standards for particulate matter (0.05 milligrams per cubic meter (mg/m^3)). Additionally, dust control measures will be taken if visible dust emissions are observed from the point-of-origin. Generation of dust during the excavation will be minimized as necessary with the use of water as a dust suppressant. The water will be provided by a water truck or a metered discharge from a fire hydrant located proximate to the site. Dust generation will be controlled by spraying water prior to daily work activities, during excavation/loading activities (as necessary to maintain concentrations below action levels), and at truck staging locations. Best management practices (BMPs), such as covering soil stockpiles during non-work hours and placement of silt fences in down slope areas, will be implemented to protect sewer drains from potential contaminated water run-off.

Vehicles, excavation equipment, hand-held equipment, and personnel will be decontaminated prior to leaving the exclusion zone. Decontamination areas will be established onsite prior to excavation activities. These areas will be designed to contain soil removed from equipment during the decontamination process. Decontamination will be performed using dry brushing methods to remove soil from equipment and vehicle tires along with disposal of personal protection equipment (PPE) and use of a wash station by personnel. After decontamination, the equipment and vehicles will be visually inspected for signs of residue. The storage bins or beds of the trucks will also be inspected to ensure the loads are properly covered and secured.

Contaminated materials characterized as non-hazardous will be transported either of the following facilities which have been identified as accepting and storing non-hazardous waste:

- Waste Management’s Altamont Landfill, 10840 Altamont Pass Road, Livermore, CA 94551
- Recology (Hay Road Landfill), 6426 Hay Road, Vacaville, California 95687

Non-impacted soils will be transported to the following facility for use as daily cover:

- Recology (Hay Road Landfill), 6426 Hay Road, Vacaville, California 95687

If a material is suspected to be hazardous, it will be required to be shipped under the appropriate hazard class. Trucks carrying contaminated substances, hazardous substances, or hazardous wastes will be enclosed so there is no odor or dust during transportation along the haul route. Based on the PEA, soil above 2 feet below ground surface (bgs) may contain non-RCRA hazardous waste. Therefore, the following facility has been identified as accepting and storing hazardous waste: Kettleman Hills Waste Management 35251 Old Skyline Blvd, Kettleman City, California, 93239.

It is estimated that the removal of 5,770 cubic yards of contaminated soil from the Phase 1 area of the site will require approximately 475 truck trips for transport. It is estimated that the backfill of 5,770 cubic yards of clean soil will also require approximately 475 truck trips for transport to the site. Excavation and off-site disposal of the contaminated soil is anticipated to take up to 75 days (approximately 3 months) to complete.

DTSC utilized information and analysis in the *Initial Study / Mitigated Negative Declaration, Cole Administrative/Education Center Project, 1011 Union Street, Oakland* (MND) to support a final determination about the type of environmental document required to be prepared for the *Revised Removal Action Workplan for the Phase I Area, Central Administration Center at Cole Campus*, as provided by Sections 15162, 15163, and 15164 of the CEQA Guidelines. Specifically, the MND analyzed potential impacts related to excavation of contaminated soils for Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

B. LEAD AGENCY ENVIRONMENTAL DOCUMENT REVIEWED

Lead Agency: Oakland Unified School District
Lead Agency’s Environmental Document: Initial Study / Mitigated Negative Declaration, Cole Administrative/Education Center Project, 1011 Union Street, Oakland
Date Certified: June 29, 2022
State Clearinghouse Number: 2022050565

C. STATEMENT OF FINDINGS AND FACTS FOR ADEQUACY OF LEAD AGENCY ENVIRONMENTAL DOCUMENT

Using its independent judgment, DTSC makes the following findings:

- The Lead Agency Final Environmental Document includes a description of the Project now before DTSC for decision
- The Lead Agency Final Environmental Document adequately analyzed impacts associated with the Project before DTSC for decision.

- DTSC concurs with the findings made by the Lead Agency Final Environmental Document relating to the Project before DTSC for decision.
- Mitigation measures are included in the Lead Agency Final Environmental Document for the following resources that would potentially be affected by the DTSC project.

<input type="checkbox"/> Aesthetics	Mitigation Measure: None
<input type="checkbox"/> Agricultural Resources	Mitigation Measure: None
<input checked="" type="checkbox"/> Air Quality	Mitigation Measures: Air-1, Air-2, and Air-4 (refer to Mitigated Negative Declaration (May 2022), see Attachment A)
<input type="checkbox"/> Agricultural Resources	Mitigation Measure: None
<input checked="" type="checkbox"/> Biological Resources	Mitigation Measure: Biology-1 (refer to Mitigated Negative Declaration (May 2022), see Attachment A)
<input checked="" type="checkbox"/> Cultural Resources	Mitigation Measures: Cultural-1, Cultural-2, Cultural-3 (refer to Mitigated Negative Declaration (May 2022), see Attachment A)
<input type="checkbox"/> Energy	Mitigation Measure: None
<input checked="" type="checkbox"/> Geology / Soils	Mitigation Measures: Geology-6, Geology-7, and Geology-8 (refer to Mitigated Negative Declaration (May 2022), see Attachment A)
<input type="checkbox"/> Greenhouse Gas Emissions	Mitigation Measure: None
<input type="checkbox"/> Hazards / Hazardous Materials	Mitigation Measure: None
<input type="checkbox"/> Hydrology / Water Quality	Mitigation Measure: None
<input type="checkbox"/> Land Use / Planning	Mitigation Measure: None
<input type="checkbox"/> Mineral Resources	Mitigation Measure: None
<input checked="" type="checkbox"/> Noise	Mitigation Measure: Noise-1, Noise-2, and Noise-3 (refer to Mitigated Negative Declaration (May 2022), see Attachment A)
<input type="checkbox"/> Population / Housing	Mitigation Measure: None
<input type="checkbox"/> Public Services	Mitigation Measure: None
<input type="checkbox"/> Recreation	Mitigation Measure: None
<input checked="" type="checkbox"/> Transportation / Traffic	Mitigation Measure: Transportation-1 (refer to Mitigated Negative Declaration (May 2022), see Attachment A)
<input type="checkbox"/> Tribal Cultural Resources	Mitigation Measure: None
<input type="checkbox"/> Utilities / Service Systems	Mitigation Measure: None
<input type="checkbox"/> Wildfire	Mitigation Measure: None

Mitigation measures identified in the Lead Agency Final Environmental Document have been adopted by DTSC for this Project and will be implemented to avoid, reduce, or substantially lessen the project impacts. No additional mitigation measures are necessary, and no additional mitigation monitoring plan is required pursuant to CEQA.

For each significant environmental effect identified for the Project:

- Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the Lead Agency Final Environmental Document.
- Such changes or alterations are within the responsibility and jurisdiction of the Alameda County not DTSC.
- Such changes have been adopted by this public agency or can and should be adopted by this public agency.
- Mitigation measures included in the Lead Agency Final Environmental Document are infeasible, and therefore, will not be incorporated into the DTSC Project for the following reasons: N/A

BASED ON THE ABOVE FINDINGS, DTSC CONCLUDES:

The proposed Project will not result in significant and unavoidable effects to the environment.

The proposed Project will result in significant and unavoidable effects to the following environmental resources:

<input type="checkbox"/> Air Quality	<input type="checkbox"/> Mineral Resources
<input type="checkbox"/> Agricultural Resources	<input type="checkbox"/> Noise
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Population/Housing
<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Public Services
<input type="checkbox"/> Energy	<input type="checkbox"/> Recreation
<input type="checkbox"/> Geology/ Soils	<input type="checkbox"/> Transportation/Traffic
<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Hazards/Hazardous Materials	<input type="checkbox"/> Utilities/ Service Systems
<input type="checkbox"/> Hydrology/ Water Quality	<input type="checkbox"/> Wildfire

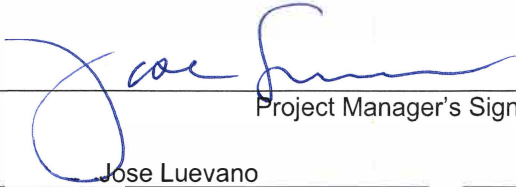
Impacts to these resources would remain significant even after applying mitigation measures described in the Lead Agency Final Environmental Document, or there is no feasible mitigation available.

In accordance with Cal. Code of Regs., title 14, section 15093, a Statement of Overriding Considerations was adopted by the Lead Agency for these resources. DTSC adopts a Statement of Overriding Considerations for these resources having determined that the DTSC Project benefits outweigh the significant environmental effects for the following reasons: The DTSC remedial actions reduce the exposure of contaminated soil, soil gas, and groundwater in order to render it safe for Site occupants. The DTSC remedial project also serves to protect human health and the environment, which are DTSC's responsibilities under the California Health and Safety Code.

None of the conditions requiring a subsequent EIR or Negative Declaration pursuant to Cal. Code Regs., tit. 14 Section 15162 exist.

In accordance with Cal. Code of Regs., title 14, section 15093, a Notice of Determination indicating the results of said Findings will be filed with the Governor's Office of Planning and Research / State Clearinghouse.

D. CERTIFICATION



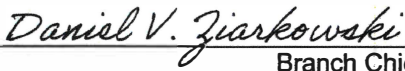
Project Manager's Signature

Jose Luevano
Project Manager's Name

Hazardous Substances Engineer
Title

Jul 7, 2022
Date

(916) 255-3577
Phone #



Branch Chief's Signature

Daniel V. Ziarkowski
Branch Chief's Name

Environmental Program Manager I (Sup)
Branch Chief

July 7, 2022
Date

(916) 255-6540
Phone #

Attachment A

The following mitigation measures are included in the Lead Agency Final Environmental Document would be implemented as applicable for activities described in the *Revised Removal Action Workplan for the Phase I Area, Central Administration Center at Cole Campus*.

Mitigation Measure Air-1, Basic Construction Mitigation:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. 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.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 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.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. 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. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure Air-2, Additional Construction Mitigation Measures:

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
3. Windbreaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Windbreaks should have at maximum 50 percent air porosity.
4. 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.
5. 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.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
8. 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.
9. Minimizing the idling time of diesel powered construction equipment to two minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
12. Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.
13. Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines.

Mitigation Measure Air-4, Diesel Particulate Matter Controls: The District shall ensure that all off-road diesel equipment used during the construction period, and all haul trucks used for soil export and import for the Project, are equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type, as certified by CARB.

Methods to comply with this standard include, but are not limited to, new clean diesel trucks (Tier 4 engines automatically meet this requirement), higher-tier diesel engine trucks with added Particulate Matter (PM) filters, hybrid trucks, alternative energy trucks, or other methods that achieve the applicable CARB emission standard. This equipment must be properly maintained and tuned in accordance with manufacturer specifications, and verified through an equipment inventory submittal and Certification Statement.

Mitigation Measure Biology-1: Protect Nesting Birds. During construction of the Project, the removal of any trees and demolition of the existing buildings shall occur between September 1 and January 31. Tree removal and building demolition should be avoided from February 1 to August 31, which is the typical migratory bird's nesting period in this part of California.

1. If no vegetation removal or building demolition is proposed during the nesting period, then no surveys are required. If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work.
2. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based largely on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

Mitigation Measure Cultural-1: Survey of the Project Area. An archaeologist should conduct a pedestrian archaeological survey of the Project area after building demolition and asphalt removal, and after soil excavation. Any newly discovered historic (over 45 years of age) or prehistoric archaeological sites identified during the survey must be recorded, as required, on appropriate Department of Parks and Recreation Primary Record (DPR 523) and associated (e.g., Building-Structure-Object) forms.

Mitigation Measure Cultural-2: Inadvertent Discoveries. If any previously unknown prehistoric resources are discovered during grading, trenching, or other on-site excavation(s), then earthwork within 25 feet of these materials shall be stopped until a qualified professional archaeologist has evaluated the potential significance of the find, and suggests appropriate steps to protect the resource.

1. According to CEQA Section 15126.4, avoidance is the preferred mitigation. Since CEQA provisions regarding the preservation of historic resources direct that adverse effects to historic resources shall be avoided, if feasible, the resource shall be protected from damaging effects through avoidance.
2. If avoidance of any previously undiscovered archaeological site is not feasible, data recovery shall be conducted in accordance with an approved Archaeological Data Recovery Plan (ADRP) to mitigate adverse effects to the significance of the site – the area of data recovery being limited to the area of adverse effect. This would fulfill CEQA requirements that the mitigation measure must be "roughly proportional" to the impacts of the project. A professional, qualified archaeologist shall conduct data recovery in compliance with CEQA Guideline Section §15064.5. Once the site has been properly tested, subject to data recovery, or preserved to the satisfaction of the professional archaeologist in compliance with CEQA Guideline §15064.5, the site can be further developed.

Mitigation Measure Cultural-3: Inadvertent Discovery of Human Remains. Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human remains, or possible human remains, are located during Project-related construction excavation. Section 7050.5(b) states, "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code."

1. The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the NAHC within 24 hours. The NAHC has various powers and duties, including the appointment of a Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

Mitigation Measure Geology-6, Project Compaction Recommendations: The Project's grading plans should follow all recommended compaction requirements as presented in Table 6 of the CEL Geology Study.

Mitigation Measure Geology-7, Building Pad Grading. To reduce potential abrupt differential settlement of the near surface soils as well as to provide uniform bearing support, the buildings should be supported by a layer of reworked, engineered fill. The fill layer should extend to at least four feet below existing ground surface. It should be constructed by a combination of over excavating the pad below the existing grade, scarifying the over-excavation subgrade to a depth of at least eight inches, and compacting the exposed surface to the project compaction requirements, and backfilling with compacted, engineered fill to the new building pad subgrades. Therefore, the scarified fill thickness can be considered part of the required minimum four-foot engineered fill thickness. The engineered fill layer should extend at least five feet horizontally beyond the perimeter of the building footprints or as feasible if limited by nearby structures.

1. Engineered fill should be placed and compacted to final pad subgrade in accordance with the detailed recommendations presented in the CEL Geology Study.
2. Due to the granular nature of the near-surface materials, excavating the edges of the over excavations may require that slopes be cut back, as near-vertical slopes may not stand beyond the short-term.

Mitigation Measure Geology-7, Shallow Foundations: The proposed buildings can be supported on conventional continuous perimeter and interior spread footings bearing on the recommended engineered fill layer. Footings should have a minimum width of 18 inches and founded on a minimum of 24 inches below lowest adjacent finished grade (i.e., pad subgrade for interior continuous footings, exterior compacted surface grade for exterior footings, not including loose landscape or topsoil material).

Mitigation Measure Geology-8, Grading Flatwork/Pavement Areas: Areas to receive concrete hardscape or pavements should be scarified to a minimum depth of eight inches below existing grade or final subgrade, whichever is lower. Scarified areas should be moisture conditioned and compacted. Where required, engineered fill should be placed and compacted to reach design subgrade elevation. Rubber-tired heavy equipment, such as a full water truck, should be used to proof load exposed subgrade areas where pumping is suspected. Proof loading will determine if the subgrade soil is capable of supporting construction equipment without excessive pumping or rutting.

Mitigation Measure Noise-1, Construction Days/Hours: The Project's construction schedule should comply with the following restrictions concerning construction days and hours:

1. Construction activities should be limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that extreme noise generating activities greater than 90 dBA and soil import and export operations shall be limited to between 8:00 a.m. and 4:00 p.m. Use of concrete saws shall be limited to the hours between 8:00 am and 4:00 pm on weekdays.
2. Construction activities should be limited to between 9:00 a.m. and 5:00 p.m. on Saturday, but only within the interior of the building with the doors and windows closed.
3. No construction is allowed on Sunday or federal holidays.
4. Any construction activity proposed outside of the above days and hours for special activities (potentially such as the longer-duration soil export and import operations) shall be evaluated on a case-by-case basis by the District, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The District shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours.

Mitigation Measure Noise-2, Construction Noise Control Best Management Practices (BMPs): The District and the District's contractor should implement best management practices (BMPs) for noise reduction to reduce construction noise to the extent practical. Noise reduction BMPs include, but are not limited to the following

1. Equipment and trucks used for construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds), wherever feasible.
2. Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. These types of mufflers can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used if such jackets are commercially available, and this could achieve a reduction of 5

dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.

3. Use electrical power instead of generators, where feasible.
4. Locate stationary noise sources as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or use other measures to provide equivalent noise reduction. Stage large equipment, compressors or generators at least 25 feet from the site perimeters when work is not being done near these uses.
5. The noisiest phases of construction should be limited to less than 10 days at a time. Exceptions may be allowed if the District determines an extension is necessary and all available noise reduction controls are implemented.
6. Construction activities should be conducted in a manner that minimizes the noise impact at the adjacent property boundaries wherever possible. Construction equipment shall be positioned as far from noise sensitive receptors as possible.
7. Prohibit unnecessary idling of internal combustion engines.
8. Erect temporary plywood noise barriers around the construction site during the loudest construction phases (ground clearing and excavation).

Mitigation Measure Noise-3, Noise Monitoring and Complaint Response: The District should establish and implement a set of procedures for responding to complaints received pertaining to construction noise, and implement these procedures during construction. These procedures should include:

1. Notify property owners and occupants located within 300 feet of construction activities at least 14 calendar days prior to commencement of construction.
2. Designate an on-site construction complaint and enforcement manager for the project.
3. Post a large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures and phone numbers for the complaint manager.
4. Construction noise monitoring should be undertaken if reliable noise complaints are received during demolition, excavation and/or construction activities.

Mitigation Measure Transportation-1, Traffic Control Plan: The District shall prepare and implement a Traffic Control Plan during the construction and soil remediation process. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle and pedestrian accommodations (or detours, if accommodations are not feasible). These traffic control measures should include an overall construction logistics plan with designated construction access routes, construction worker parking plan and construction phasing plan, proposed truck routes, detour signage and lane closure procedures (if required), signs or cones for driver safety, and a pedestrian safety plan. The Traffic Control Plan shall be in conformance with the City of Oakland's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists and Bus Facilities in Construction Zones.