B. MITIGATION MEASURES

<u>Mitigation Measure AES-1</u>: The project applicant shall prepare project lighting plans and submit them to the City of Emeryville for review. City staff shall review and approve these plans to ensure that proposed lighting would be low-intensity, downward-directed, and located only in places where it is necessary.

Mitigation Measure AIR-1: Consistent with the guidance from the Bay Area Air Quality Management District (BAAQMD), the project applicant shall include dust control measures in construction specifications for the project. The City shall review the final construction specifications to verify that the requirements have been included prior to issuing a grading or building permit for the project. The City shall verify via field inspection at least twice during construction that the measures are being implemented. The following measures are required:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.

Mitigation Measure AIR-2a: Implement Mitigation Measure AIR-1.

Mitigation Measure AIR-2b: Consistent with guidance from the BAAQMD, the project applicant shall require contractors to include emissions control measures in construction specifications for the project. The City shall review the final construction specifications to verify that the requirements have been included prior to issuing a grading or building permit for the project. The City shall verify via field inspection at least twice during construction that the measures are being implemented. The following actions are required:

- Idling time of diesel powered construction equipment shall be limited to 5 minutes;
- Alternative powered construction equipment (i.e., CNG, biodiesel, electric) shall be utilized when feasible;
- Add-on control devices shall be used such as diesel oxidation catalysts or particulate filters;
- Project construction (demolition, site preparation, and building erection) shall be phased (not occur simultaneously); and operating hours of heavy duty equipment shall be minimized.

Mitigation Measure BIO-1: Implement Mitigation Measures HYD-1a and HYD-1b.

<u>Mitigation Measure CULT-1</u>: Ground disturbance associated with project activities below the project site fill layer shall be monitored by a qualified archaeologist. Archaeological monitors shall be empowered to halt construction activities at the location of the discovery to review

possible archaeological material and to protect the resource while the finds are being evaluated. Monitoring shall continue until, in the archaeologist's judgment, cultural resources are not likely to be encountered.

If deposits of prehistoric or historical archaeological materials are encountered during project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the finds, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. Adverse effects to such deposits shall be avoided by project activities. If avoidance is not feasible, the archaeological deposits shall be evaluated for their eligibility for listing in the California Register. If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, adverse effects on the deposits shall be avoided or mitigated.

Mitigation shall consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City of Emeryville and the Northwest Information Center.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the applicant, the City of Emeryville, and the Northwest Information Center.

Mitigation Measure CULT-2: In the event that an archaeological monitor is not present and deposits of prehistoric or historical archaeological materials are encountered during project activities, all work within 25 feet of the discovery should be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. The project proponent should also be notified. Project personnel should not collect or move any archaeological materials. It is recommended that adverse effects to such deposits be avoided by project activities. If such deposits cannot be avoided, they should be evaluated for their California Register of Historical Resources eligibility. If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, adverse effects on the deposits must be avoided or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the assessment, the archeologist should prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City of Emeryville and the Northwest Information Center.

<u>Mitigation Measure CULT-3</u>: The project applicant shall inform its contractor(s) of the sensitivity of the project area for paleontological resources by including the following directive in contract documents:

The subsurface of the construction site may be sensitive for paleontological resources. If paleontological resources are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Paleontological resources include fossil plants and animals, and such trace fossil evidence of past life as tracks. Ancient marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Vertebrate land mammals may include bones of mammoth, camel, saber tooth cat, horse, and bison. Paleontological resources also include plant imprints, petrified wood, and animal tracks.

The City shall verify that the language has been included in the contract documents before issuing the grading or building permit.

Adverse effects to paleontological deposits should be avoided by project activities. If avoidance is not feasible, the paleontological resources shall be evaluated for their significance. If the resources are not significant, avoidance is not necessary. If the resources are significant, project activities shall avoid disturbing the deposits, or the adverse effects of disturbance shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a technical recovery report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the paleontological assessment and/or mitigation, a report shall be prepared documenting the methods, results, and recommendations of the study. The report shall be submitted to the applicant and the City of Emeryville and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology.

Mitigation Measure CULT-4: If human remains are encountered, these remains shall be treated in accordance with Health and Safety Code §7050.5. The project applicant shall inform its contractor(s) of the sensitivity of the project area for human remains by including the following directive in contract documents:

If human remains are encountered during project activities, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

The City shall verify that the language has been included in the contract documents before issuing the grading or building permit.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the most likely descendent (MLD). The report shall be submitted to the applicant, the City of Emeryville, and the Northwest Information Center.

Mitigation Measure GEO-1: A Certified Engineering Geologist, Geotechnical Engineer or other appropriately registered professional shall be engaged by the project applicant to conduct a design-level geotechnical investigation and prepare a geotechnical and soils report for the proposed project, including remediation. The applicant shall submit a shoring plan (or evidence that shoring is not required) to the DTSC and the City of Emeryville Planning and Building Department prior to approval of the final RDIP by the DTSC. The applicant shall submit the final plans for the project and specifications for conformance with the recommendations in the geotechnical report to the City of Emeryville Planning and Building Department for review and confirmation that the proposed buildings fully comply with the California Building Code (Seismic Zone 4). The report shall identify building techniques appropriate for minimizing seismic damage. All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils report shall be followed. The City shall review and approve the plans and specifications prior to issuing a building permit for the project.

Mitigation Measure GEO-2: The project applicant shall prepare an Erosion Control Plan in accordance with the San Francisco Bay Regional Water Quality Control Board's requirements. The City shall verify that the Erosion Control Plan has been prepared before issuing the grading or building permit for the project.

<u>Mitigation Measure GEO-3</u>: Implement Mitigation Measure HYD-1a and HYD-1b (Preparation of a SWPPP and a Storm Water Management Plan).

Mitigation Measure GEO-4: Implement Mitigation Measure GEO-1.

Mitigation Measure GEO-5: Implement Mitigation Measure GEO-1.

Mitigation Measure HAZ-1: Before issuing the grading permit for the remediation phase of the project on the EmeryStation West building site, the City shall verify that the final *Remedial Design and Implementation Plan* (RDIP) has been prepared and that the Department of Toxic Substances Control (DTSC) has reviewed and concurred with the plans presented in the RDIP. The project applicant shall be responsible for ensuring that the plans are implemented. The Operations and Maintenance Plan shall describe soil confirmation sampling and groundwater sampling to ensure that soils and groundwater remaining on site do not present an environmental or human health hazard. The site-specific Health and Safety Plan shall be prepared in accordance with federal, State and local standards governing the remediation of soil and groundwater containing hazardous waste.

<u>Mitigation Measure HAZ-2a</u>: Before issuing the grading or building permit for construction of the Heritage Square parking structure, the City shall confirm that the deed restriction allowing commercial development on the site has been prepared and agreed to by the property owner and the San Francisco Bay Regional Water Quality Control Board.

Mitigation Measure HAZ-2b: The project applicant shall submit final construction drawings that show maximum depths of excavation across the Heritage Square parking structure site that would be needed to accommodate the building's foundation. The City shall review the plans with respect to the residual concentrations in soil at the site as identified in the 2004 Characterization and Remediation of Polychlorinated Biphenyl-impacted Soils Beneath the North and East Parking Lots at Heritage Square prepared by SOMA Environmental Engineering. If excavation for the Heritage Square parking structure would extend into any areas of residual contamination then the applicant shall prepare a Site Management Plan and a Health and Safety Plan for excavation activities in areas where contaminants persist.

The Site Management Plan shall describe how contaminated materials will be excavated, handled, and segregated from the underlying soil, how contaminated materials will be disposed, and the maintenance requirements necessary to ensure that long-term soil management measures, such as capping of the soils, will remain effective during the site's use and occupancy period. The project applicant shall be responsible for ensuring that long-term soil management measures are implemented. The Site Management Plan shall describe soil confirmation sampling and groundwater sampling, if needed, to ensure that soils and groundwater remaining on site do not present an environmental or human health hazard. The site-specific Site Management Plan and the Health and Safety Plan shall be prepared in accordance with federal, State and local standards governing the remediation of soil and groundwater containing hazardous waste. The Health and Safety Plan shall describe air and dust monitoring procedures and corrective actions, as necessary, to ensure that workers and the public are not exposed to site-related contaminants in volatile air emissions or dust containing harmful concentrations of contaminants during construction.

The City shall verify that the Site Management Plan and Health and Safety Plan have been prepared and that the Site Management Plan has been conditionally approved with concurrence from the San Francisco Bay Regional Water Quality Control Board before issuing the grading or building permit.

Mitigation Measure HAZ-3: Implement Mitigation Measures HAZ-1, HAZ-2a and HAZ-2b.

Mitigation Measure HYD-1a: The project applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for the post-remediation period of construction designed to reduce potential impacts to surface water quality. It is not required that the SWPPP be submitted to the Water Board, but must be maintained on site and made available to Water Board staff upon request. The SWPPP shall include specific and detailed Best Management Practices (BMPs) designed to mitigate construction-related pollutants. At minimum, BMPs shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly designed centralized storage areas that keep these materials out of the rain. The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and

shall include both dry and wet weather inspections. The City shall verify that the SWPPP has been prepared before issuing the grading or building permit for the project.

Mitigation Measure HYD-1b: The project applicant shall prepare a Storm Water Management Plan that is consistent with the *Stormwater Guidelines for Green, Dense Redevelopment:* Stormwater Quality Solutions for the City of Emeryville. The City shall verify that the Storm Water Management Plan has been prepared before issuing the building permit for the project.

<u>Mitigation Measure HYD-2</u>: Implement Mitigation Measure GEO-2.

Mitigation Measure HYD-3: Implement Mitigation Measures HYD-1a and HYD-1b.

Mitigation Measure NOISE-1: The project contractor shall comply with the following measures:

Hours. Unless the City Council grants a waiver allowing different remediation and construction hours pursuant to Section 5-13.06 of the Emeryville Municipal Code, remediation and construction hours shall be limited to 7:00 a.m. to 6:00 p.m., Monday through Friday. In an urgent situation, the City Manager, Planning and Building Director, or Public Works Director may approve weekend or night work pursuant to Section 5-13.05(e) of the Emeryville Municipal Code.

Equipment. All heavy remediation and construction equipment used on the project shall be maintained in good operating condition, with all internal combustion, engine-driven equipment equipped with intake and exhaust mufflers that are in good condition as deemed to be practically feasible. All non-impact tools shall meet a maximum noise level of no more than 85 dB when measured at a distance of 50 feet. All stationary noise-generating equipment shall be located as far away as possible from neighboring property lines, especially residential uses.

Noise Disturbance Coordinator. The applicant shall designate a "Noise Disturbance Coordinator" who shall be responsible for responding to any complaints about remediation and construction noise. The Noise Disturbance Coordinator shall determine the cause of the noise complaint and shall require that reasonable measures warranted to correct the problem be implemented. The applicant shall conspicuously post a telephone number for the Noise Disturbance Coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

Mitigation Measure NOISE-2: Implement Mitigation Measure NOISE-1.

Mitigation Measure NOISE-3: Implement Mitigation Measure NOISE-1.

<u>Mitigation Measure TRANS-1</u>: The project applicant shall be responsible for providing the City with funds to develop and implement timing plans that optimize the operations of the coordinated signals at the following four intersections during AM peak, mid-day, and PM peak hours:

- Christie Avenue / Powell Street (Intersection #8)
- I-80 EB Ramps /Powell Street (Intersection #9)

- Frontage Road /Powell Street (Intersection #10)
- Frontage Road /I-80 WB Ramps (Intersection #11)

Given that said intersections are also coordinated with the closely spaced intersections of Shellmound Street and Christie Avenue, Shellmound Way and Shellmound Street, Christie Avenue and Powell Street Plaza, and Shellmound Street and Christie Avenue, these intersections shall be included with signal timing optimization.

Mitigation Measure TRANS-2: The project applicant shall be responsible for designing and installing a traffic signal at the intersection of 62nd and Hollis Street. Said new traffic signal shall be interconnected and coordinated with the existing traffic signals on Hollis Street. The applicant shall also be responsible for providing the City with funds to develop and implement timing plans that optimize the operation of the new signal with five existing coordinated traffic signals on Hollis Street from Stanford Avenue to 65th Street during AM peak, mid-day and PM peak hours. The fee for signalizing the intersection and coordination with existing traffic signal shall be paid to the City of Emeryville prior to issuing the temporary occupancy permit for the EmeryStation West building.

<u>Mitigation Measure TRANS-3</u>: The project applicant shall prepare and submit detailed Traffic Management Plan (TMP) drawings for each phase of construction to the City of Emeryville for approval. This shall include preparation and implementation of a parking management plan for the existing parking uses on the EmeryStation West site and the Heritage Square site. The project applicant shall consider the following items when preparing the detailed TMP drawings:

- Truck loading and unloading is strongly recommended to be conducted off-street during the remediation and post-remediation phases of construction. However, if this is determined infeasible and the applicant plans to load or unload on Horton Street, the following issues shall be considered:
 - The Horton Street roadway is approximately 30 feet wide and provides one traffic lane and an on-street bicycle lane in each direction. The project applicant shall determine whether two-way traffic could be maintained adjacent to the on-street loading area. It is desirable that two-way traffic would be maintained along this section of Horton Street and the roadway would need to be re-striped to provide a 10-foot wide loading area and two 10-foot wide traffic lanes, which would require the temporary removal of the on-street bicycle lanes on Horton Street. Adequate signage shall be installed to warn motorists and bicyclists of the changed traffic conditions along this segment of Horton Street. It is also recommended that a reduced speed limit be temporarily established to highlight the changed traffic conditions and improve road safety for motorists and bicyclists.
 - The installation of concrete K-rail barriers along the edge of any on-street loading area is recommended. The barriers would enable the area to be used safely for material loading and storage and for general construction parking. This proposal would necessitate closure of the abutting sidewalk. However, it is unknown whether the K-Rail barriers could be installed and two lanes of traffic still maintained.

- Because the width of the required loading zone has not been designed it is unknown whether the K-Rail barriers could be installed and one lane of traffic in each direction maintained. Should two-way traffic be unable to be maintained, the applicant shall implement either "two-way stop and hold contra-flow traffic" or a "local detour route for one direction of traffic." On-site traffic controllers shall operate the two-way contra-flow traffic arrangement. The provision of safe bicycle access shall be considered for both of these potential options.
- Fencing shall be installed along the perimeter of the construction areas to restrict the public from entering the site.
- Safe and convenient pedestrian access shall be maintained along Horton Street. Should the sidewalk on one side of the street need to be closed, appropriate signage shall be installed and pedestrians directed to use the opposite side of the street.
- Truck traffic that occurs during the peak commute hours (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) could result in degraded levels of service and increased delays at local intersections than during off-peak hours. Accordingly, truck trips to or from the site shall be restricted to off-peak periods, to the extent feasible.
- If construction work is proposed outside of normal allowed hours, the applicant shall obtain an out-of-hours permit from the City of Emeryville to undertake the proposed work.
- Lane detours for street improvements and utility connections may be required to undertake
 asphalt paving, sewer, water, phone, data, temporary power, gas and electrical works. The
 applicant shall provide specific and detailed TMP drawings to the City of Emeryville for
 these phases of construction.
- Adjacent property owners and City public safety personnel shall be notified regarding when major deliveries, detours, lane closures and out-of-hours work would occur.
- A process shall be developed for responding to and tracking complaints pertaining to construction activity, including identification of an on-site complaint manager. The manager shall determine the cause of each complaint and shall take prompt action to correct the problem. The Planning and Building Department shall be informed of the name and contact information for the complaint manager prior to the issuance of the first permit.

Mitigation Measure TRANS-4: The City shall signalize the Doyle Street/Powell Street intersection when traffic conditions warrant. Because this impact can be attributed to existing traffic in the area, as well as traffic from approved, planned, and potential development in and around Emeryville, the applicant shall pay a pro rata share of the cost of signalization based on the project's contribution to the total cumulative growth. In the Cumulative Plus Project scenario, project traffic represents 3.6 percent of the total cumulative growth at this intersection in the PM peak hour.

Mitigation Measure TRANS-5: Implement Mitigation Measure TRANS-2.