

**ATTACHMENT L**

**MISSION BAY NORTH**  
**CEQA MITIGATION MEASURES**

## ATTACHMENT L

### MISSION BAY NORTH CEQA MITIGATION MEASURES

Initially capitalized terms unless separately defined in this Attachment L have the meaning and content set forth in the North OPA.

This Attachment L allocates responsibility for CEQA Mitigation Measures to be imposed on the North Plan Area. The schedule for implementation and monitoring of these measures is provided in the Mitigation Monitoring and Reporting Program for the North Plan Area. Certain of the Transportation measures listed below may be triggered either by development in the North Plan Area or the South Plan Area, depending on the rate and location of development. Accordingly, these measures are listed as obligations for both Plan Areas, but the responsibility for implementation will ultimately be assigned to one Plan Area or the other based on the thresholds established in Tables 1-3 to Exhibit 1 of the Mitigation Monitoring and Reporting Program.

Where Owner is denoted in the right hand column, responsibility for implementation is allocated to the Owner only as applicable with respect to Owner Improvements. The Owner may transfer certain obligations to one or more associations, as provided in Section 14.5 of this North OPA. Where Agency is denoted in the right hand column, responsibility for implementation is allocated to the Agency or, where applicable, a Qualified Housing Developer, only as applicable with respect to Improvements constructed on Agency Affordable Housing Parcels or other Agency Property. Any obligation listed as the obligation of a City entity shall be performed by the relevant City Agency pursuant to the Mission Bay North Interagency Cooperation Agreement.

Where a measure is subject to approval of one or more regulatory agencies other than a City Agency or the Agency, the obligation to implement such measure is conditioned upon obtaining any required authorizations, permits or approvals from such agencies.

<u>Measure</u>	<u>Responsibility</u>
<p>D.1. <u>Lighting and Glare</u>. Design parking structure lighting to minimize off-site glare. The design could include 45-degree cutoff angles on light fixtures to focus light within the site, and specifications that spill lighting from parking areas would be 0.25 foot-candle or less at 5 feet from the property line of the parking areas. Applies to individual sites within the Project Area.</p>	<p>Owner, Agency</p>
<p>D.3. <u>Archaeological Resources</u>. Retain the services of an archaeologist, because of the strong possibility of encountering the remains of cultural or historic artifacts or features in the six historic resources areas. The Environmental Review Officer (ERO) in consultation with the President of the Landmarks Preservation Advisory Board (LPAB) and the archaeologist would determine: 1) whether the archaeologist should instruct all excavation and foundation crews on the project site of the potential for discovery of historic archaeological deposits and artifacts, and the procedures to be followed if such materials are uncovered; and 2) prior to the commencement of foundation excavation, a program of archaeological testing.</p> <p>Retain a qualified historic archaeologist to supervise a pre-foundation excavation testing program for each phase of Project Area development or each construction site, as appropriate, using a series of mechanical, exploratory borings or other testing methods determined by the archaeologist to be appropriate. A qualified historical archaeologist would supervise the testing in the six historic resource areas to determine the probability of finding cultural and historical remains. At the completion of the archaeological testing program, the archaeologist would submit a written report first and directly to the ERO and the President of the LPAB, with a copy to the project sponsor, which describes the findings, assesses their significance and proposes appropriate recommendations for any additional procedures necessary for the mitigation of adverse impacts to cultural resources determined to be significant.</p> <p>Retain a certified archaeologist to supervise a program of on-site monitoring during site excavation in the six historic resource areas, following site clearance and pre-excavation testing. The certified archaeologist would record observations in a permanent log. Should cultural or historic artifacts be found following commencement of excavation activities, the archaeologist would assess the significance of the find, and immediately report to the ERO and the President of LPAB. Upon receiving the advice of the consultant and the LPAB, the ERO would recommend specific mitigation measures, if necessary. The monitoring program, whether or not there are finds of significance, would result in a written report to be submitted first and directly</p>	<p>Owner, Agency</p>

<u>Measure</u>	<u>Responsibility</u>
<p>to the ERO and the President of the LPAB, with a copy to the project sponsor.</p> <p>Suspend excavation or construction activities which might damage discovered cultural resources for a total maximum of four weeks over the course of construction at each site to permit inspection, recommendation and retrieval, if appropriate.</p> <p>Implement an appropriate security program to prevent looting or destruction, if cultural resources of potential significance are discovered. Any discovered cultural artifact assessed as significant by the archaeologist upon concurrence by the ERO and the President of the LPAB would be placed in a repository designated for such materials or possibly exhibited in a public display. Following approval of the archaeological testing and monitoring program reports by the ERO and the President of LPAB, a final report would be sent to the California Archaeological Site Survey Office at Sonoma State University, the Foundation for San Francisco's Architectural Heritage and the State Office of Historic Preservation. The Office of Environmental Review would receive three final copies of the final archaeological findings report. Archaeological testing could be coordinated with other site investigations for geotechnical and toxic waste purposes.</p>	
<p>D.4. <u>Archaeological Exploration Program</u>. Develop archaeological exploration programs, consistent with Measure D.3, above, for pre-identified sensitive historic archaeological areas that should include the following:</p>	Owner, Agency
<p>D.4.a. Define specific research parameters and prepare a written study plan in consultation with the ERO and LPAB prior to subsurface exploration, with emphasis on National Register determination of historical significance and the maximum retrieval of archaeological data.</p>	Owner, Agency
<p>D.4.b. Examine large-scale exposure of soil profiles.</p>	Owner, Agency
<p>D.4.c. Complete detailed field records, including photographs and drawings, to document subsurface soil profiles, archaeological deposits and integrity of such deposits.</p>	Owner, Agency
<p>D.4.d. Complete a detailed report of findings to describe research and exploration methodologies, testing results, all archaeological findings and recommendations for resource management.</p>	Owner, Agency

<u>Measure</u>	<u>Responsibility</u>
<p>D.5. <u>Archaeological Monitoring at 19th Century City Dump</u>. Archival review suggests that depositional integrity of the late 19th-century city dump has been lost because of scavenging while the dump was in operation; however, important historical artifacts may still be present. Pre-construction archaeological testing is therefore not recommended. Archaeological monitoring during construction would be the appropriate mitigation measure for that area. Therefore, retain the services of a qualified archaeologist. The ERO in consultation with the President of the LPAB and the archaeologist would determine whether the archaeologist should instruct all excavation and foundation crews in the area of the 19th-century city dump of the potential for discovery of cultural and historic artifacts or features. If such artifacts or features were uncovered, follow procedures described in Measure D.3 for suspension of construction activities, notification of the ERO and President of the LPAB, and development recovery measures, as appropriate.</p>	<p>Owner, Agency</p>
<p>D.6. <u>Unknown Archaeological Remains</u>. The entire Mission Bay Project Area has at least some sensitivity for the presence of unknown archaeological remains. Prehistoric cultural deposits could be encountered in three identified areas and unknown historical features, artifact caches and debris areas could be located anywhere in the Project Area. Follow procedures for instructing excavation crews, notifying the ERO and President of the LPAB, and developing recovery measures, as described in Measure D.3, above. In addition, in the event that prehistoric archaeological deposits are discovered, consult local Native American organizations. Dialogue with the ERO, LPAB and the archaeological consultant would take place in developing acceptable archaeological testing and excavation procedures, particularly in regard to the disposition of cultural materials and Native American burials.</p>	<p>Owner, Agency</p>
<p>D.7. <u>Pedestrian-Level Winds</u>. Require a qualified wind consultant to review specific designs for buildings 100 feet or more in height for potential wind effects. The Redevelopment Agency would conduct wind review of high-rise structures above 100 ft. Wind tunnel testing would also be required unless, upon review by a qualified wind consultant, and with concurrence by the Agency, it is determined that the exposure, massing and orientation of the buildings are such that impacts, based on a 26-mile-per-hour hazard for a single hour of the year criterion, will not occur. The purpose of the wind tunnel studies is to determine design-specific impacts and to provide a basis for design modifications to mitigate these impacts. Projects within Mission Bay, including UCSF, would be required to meet this standard or to mitigate exceedances through building design.</p>	<p>Owner, Agency</p>

<u>Measure</u>	<u>Responsibility</u>
<p>D.8. <u>Shadows</u>. The Redevelopment Plan documents would require analysis of potential shadows on existing and proposed open spaces during the building design and review process when exceptions to certain standards governing the shape or locations of buildings are requested that would cause over 13% of Mission Creek Park (either North or South), 20% of Bayfront Park, 17% of Triangle Square or 1% of Mission Bay Commons to be in continuous shadow for a period of one hour from March to September between 10:00 a.m. and 4:00 p.m.</p>	Owner, Agency
E.1. <u>Third Street/King Street</u>	Owner
E.1.a. Widen the northbound approach to provide an additional through lane on the west side of Third Street.	Owner
E.1.b. Reconfigure the existing traffic signal.	Owner
E.1.c. Install "Don't Block the Box" signs.	Owner
E.2. <u>Third Street/ Berry Street</u>	Owner
E.2.a. Restripe the northbound approach to provide an additional through lane.	Owner
E.2.b. Reconfigure the existing traffic signal.	Owner
E.2.c. Install "Don't Block the Box" signs.	Owner
E.8. <u>Fourth Street/King Street</u>	Owner, San Francisco Municipal Railway ("MUNI") as allocated in the Infrastructure Plan
E.8.a. Widen the eastbound approach to provide an exclusive right-turn lane.	Owner

<u>Measure</u>	<u>Responsibility</u>
E.8.b. Reconfigure the existing traffic signal.	Owner, MUNI as allocated in the Infrastructure Plan
E.8.c. Install "Don't Block the Box" signs.	Owner
E.9. <u>Fourth Street/Berry Street</u>	Owner, MUNI as allocated in the Infrastructure Plan
E.9.a. Restripe the westbound approach to provide an additional lane.	Owner
E.9.b. Restripe the northbound approach to provide an additional lane.	Owner
E.9.c. Reconfigure the existing traffic signal.	Owner, MUNI as allocated in the Infrastructure Plan
E.9.d. Install "Don't Block the Box" signs.	Owner
E.19. <u>Fifth Street/King Street</u>	Owner; City as applicant
E.19.a. Narrow approximately 250 feet of the median on the westbound approach to provide an exclusive left-turn lane.	Owner; City as applicant
E.19.b. Restripe the I-280 off-ramp touchdown and narrow the median on the south side of King Street for a distance of about 300 feet beginning at the intersection with Fifth Street, to increase the number of eastbound lanes from the existing two to three.	Owner; City as applicant
E.19.c. Reconfigure the existing traffic signal.	Owner; City as applicant

<u>Measure</u>	<u>Responsibility</u>
E.21. <u>Third Street</u>	Owner, MUNI
E.21.a. Widen the west side of Third Street between Berry Street and King Street to accommodate the additional lanes described in Measure E.1.	Owner
E.21.b. Widen Third Street for approximately one-third the distance between Mariposa Street and 16th Street to accommodate the lane configuration described in Measure E.6.	Owner
E.21.c. In cooperation with MUNI and the Department of Public Works, reconfigure Third Street in the Project Area to accommodate the Third Street light rail transit median while maintaining two travel lanes in each direction and exclusive left-turn lanes at specific locations, as listed in Measures E.6 and E.7.	Owner, MUNI as allocated in the Infrastructure Plan
E.23. <u>Fourth Street</u>	Owner, MUNI as allocated in the Infrastructure Plan
E.23.a. Widen Fourth Street between China Basin Channel and King Street to accommodate the Third Street light rail tracks and a MUNI station platform between Berry and King Streets.	Owner, MUNI as allocated in the Infrastructure Plan
E.23.b. Extend Fourth Street southward, parallel to Third Street, to intersect with Mariposa Street at the existing intersection with Minnesota Street.	Owner
E.24. <u>King Street</u>	Owner
E.24.a. Widen eastbound King Street between Fifth and Fourth Streets to accommodate the lane configurations for the Fourth Street/King Street intersection in Measure E.8.	Owner
E.24.b. Construct westbound King Street frontage road between Fifth Street and Berry Street.	Owner



<u>Measure</u>	<u>Responsibility</u>
<u>E.30. Seventh Street/Townsend Street</u>	Owner
E.30.a. Restripe the southbound, eastbound, and westbound approaches to provide a left-turn lane, a through lane, and a right-turn lane.	Owner
E.30.b. Restripe the northbound approach to provide a left turn lane, a through lane, and a shared right-through lane.	Owner
<u>E.31. Seventh Street/Berry Street</u>	Owner
E.31.a. Restripe the eastbound approach to provide two lanes.	Owner
E.31.b. Restripe the northbound approach to provide a shared left-through lane and a through lane and restripe the southbound approach to provide a through lane and a shared right-through lane.	Owner
<u>E.35. Eighth Street/Townsend Street</u>	Owner
E.35.a. Eliminate traffic circle and reconfigure intersection.	Owner
E.35.b. Install a new traffic signal.	Owner
<u>E.36. Third Street/Townsend Street</u>	San Francisco Department of Parking and Traffic ("DPT")
E.36.a. Remove the on-street parking on the westbound approach during the p.m. peak commute period.	DPT
E.36.b. Provide an additional westbound through lane during the p.m. peak commute period.	DPT

<u>Measure</u>	<u>Responsibility</u>
E.38. <u>Fourth Street/King Street</u> . Widen the southbound approach to provide an additional lane, and restripe the intersection to provide one exclusive left-turn lane, one exclusive through lane, one shared right-through lane, and an exclusive right-turn lane for the southbound Fourth Street approach.	Owner
E.41. <u>Fourth Street</u> . Widen the west side of Fourth Street for approximately half the distance between Townsend Street and King Street to provide the additional southbound lane noted in Mitigation Measure E.38, including providing additional right-of-way.	Owner
E.42. <u>Seventh Street</u> . Eliminate on-street parking on both sides of Seventh Street between Townsend and 16th Streets during the morning and afternoon peak commute periods to accommodate the lane configuration changes described in Mitigation Measures E.29, E.30, E.31, and E.32.	DPT; City as applicant
E.45. <u>Extend N-Judah MUNI Metro Line</u> . Extend and operate the route of the N-Judah MUNI Metro line from the Embarcadero station to Mariposa Street, using the MMX and Third Street light rail tracks.	MUNI
E.46. <u>Transportation Management Organizations</u> .	Owner, Agency
E.46.a Form a Mission Bay Transportation Management Association ("TMA") to implement a Transportation System Management ("TSM") Plan.	Owner
E.46.b Form a Transportation Coordinating Committee ("TCC") including representatives of Project Area property owners, surrounding neighborhood groups, the University of California, San Francisco ("UCSF"), the San Francisco Redevelopment Agency ("SFRA") and appropriate City staff, including DPT, MUNI, and the San Francisco Department of Public Works ("DPW"), to address area-wide transportation planning issues and coordinate with other uses and neighborhoods in nearby areas.	Agency

Measure	Responsibility
<p>E.47. <u>Transportation System Management (TSM) Plan</u>. Prepare a TSM Plan, which could include the following elements:</p>	<p>Owner</p>
<p>E.47.a. <u>Shuttle Bus System</u>. Operate shuttle bus service between Mission Bay and regional transit stops in San Francisco (e.g., BART, Caltrain, Ferry Terminal, Transbay Transit Terminal), and specific gathering points in major San Francisco residential neighborhoods (e.g., Richmond and Mission Districts).</p>	<p>Owner</p>
<p>E.47.b. <u>Transit Pass Sales</u>. Sell transit passes in neighborhood retail stores and commercial buildings in the Project Area.</p>	<p>Owner, Agency</p>
<p>E.47.c. <u>Employee Transportation Subsidies</u>. Provide a system of employee transportation subsidies for major employers.</p>	<p>Owner</p>
<p>E.47.e. <u>Secure Bicycle Parking</u>. Provide secure bicycle parking areas in parking garages of residential buildings, office buildings, and research and development facilities. Provide secure bicycle parking areas by 1) constructing secure bicycle parking at a ratio of 1 bicycle parking space for every 20 automobile parking spaces, and 2) carrying out an annual survey program during project development to establish trends in bicycle use and to estimate demand for secure bicycle parking and for sidewalk bicycle racks, increasing the number of secure bicycle parking spaces or racks either in new buildings or in existing automobile parking facilities to meet the estimated demand.</p>	<p>Owner, Agency</p>
<p>Provide secure bicycle racks throughout Mission Bay for the use of visitors.</p>	
<p>E.47.f. <u>Appropriate Street Lighting</u>. Ensure that sidewalks in Mission Bay are sufficiently lit to provide pedestrians and bicyclists with a greater sense of safety, and thereby encourage Mission Bay employees, visitors, and residents to walk and bicycle to and from Mission Bay.</p>	<p>Owner, Agency</p>

Measure	Responsibility
E.47.g. <u>Transit, Pedestrian and Bicycle Route Information</u> . Provide maps of the local and citywide pedestrian and bicycle routes with transit maps and information on kiosks throughout the Project Area to promote multi-modal travel.	MUNI, DPW to provide in connection with transit shelters and other transit signage
E.47.h. <u>Parking Management Guidelines</u> . Establish parking management guidelines for the private operators of parking facilities in the Project Area.	Owner
E.49. <u>Ferry Service</u> . Make a good faith effort to assist the Port of San Francisco and others in ongoing studies of the feasibility of expanding regional ferry service. Make good faith efforts to assist in implementing feasible study recommendations.	Owner
F.1. <u>TSM Measures</u> . Implement measures to decrease vehicle trips, as described in Mitigation Measures E.46 through E.50.	Owner, Agency
F.2. <u>Construction PM<sub>10</sub></u> . As conditions of construction contracts, require contractors to implement the following mitigation program, based on the instructions in the Bay Area Air Quality Management District ("BAAQMD") CEQA Guidelines, at all construction sites in the Project Area:	Owner, Agency
F.2.a. Water all active construction areas at least twice a day, or as needed to prevent visible dust plumes from blowing off-site.	Owner, Agency
F.2.b. Use tarpaulins or other effective covers for on-site storage piles and for haul trucks that travel on streets.	Owner, Agency
F.2.c. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved parking areas and staging areas at construction sites.	Owner, Agency
F.2.d. Sweep all paved access routes, parking areas, and staging areas daily (preferably with water sweepers).	Owner, Agency
F.2.e. Sweep streets daily (preferably with water sweepers) if visible amounts of soil material are carried onto public streets.	Owner, Agency

<u>Measure</u>	<u>Responsibility</u>
F.2.f. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).	Owner, Agency
F.2.g. Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).	Owner, Agency
F.2.h. Limit traffic speeds on unpaved roads to 15 mph.	Owner, Agency
F.2.i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.	Owner, Agency
F.2.j. Replant vegetation in disturbed areas as quickly as possible.	Owner, Agency
F.2.k. Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.	Owner, Agency
F.2.l. Install wind breaks, or plant trees / vegetative wind breaks at windward side(s) of construction areas.	Owner, Agency
F.2.m. Suspend excavation and grading on large construction sites when winds (instantaneous gusts) exceed 25 mph.	Owner, Agency
F.2.n. Limit the area subject to excavation, grading and other construction activity at any one time.	Owner, Agency
F.3. <u>Toxic Air Contaminants (TACs)</u> . Prior to issuing a certificate of occupancy for a facility containing potential toxic air contamination sources, obtain written verification from BAAQMD either that the facility has been issued a permit from BAAQMD, if required by law, or that permit requirements do not apply to the facility.	Owner, Agency

<u>Measure</u>	<u>Responsibility</u>
<p>F.5. <u>Dry Cleaning Facilities</u>. Prohibit dry cleaning facilities that conduct on-site dry cleaning operations in residential areas within the Project Area. For any dry cleaning operations within the Project Area, require vapor barriers in their design and construct so as to reduce exposure to perchloroethylene and any other toxic air contaminants handled at the facility.</p>	<p>Owner, Agency required to implement any vapor barrier requirements as may be imposed by BAAQMD</p>
<p>F.6. <u>Child-Care Buffer Zones</u>. Require preschool and childcare centers to notify BAAQMD and the San Francisco Department of Public Health regarding the locations of their operations, and require these centers to consult with these agencies regarding existing and possible future stationary and mobile sources of toxic air contaminants. The purpose of these consultations is to obtain information so that preschool and childcare centers can be located to minimize potential impacts from toxic air contaminants emissions sources.</p>	<p>Owner, Agency to provide notice and consult as required by measure</p>
<p>G.1. <u>Noise Reduction in Pile Driving</u>. Use noise-reducing pile driving techniques such as pre-drilling pile holes (if feasible, based on soils) to the maximum feasible depth, installing intake and exhaust mufflers on piling equipment, vibrating piles into place when feasible, installing shrouds around the piling equipment where feasible, and restricting the hours of operation.</p>	<p>Owner, Agency</p>
<p>G.2. <u>Analyze Potential Vibrations from Caltrain</u>. Analyze potential vibration from Caltrain on the western-most block of Mission Bay North at Berry and King Streets, adjacent to Caltrain tracks, based on information about localized soils, and, if the analysis shows vibration could be significant without mitigation, design and construct foundations of buildings proposed to be on that block with vibration-reducing features to reduce potential impacts from adjacent passenger trains.</p>	<p>Owner, Agency</p>
<p>H.1. <u>Heavy Equipment Storage</u>. During the build-out period, store heavy construction equipment in the Project Area during the buildout period that is capable of traveling on damaged roads, clearing debris, and opening access to, and within, the Project Area after a major earthquake.</p>	<p>Owner, Agency</p>
<p>H.2. <u>Emergency Preparedness and Emergency Response</u>. Following build-out, coordinate emergency response plans with the City regarding use of heavy equipment from the City storage yard in the vicinity of the Project Area.</p>	<p>Owner, Agency</p>

Measure	<u>Responsibility</u>
<p data-bbox="207 1291 240 1969"><u>H.3. Comprehensive Preparedness and Response Plan</u></p> <p data-bbox="267 583 381 1969">H.3.a. Require the formulation of a comprehensive preparedness and response plan for the entire Project Area (as opposed to the typical building-by-building plan), integrated with the City's emergency response plans and in coordination with the Mayor's Office of Emergency Services. An emergency response plan should include:</p> <ul data-bbox="414 583 1120 1969" style="list-style-type: none"> <li>• Community coordination and response</li> <li>• Coordination with government services</li> <li>• Outreach and training (not only for employees but also residents)</li> <li>• Food and water</li> <li>• Shelter</li> <li>• Sanitation</li> <li>• Consideration of need and potential locations for special facilities (operations, medical, etc.) in the context of the citywide Emergency Response Plan and the Project Area's location in Emergency Response District 3</li> <li>• Organization of employees into response teams</li> <li>• Employee training in response procedures, including setting up a command post, communications, first aid, evacuation, security and clean-up</li> </ul> <p data-bbox="1161 562 1274 1969">H.3.b. In addition to the Project Area-wide plan, require each building or complex in the Project Area to prepare an emergency response plan. Each plan would be the responsibility of the owner(s) of each building or complex, and would be reviewed by the City periodically to ensure it is kept up to date.</p>	<p data-bbox="267 451 300 535">Owner</p> <p data-bbox="1144 325 1177 535">Owner, Agency</p>

<u>Measure</u>	<u>Responsibility</u>
<p>H.6. <u>Facilitate Emergency Access Routes</u>. As part of the comprehensive preparedness plan identified in Measure H.3, identify and implement feasible measures to facilitate and improve emergency access routes to the site, especially in the vicinity of Seventh and Owens Streets. Such measures could include design of open spaces to allow vehicle access following in a catastrophic event; designing underground utilities at the Owens and Seventh Streets connector to minimize severe damage or disconnection caused by earthquakes; constructing heavier pavement sections along critical routes if indicated through a geotechnical study; and siting buildings within the area bounded by Seventh Street, the Seventh Street connector, Owens Street, and 16th Street in a manner that would allow emergency vehicle access between these buildings in a catastrophic event.</p>	<p>Owner</p>
<p>H.7. <u>Corrosivity</u>. Test soils for sulfate and chloride content. If necessary, use admixtures in concrete so it would not be susceptible to attack by sulfates, and/or use coated metal pipes so that pipes would be more resistant to corrosion by chlorides.</p>	<p>Owner, Agency</p>
<p>J.1. <u>Risk Management Plan(s)</u>. Prior to any site development activities in the Project Area, develop and implement a San Francisco Regional Water Quality Control Board ("RWQCB")-approved Risk Management Plan or Plans (RMP). The RMP shall address all site development activities and post-development activities and shall include specific measures that would be protective of human health and the aquatic environment. The human health standards to be applied in the RMP are a cumulative cancer risk of <math>1 \times 10^{-5}</math> and Hazard Index of 1, or more stringent standards as may be required by the RWQCB. Amend the RMPs as required by the RWQCB to reflect new information regarding contamination, land use decisions, or as a result of Article 20 compliance.</p>	<p>Owner, Agency, City as allocated in the North Environmental Investigation and Response Program</p>
<p>J.2. <u>Site Specific Risk Evaluation</u>. Carry out a site-specific risk evaluation for each site in a non-residential area proposed to be used for a public school or child care facility; submit to RWQCB for review and approval. If cancer risks exceed <math>1 \times 10^{-5}</math> and/or non-cancer risk exceeds a Hazard Index of 1, carry out remediation designed to reduce risks to meet these standards or select another site that is shown to meet these standards.</p>	<p>Owner, Agency, City as allocated in the North Environmental Investigation and Response Program</p>



<u>Measure</u>	<u>Responsibility</u>
<p>K.1. <u>Stormwater Pollution Prevention Program (SWPPP)</u>. Develop and implement a comprehensive Stormwater Pollution Prevention Plan (SWPPP) for all construction activities within the Project Area to avoid and minimize erosion and sedimentation in China Basin Channel and San Francisco Bay and to manage other aspects of the construction site. Include at least the following Best Management Practices, or substantially equivalent measures.</p>	Owner, Agency
<p>K.1.a. Minimize dust during demolition, grading, and construction by lightly spraying exposed soil on a regular basis.</p>	Owner, Agency
<p>K.1.b. Minimize wind and water erosion on temporary soil stockpiles by spraying with water during dry weather and covering with plastic sheeting or other similar material during the rainy season (November to April).</p>	Owner, Agency
<p>K.1.c. Minimize the area and length of time during which the site is cleared and graded.</p>	Owner, Agency
<p>K.1.d. Prevent the release of construction pollutants such as cement, mortar, paints and solvents, fuel and lubricating oils, pesticides, and herbicides by storing such materials in a bermed, or otherwise secured, area.</p>	Owner, Agency
<p>K.1.e. As needed, install filter fences around the perimeter of the construction site to prevent off-site sediment discharge. Prior to grading the bank slopes of China Basin Channel for the proposed channel-edge treatments, install silt or filter fences to slow water and remove sediment. As needed, properly trench and anchor in the silt or filter fences so that they stand up to the forces of tidal fluctuation and wave action, and do not allow sediment-laden water to escape underneath them.</p>	Owner, Agency
<p>K.1.f. Follow design and construction standards found in the Manual of Standards for Erosion and Sediment Control Measures for placement of riprap and stone size.</p>	Owner, Agency
<p>K.1.g. Install and maintain sediment and oil and grease traps in local stormwater intakes during the construction period, or otherwise properly control oil and grease discharges.</p>	Owner, Agency
<p>K.1.h. Clean wheels and cover loads of trucks carrying excavated soils before they leave the construction site.</p>	Owner, Agency

<u>Measure</u>	<u>Responsibility</u>
<p>K.1.i. Implement a hazardous material spill prevention, control, and clean-up program for the construction period. As needed, the program would include measures such as constructing swales and barriers that would direct any potential spills away from the Channel and the Bay and into containment basins to prevent the movement of any materials from the construction site into water.</p>	<p>Owner, Agency</p>
<p>K.2. <u>Changes in Sanitary Sewage Quality.</u> In addition to developing and implementing a Stormwater Management Program for the Central/Bay Basin (see Mitigation Measure K.5), participate in the City's existing Water Pollution Prevention Program. Facilitate implementation of the City's Water Pollution Prevention Program by providing and installing wastewater sampling ports in any building anticipated to have a potentially significant discharge of pollutants to the sanitary sewer, as determined by the Water Pollution Prevention Program of the San Francisco Public Utilities Commission's Bureau of Environmental Regulation and Management, and in locations as determined by the Water Pollution Prevention Program.</p>	<p>Owner, Agency</p>
<p>K.3. <u>Sewer Improvement Design.</u> Design and construct sewer improvements such that potential flows to the City's combined sewer system from the project do not contribute to an increase in the annual overflow volume as projected by the Bayside Planning Model by providing increased storage in oversized pipes, centralized storage facilities, smaller dispersed storage facilities, or detention basins, or through other means to reduce or delay stormwater discharges to the City system.</p>	<p>Owner</p>
<p>K.6. <u>Structure Placement and Design to Minimize Dangers of Flooding.</u> Structures in the Project Area should be designed and located in such a way to assure the reasonable safety of structures and shoreline protective devices built in the Bay or in low-lying shoreline areas from the dangers of tidal flooding, including consideration of a rise in relative sea level. Detailed construction specifications to mitigate against impacts of a sea-level rise, however, would require specific flood protection engineering and building analysis by a licensed engineer where structures are proposed below a 99-foot elevation (Mission Bay Datum). Measures include:</p>	<p>Owner, Agency</p>
<p>K.6.a. Setback from the water's edge.</p>	<p>Owner, Agency</p>
<p>K.6.b. Install seawalls, dikes, and/or berms during construction of infrastructure.</p>	<p>Owner, Agency</p>

<u>Measure</u>	<u>Responsibility</u>
K.6.c. Provide for dewatering basements.	Owner, Agency
K.6.d. Construct streets and sidewalks above existing grades by reducing the amount of excavation for utilities or basements.	Owner, Agency
K.6.e. Use topsoil to raise the level of public open spaces.	Owner, Agency
K.6.f. Use half-basements and partially depressed garage levels to minimize excavation.	Owner, Agency
L.1. <u>Salt Marsh Wetland Habitat Mitigation Plan</u> . Prepare and implement a salt marsh wetland habitat mitigation plan in accordance with the San Francisco District, U.S. Army Corps of Engineers Habitat Mitigation Planning Guidelines. Determine the details of the plan through the Section 404 permit process. Nothing in this mitigation measure is intended to constrain the flexibility needed to meet permitting agency requirements, or adjust to variability in field conditions, new information or technology, or other factors. Similarly, this condition is not intended to conflict with or constrain use of more natural alternative Channel edge treatments that are determined feasible and consistent with adopted Redevelopment Agency standards and guidelines applicable to Mission Bay as contained in Design for Development documents.	Owner
L.2. <u>Wetland Habitat Avoidance</u> . Avoid salt marsh wetland habitat along the China Basin Channel shoreline during installation of suction inlets (and associated piping) used for fire-fighting water supply. Design the storm drain outfalls to minimize scouring and erosion of mudflats in coordination with relevant permitting agencies during the permitting process.	Owner
L.3. <u>Construction During Pacific Herring Spawning Season</u> . Do not conduct any construction activities (including movement of heavy equipment or structures by barge or tugboat) with the potential to cause turbidity in Channel or Bay waters during the spawning season of Pacific herring (December 1-March 1).	Owner, Agency

<u>Measure</u>	<u>Responsibility</u>
<p>L.4. <u>Turbidity Prevention</u>. Require the construction contractor to use shallow-draft tugboats, to prevent turbidity and sediment resuspension caused by tugboat activity in the Channel. Shallow-draft tugboats float higher in the water than deep-draft tugboats. Because they float higher, the tugboat propellers are not as deep under the water surface, and therefore are farther away from the bottom of the Channel. This arrangement has less potential to disturb bottom sediments because the local currents created by the propellers would not extend as deeply into the water column. Require the construction contractor to operate the tugboats at the minimum speed necessary to maintain maneuverability of the barges. Slower speeds would reduce the spin of tugboat propellers, thus minimizing turbidity and sediment resuspension.</p>	<p>Owner, Agency</p>
<p>L.5. <u>Construction In Channel</u>. Confine resuspended sediments from construction activities in the Channel or Bay waters to the work site using submarine silt curtains around pile-driving or outfall construction sites, or silt fences properly anchored and trenched in place at the toe of slope below any grading or rubble-removing activities.</p>	<p>Owner</p>
<p>L.6. <u>Removal and Disposal Plan</u>. Prepare a written plan for removal and disposal, including a description of any methods incorporated to avoid or minimize potential surface water contamination shall be prepared prior to removing existing support piles from China Basin Channel for the proposed Channel-edge treatments. Submit the plan to the San Francisco Bay Regional Water Quality Control Board for approval before implementation. Implement the plan during construction and have a qualified specialist monitored the plan to ensure adequate performance. Implement this plan during removal of pilings under the direction of a qualified specialist.</p>	<p>Owner</p>
<p>M.2. <u>Include Water Conservation in Buildings and Landscaping</u>. Include methods of water conservation in Mission Bay buildings and landscaping. Water conservation methods include the following:</p>	<p>Owner, Agency</p>
<p>M.2.a. Install water conserving dishwashers and washing machines in rental apartments and condominiums.</p>	<p>Owner, Agency</p>
<p>M.2.b. Install water conserving dishwashers and water efficient centralized cooling systems in office buildings.</p>	<p>Owner, Agency</p>
<p>M.2.c. Incorporate water efficient laboratory techniques in research facilities where feasible.</p>	<p>Owner, Agency</p>

<u>Measure</u>	<u>Responsibility</u>
M.2.d. Provide information to residences and businesses advising methods to conserve water.	Owner, Agency
M.2.e. Install water conserving irrigation systems (e.g., drip irrigation).	Owner, Agency
M.2.f. Design landscaping using drought resistant and other low-water use plants.	Owner, Agency
M.3 <u>Extend Auxiliary Water Supply System</u> . Extend the Auxiliary Water Supply System (High-Pressure System) through the interior of the Project Area. The routing, design, and implementation of the AWSS extensions shall be determined by the Fire Department and the Department of Public Works.	Owner