ATTACHMENT A, EXHIBIT 1

MITIGATION MONITORING AND REPORTING PROGRAM FOR

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule | |
|---|--|------------------------------------|--|--|--|
| MITIGATION MEASURES FOR THE SEAWALL LOT 337 AND PIER 48 MIXED-USE PROJECT | | | | | |
| Cultural Resources (Archaeological Resources) Mitigation Measures | | | | | |
| M-CP-2: Archeological Testing. Based on a reasonable presumption that archeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the rotational Qualified Archeological Consultants List (QACL) maintained by the Planning Department archeologist. The project sponsor shall contact the Planning Department archeologist to obtain the names and contact information for the next three archeological consultants on the QACL. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant, as specified herein, shall be submitted first and directly to the ERO for review and comment and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of 4 weeks. At the direction of the ERO, the suspension of construction can be extended beyond 4 weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level of potential effects on a significant archeological resource, as defined in CEQA Guidelines, Sections 15064.5 (a) and (c). | Permittee for horizontal improvements, such as infrastructure, in public right-of-ways, and public spaces (hereinafter "infrastructure developer") or vertical developer(s) for work on vertical development parcels and related improvements (hereinafter "vertical developer(s)"), ¹ as applicable, to retain qualified professional archaeologist from the rotational pool of archaeological consultants | Prior to issuance of site permits. | Infrastructure developer or vertical developer, as applicable, to retain the qualified archeological consultant for the project who shall report to the ERO. Qualified archeological consultant will scope archeological testing program with ERO. | Considered complete when infrastructure developer or vertical developer(s), as applicable, retains a qualifie professional archaeological consultant and archeological consultant has approved scope by the ERO and submits any required reports to ERO for the archeological testing program. | |

maintained by the Planning

¹ Where applicable, "vertical developer" includes the Pier 48 developer.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|--|--|---|---|
| | Department. | | | |
| Consultation with Descendant Communities: On discovery of an archeological site ² associated with descendant Native Americans, the overseas Chinese, or other potentially interested descendant group, an appropriate representative ³ of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and offer recommendations to the ERO regarding appropriate archeological treatment of the site, recovered data from the site, and, if applicable, interpretative treatment of the associated archeological site. A copy of the final archeological resources report shall be provided to the representative of the descendant group. | Infrastructure developer or vertical developer(s) (as applicable) and archaeological consultant. | For the duration of soil-disturbing activities and data recovery of potentially significant archeological sites. | Infrastructure developer or vertical developer(s) (as applicable) and/or archaeological consultant shall contact the ERO and descendant group representative upon discovery of an archaeological site associated with descendant Native Americans, Overseas Chinese, or interested descendant group. The representative of the descendant group shall be given the opportunity to monitor archaeological field investigations on the site and consult with the ERO regarding appropriate archaeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archaeological Consultant shall prepare a Final Archaeological Resources | Considered complete upon submittal of Fina Archaeological Resources Report. |

The term "archeological site" is intended here to include any archeological deposit, feature, burial, or evidence of burial.

An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American contact list for the City and County of San Francisco maintained by the NAHC or, in the case of overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the department archeologist.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|--|--|--|
| | | | Report in consultation with the ERO (per below). A copy of this report shall be provided to the ERO and the representative of the descendant group. | |
| Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing plan (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine, to the extent possible, the presence or absence of archeological resources and identify and evaluate whether any archeological resource encountered on the site constitutes a historical resource under CEQA. | Infrastructure developer or vertical developer(s) (as applicable) and archaeological consultant in consultation with the ERO. Development of ATP for a defined geographic area and/or specified construction activities. | Prior to any excavation, site preparation or construction, and prior to testing, submit an ATP for a defined geographic area and/or specified construction activities to and obtain approval by the ERO. A single ATP or multiple ATPs may be produced to address project phasing. | Archaeological consultant to undertake ATP in consultation with ERO. | Prior to any soil disturbing activities. Considered complete upon approval of the ATP by the ERO and finding by the ERO that the ATP is implemented. |
| At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If, based on the archeological testing program, the archeological consultant finds that significant archeological resources may be present, the ERO, in consultation with the archeological consultant, shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. No archeological data recovery shall be undertaken without the prior approval of the ERO or the Planning Department archeologist. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor: | Infrastructure developer or vertical developer(s) (as applicable) and archaeological consultant in consultation with the ERO. | Upon completion of the archeological testing program. | Archaeological consultant to submit results of testing, and, in consultation with ERO, determine whether additional measures are warranted. If significant archaeological resources are present and may be adversely affected., the infrastructure developer or vertical developer(s) (as applicable), at its discretion, may elect to redesign a project, or implement data | Considered complete after ERO review and approval of report(s) on ATP findings. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) recovery program, unless ERO determines the archaeological resource is of greater interpretive than research significance and that interpretive use is feasible. | Monitoring Schedule |
|---|---|--|--|--|
| A. The proposed project shall be redesigned so as to avoid any adverse effect on the significant archeological resource, or B. A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible. | Written report on ATP findings: Infrastructure developer or vertical developer(s) (as applicable) and archaeological consultant in consultation with the ERO. | At the completion of each archaeological testing program. | Archeological consultant shall submit report of the findings of the ATP to the ERO. | After completion of archeological testing program. |
| Archeological Monitoring Program. If the ERO, in consultation with the archeological consultant, determines that an archeological monitoring program shall be implemented, the archeological monitoring program shall include the following provisions: The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the archeological monitoring program reasonably prior to any project-related soil-disturbing activities commencing. The ERO, in consultation with the archeological consultant, shall determine what project activities shall be archeologically monitored. In most cases, any soil-disturbing activities, such as demolition, foundation removal, excavation, grading, utility installation, foundation work, pile driving (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the risk these activities pose to potential archeological resources and their depositional context; The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), know how to identify evidence of the expected resource(s), and know the appropriate protocol in the event of apparent discovery of an archeological | Infrastructure developer or vertical developer(s) (as applicable) and archaeological consultant in consultation with the ERO. | The archaeological consultant, infrastructure developer or vertical developer(s) (as applicable), and ERO shall meet prior to the commencement of soil-disturbing activities for a defined geographic area and/or specified construction activities. The ERO in consultation with the archaeological | If required, archaeological consultant to prepare the AMP in consultation with the ERO. Infrastructure developer or vertical developer(s) (as applicable), project archaeological consultant, and infrastructure developer's or vertical developer(s) contractors shall implement the AMP, if required by the ERO. | Considered complete on approval of AMP(s) by ERO; submittal of report regarding findings of AMP(s); and finding by ERO that AMP(s) is implemented. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|---|---|--|---|
| resource; The archeological monitor(s) shall be present on the project site according to the schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits; The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis; If an intact archeological deposit is encountered, all soil-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile-driving/construction activities and equipment until the deposit is evaluated. If, in the case of pile-driving activity (foundation, shoring, etc.), the archeological monitor has cause to believe that the pile-driving activity may affect an archeological resource, the pile-driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit and present the findings of this assessment to the ERO. Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO. | | consultant shall determine what archaeological monitoring is necessary. A single AMP or multiple AMPs may be produced to address project phasing. | | |
| Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accordance with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would | Infrastructure developer or vertical developer(s) (as applicable) and archaeological consultant in consultation with the ERO. | Upon determination by the ERO that an ADRP is required. A single ADRP or multiple ADRPs may be produced to address project phasing. | If required, archaeological consultant to prepare an ADRP(s) in consultation with the ERO. | Considered complete upon review and approval of the ADRP(s) by the ERO. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|---|---|---|---|
| address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to any portions of the archeological resources if nondestructive methods are practical. | | | | |
| The scope of the ADRP shall include the following elements: Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations. Cataloging and Laboratory Analysis. Description of selected cataloging system and artifact analysis procedures. Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies. Interpretive Program. Consideration of an onsite/offsite public interpretive program during the course of the archeological data recovery program. Security Measures. Recommended security measures to protect the archeological resource from vandalism, looting, and nonintentionally damaging activities. Final Report. Description of proposed report format and distribution of results. Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the | | | | |
| accession policies of the curation facilities. Final Archeological Resources Report. The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. A separate, brief, non-confidential summary of findings that can be made available to the public shall be submitted with each FARR. | Infrastructure developer or vertical developer(s) (as applicable) and archaeological consultant in consultation with the ERO. | For infrastructure developer-prior to acceptance of work. Prior to issuance of Certificate of Temporary or Final Occupancy, whichever occurs first. | If applicable, archaeological consultant to submit a Draft FARR to ERO. | Considered complete on submittal of FARR and approval by ERO. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|---|---|--|
| Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one copy, the ERO shall receive a copy of the transmittal of the FARR to the NWIC, and the Environmental Planning division of the Planning Department shall receive one bound, one unbound, and one unlocked, searchable PDF copy on CD of the FARR, along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or high interpretive value of the resource, the ERO may require a final report content, format, and distribution different from that presented above. | Archaeological consultant at the direction of the ERO. | Upon approval of the FARR by the ERO. | Archaeological consultant to distribute FARR. | Considered complete when archaeological consultant provides written certification to the ERO that the required FARR distribution has been completed. |
| M-CP-3: Treatment of Human Remains, Associated or Unassociated Funerary Objects. The treatment of human remains and associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the coroner of the City and County of San Francisco and, in the event of the coroner's determination that the human remains are Native American remains, notification of the Native American Heritage Commission (NAHC), which shall appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). The ERO will also be immediately notified. The archeological consultant, project sponsor, ERO, and MLD shall have up to but not beyond 6 days after the discovery to make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines. Section 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the ERO to accept recommendations of an MLD. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects, as specified in the treatment agreement, if such an agreement has been made or, otherwise, as determined by the archeological consultant and the ERO. | Infrastructure developer or vertical developer(s) (as applicable) and archaeological consultant, in consultation with the San Francisco Coroner, NAHC, ERO, and MLD. | In the event human remains and/or funerary objects are encountered, during soils disturbing activity. | Archaeological consultant or archaeological monitor or infrastructure developer or vertical developer(s) or contractor to contact San Francisco County Coroner and ERO Implement regulatory requirements, if applicable, regarding discovery of Native American human remains and associated and/or unassociated funerary objects. Contact archaeological consultant and ERO. | Considered complete on notification of the San Francisco County Coroner, ERO, and NAHC, if necessary, and completion of treatment agreement and/or analysis. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|--|--|---|
| M-CP-4: Tribal Cultural Resources Interpretive Program. If the ERO determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource (TCR) and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned so as to avoid any adverse effect on the significant tribal cultural resource, if feasible. If the Environmental Review Officer (ERO) determines that preservation-in-place of the tribal cultural resource (TCR) pursuant to Mitigation Measure M-CP-2, Archeological Testing, is both feasible and effective, then the archeological consultant shall prepare an archeological resource preservation plan (ARPP). Implementation of the approved ARPP by the archeological consultant shall be required when feasible. If the Environmental Review Officer (ERO), if in consultation with the affiliated Native American tribal representatives and the Project Sponsor, determines that preservation in place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the TCR in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifacts displays and interpretation, and educational panels or other informational displays. | Infrastructure developer or vertical developer(s) (as applicable), archaeological consultant, and ERO, in consultation with the affiliated Native American tribal representatives. | If significant archeological resources are present, during implementation of the project. | Infrastructure developer, vertical developer(s), or archaeological consultant shall implement the project redesign, completion of archeological resource preservation plan, or interpretive program of the TCR, if required. | Considered complete upon project redesign, completion of ARPP, or interpretive program of the TCR, if required. |
| Transportation and Circulation Mitigation Measures M-TR-3: Parking Garage and Intersection Queue Impacts. The easternmost driveway on Long Bridge Street (i.e., closest to Bridgeview Street) shall be restricted to right-in, right-out access during all times. Restricted access could be accomplished by placing signage (i.e., on Long Bridge Street to direct westbound traffic to the westernmost garage driveway, and within the parking garage for exiting traffic to indicate outbound right | Infrastructure developer, garage operator, or vertical developer(s) of garage. | Prior to issuance of certificate of occupancy of Block D2 parking garage. Note: Mitigation | SFMTA, in consultation with the Planning Department and the Port, to review and sign off on detailed plans regarding driveways to ensure design will | Considered complete upon approval of the final driveway plans by SFMTA, |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|---|---|--|---|
| turn movement only allowed) as well as delineators of a sufficient length in the middle of Long Bridge Street to block left-turn access to the driveway. | | Measure M-TR-3 is not applicable to Variant 3 (Reconfigured Parking). | sufficiently restrict movements at driveway to right-in, right-out. | Planning Department, and the Port. |
| M-TR-4.1: Provide Fair-Share Contribution to Improve 10 Townsend Line Capacity. Upon completion and occupancy of Phase 1 of the proposed project and upon completion and occupancy of each subsequent phase as defined in the Development Agreement the project sponsor shall obtain from SFMTA the current ridership on the 10 Townsend and conduct an assessment of the capacity utilization at the screenline's Maximum Load Point (MLP) for weekday AM and PM peak hour conditions. If the capacity utilization exceeds 85 percent, a fair share contribution payment shall be made to SFMTA by the project sponsor, calculated as further provided in a Transit Mitigation Agreement described below, and attached to or incorporated into the Development Agreement. Such payment shall be adjusted, as appropriate, to the extent, if any, that the proposed project reflects either the High Residential Assumption or High Commercial Assumption based upon all phases of the proposed project that have been completed up to such date. Accordingly, the fair share contributions by phase may differ by scenario because the number of transit riders varies due to different mixes of land use. If the capacity utilization based on SFMTA's ridership data is less than 85 percent, then the project sponsor's fair share payment for that phase shall be \$0 and the process will repeat at the next subsequent phase. Each subsequent fair share calculation shall take account of amounts paid for prior phases, to ensure that payments are not duplicative for the same transit rider impacts. The project sponsor shall enter into a Transit Mitigation Agreement with the SFMTA pursuant to which the project sponsor will make a fair share contribution to the cost of providing additional bus service or otherwise improving service on the 10 Townsend. The fair share contribution as documented in the Transportation Impact Study for the proposed project shall not exceed the following amounts, in total across all phases: a. \$991,230 for High Commercial Assumption | Infrastructure developer and/or vertical developer(s), Transportation Coordinator, and SFMTA. | Prior to issuance of certificate of occupancy of Phase 1 of the proposed project, enter into Transit Mitigation Agreement. Upon issuance of a certificate of occupancy for each phase of development as defined in the Development Agreement, SFMTA to provide ridership data and assess capacity utilization and, if capacity utilization exceeds 85 percent, the infrastructure developer/vertical developer(s) would pay fair share contribution fees as specified in this measure, which would be used by | Infrastructure developer and/or vertical developer(s) and Transportation Coordinator to obtain current ridership on the 10 Townsend from SFMTA and conduct an assessment of the capacity utilization associated with the project, as described in the measure. If the capacity utilization of the 10 Townsend line at its maximum load point exceeds 85 percent as measured at the completion of any individual project phase, and the SFMTA has committed to implement M-TR-4.1, the infrastructure developer shall provide a fair share contribution subject to the limits stated in M-TR-4.1 to capital costs for SFMTA to implement one of the designated capacity enhancement measures. | Considered complete upon execution of Transit Mitigation Agreement and payment of fair share contribution as described in this M-TR-4.1 for any phase of development for which such contribution is determined to be necessary. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|--|---|---|---|
| b. \$782,706 for High Residential Assumption SFMTA will determine whether adding bus(es) or other measures are more desirable to increase capacity along the route and will use the funds provided by the project sponsor to implement the most desirable measure(s), which may include but is not limited to the following measures: 1. Convert to using higher-capacity vehicles on the 10 Townsend route. In this case, the project sponsors fair share contribution may be utilized to convert the route to articulated buses. Some bus stops along the route may not currently be configured to accommodate the longer articulated buses. Some bus zones could be extended by removing one or more parking spaces at locations where appropriate space is available. 2. Instead of adding more buses to a congested route, increase travel speeds along the route which would allow for buses to move faster thus increasing efficiency and reliability. In this case, the project sponsor's fair share contribution may be used to fund a study to identify appropriate and feasible improvements and/or implement a portion of the improvements that would increase travel speeds enough to increase capacity along the bus route. Such improvements could include transit only lanes, transit signal priority, and transit boarding improvements. 3. Increase capacity along the corridor by adding a new Muni service route in this area. If this option is selected, the project sponsor's fair share contribution may fund the purchase of the new vehicles. | | SFMTA to increase capacity. | | |
| M-TR-4.2: Provide Fair-Share Contribution to Improve 30 Stockton Line Capacity Proposed Project. Upon completion and occupancy of Phase 1 of the proposed project and upon completion and occupancy of each subsequent phase as defined in the Development Agreement, the project sponsor shall obtain from SFMTA the current ridership on the 30 Stockton and conduct an assessment of the capacity utilization at the Maximum Load Point (MLP) on the route between the proposed project and Market Street for weekday PM peak hour conditions. If the capacity utilization exceeds 85 percent, a fair share contribution payment shall be made by the project sponsor, calculated as further provided in Transit Mitigation Agreement described below, and attached to or incorporated into the Development Agreement. Such payment shall be | Infrastructure developer and/or vertical developer(s), or Transportation Coordinator, and SFMTA. | Prior to issuance of certificate of occupancy of Phase 1 of the proposed project, enter into Transit Mitigation Agreement. Upon issuance of a certificate of occupancy for each phase of development as | Infrastructure developer or Transportation Coordinator to obtain current ridership on the 30 Stockton from SFMTA and conduct an assessment of the capacity utilization associated with the project, as described in the measure. If the capacity utilization of the 30 Stockton line at its maximum load point exceeds 85 percent as measured at | Considered complete upon execution and implementation of Transit Mitigation Agreements and payment of fair share contribution as described in this M-TR-4.2 for any phase for which |

| | Implementation | Mitigation | Monitoring/Reporting Responsibility (Public | Monitoring |
|--|----------------|---|---|--|
| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Responsibility | Schedule | Agency) | Schedule |
| adjusted, as appropriate, to the extent, if any, that the proposed project reflects either the High Commercial Assumption or the High Residential Assumption, the latter of which does not require any fair share contribution. The fair share contributions differ by scenario because the number of transit riders varies due to different mixes of land use. If the capacity utilization based on SFMTA's ridership data is less than 85 percent, then the project sponsor's fair share payment for that phase shall be \$0 and the process will repeat at the next subsequent phase. Each subsequent fair share calculation shall take account of amounts paid for prior phases, to ensure that payments are not duplicative for the same transit rider impacts. The project applicant shall enter into a Transit Mitigation Agreement with the SFMTA pursuant to which the project applicant will make a fair share contribution to the cost of providing additional bus service or otherwise improving service on the 30 Stockton. The fair share contribution as documented in the Transportation Impact Study for the proposed project shall not exceed the following amounts, in total across all phases: a. \$417,691 for High Commercial Assumption b. \$0 for High Residential Assumption SFMTA will determine whether adding bus(es) or other measures are more desirable to increase capacity along the route and will use the funds provided by the project sponsor to implement the most desirable measure(s), which may include but is not limited to the following measures: 1. Convert to using higher-capacity vehicles on the 30 Stockton route. In this case, the project sponsors fair share contribution may be utilized to convert the route to articulated buses. Some bus stops along the route may not currently be configured to accommodate the longer articulated buses. Some bus zones could be extended by removing one or more parking spaces at locations where appropriate space is available. | | defined in the Development Agreement, SFMTA to provide ridership data and assess capacity utilization and, if capacity utilization exceeds 85 percent, the infrastructure developer/vertical developer(s) would pay fair share contribution fees as specified in this measure, which would be used by SFMTA to increase capacity. | the completion of any individual project phase, and the SFMTA has committed to implement M-TR-4.2, the infrastructure developer shall provide the fair share contribution subject to the limits stated in M-TR-4.2 to capital costs for SFMTA to implement one of the designated capacity enhancement measures. | such contribution is determined to be necessary. |
| 2. Instead of adding more buses to a congested route, increase travel speeds along the route which would allow for buses to move faster thus increasing efficiency and reliability. In this case, the project sponsor's fair | | | | |
| share contribution may be used to fund a study to identify appropriate and | | | | |
| feasible improvements and/or implement a portion of the improvements that would increase travel speeds enough to increase capacity along the | | | | |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|--|---|---|--|
| bus route. Such improvements could include transit only lanes, transit signal priority, and transit boarding improvements. 3. Increase capacity along the corridor by adding a new Muni service route in this area. If this option is selected, the project sponsor's fair share contribution may fund the purchase of the new vehicles. | | | | |
| M-TR-6: Parking Garage and Intersection Queue Impacts on Transit Delay A. The westernmost driveway on Mission Rock Street (i.e., closest to Third Street) shall be restricted to right-in, right-out access and closed during large AT&T Park events. Restricted access could be accomplished by placing signage as well as delineators of a sufficient length on the center line on Mission Rock Street t, east of Third Street o block left-turn access to the driveway. | Infrastructure developer and/or garage operator SFMTA, Planning Department, Transportation Coordinator, onsite transportation staff, parking garage management staff, event staff. | Prior to certificate of occupancy for Block D garage. | SFMTA, in consultation with the Planning Department and the Port, to review and sign off on detailed plans regarding driveways to ensure design will sufficiently restrict movements at driveway to right-in, right- out. | Infrastructure developer's/ garage operator's obligations deemed complete once construction of listed improvements are complete. |
| B. A "keep clear" zone shall be provided in front of the easternmost driveway on Mission Rock Street (i.e., closest to Bridgeview Street) to prevent westbound queues at the Third Street/Mission Rock traffic signal from blocking inbound access to the driveway. The Keep Clear pavement markings shall be placed in the westbound lane immediately in front of the easternmost driveway for the Block D2 parking garage. | Infrastructure developer and/or garage operator SFMTA, Planning Department, Transportation Coordinator, onsite transportation staff, parking garage management staff, event staff. | Prior to the opening of the Block D2 garage. | SFMTA, in consultation with the Planning Department and the Port, to review and sign off on detailed plan regarding the easternmost driveway keep clear zone. | Infrastructure developer's/ garage operator's obligations deemed complete once construction of listed improvements are complete. |
| C. The southbound left-turn lane at the Third Street/Mission Rock Street intersection shall be restriped to extend the length of the left-turn lane to 350 feet. Advance traffic signal detection equipment shall be installed at the end of the newly striped left-turn pocket to detect when queues fill up the left-turn pocket and extend north to the end of the pocket near the Third Street/Channel Street intersection, allowing additional green time to be allocated to the southbound left-turn movement at the Third Street/Mission Rock Street traffic signal. | Infrastructure developer and/or garage operator SFMTA, Planning Department, Transportation Coordinator, onsite transportation staff, parking garage | Prior to certificate of occupancy for Block D garage; sequencing and selection of interventions outlined within Item C shall be at the direction of the | SFMTA, in consultation with the Planning Department and the Port, to review and sign off on detailed plans regarding extension of the left-turn pocket on Third Street/Mission Rock Street. | Infrastructure developer's/garage operator's obligations deemed complete once construction of listed improvements are complete. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|--|--|---|--|
| | management staff, event staff. | SFMTA. In the case that the SFMTA identifies any of these intervention as technically challenging, infeasible, or undesirable because of resultant operational issues, other interventions must be selected. | | |
| D. Wayfinding signs including Static and Variable Message Signs will be installed to provide directions to the parking garages and to provide traffic alerts, messages, and alternate driving routes for drivers traveling to the Block D2 aboveground garage, to destinations in the vicinity, or through the area. Four High Visibility Static Signs will be installed, three on the approaches to the Third Street/Mission Rock Street intersections (for southbound, eastbound and northbound directions) and one for northbound drivers on Terry A. Francois Boulevard, south of Mission Rock Street. One permanent Variable Message Sign shall be installed for southbound drivers on Third Street, between King Street and Berry Street. | Infrastructure developer and/or garage operator SFMTA, Planning Department, Transportation Coordinator, onsite transportation staff, parking garage management staff, event staff. | Prior to certificate of occupancy for Block D garage. | SFMTA, in consultation with the Planning Department and the Port, to review and sign off on detailed plans regarding wayfinding signs including Static and Variable Message Signs. | Infrastructure developer's/garage operator's obligations deemed complete once construction of listed improvements is complete. |
| E. The project sponsor shall enter into an Event Mitigation Agreement with the SFMTA that provides for Parking Control Officers (PCOs) to manage traffic within the project site adjacent to the proposed project's parking garages and on Exposition Street (between Third Street and the Shared Public Way) during all AT&T Park events and on-site events with 15,000 or more attendees. | Infrastructure developer and/or garage operator, SFMTA, Planning Department, Transportation Coordinator, onsite transportation staff, parking garage management staff, | Enter into Event Mitigation Agreement prior opening of the Block D2 parking garage. Prior to commencement of construction on the site, and on-going | Infrastructure developer and/or garage operator to enter in Event Management Agreement with SFMTA, who should provide for implementation of all of these items, as well as closure of the westernmost driveway during AT&T events per Item A. | Considered complete upon Infrastructure developer and SFMTA entering into Event Mitigation Agreement. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility event staff. | Mitigation Schedule through the life of project. | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|---|--|---|---|
| F. The site's transportation coordinator shall be a member of the Mission Bay Ballpark Transportation Coordination Committee and provide notification prior to the start of any on-site event that would overlap with an event at AT&T Park or the Warriors arena. | Infrastructure developer and/or garage operator SFMTA, Planning Department, Transportation Coordinator, onsite transportation staff, parking garage management staff, event staff. | Enter into Event Mitigation Agreement prior opening of the Block D2 parking garage. With commencement of construction, and on-going through life of the project. | Infrastructure developer and/or garage operator to enter into Event Management Agreement with SFMTA, who should provide for implementation of all of these items, as well as closure of the westernmost driveway during AT&T events per Item A. | Upon infrastructure developer and SFMTA entering into Event Mitigation Agreement and ongoing during project operations. |
| G. Traffic destined for the proposed project's parking garages will be monitored by the owner/operator during all AT&T Park events and on-site events with 15,000 or more attendees, and periodically during weekday a.m. and p.m. peak hours, to ensure that garage access queues do not affect operations of the T Third transit line. Action will be taken by the Mission Rock Transportation Coordinator, onsite transportation staff, parking garage management staff, event staff, and/or PCOs assigned to event traffic management to implement real-time traffic management strategies (i.e., alternative traffic routing, temporal parking pricing, enhanced garage driveway controls, etc.) to reduce vehicle garage access queues so they do not affect operations of the T Third line. | Infrastructure developer and/or garage operator SFMTA, Planning Department, Transportation Coordinator, onsite transportation staff, parking garage management staff, event staff. | Enter into Event Mitigation Agreement prior opening of the Block D2 parking garage. With commencement of construction, and on-going through life of the project; the weekday (non-event) AM and PM peak-hour monitoring shall be conducted quarterly on a Tuesday, Wednesday, or Thursday of a | Infrastructure developer and/or garage operator to enter into Event Management Agreement with SFMTA, who should provide for implementation of all of these items, as well as closure of the westernmost driveway during AT&T events per Item A. | Upon Infrastructure developer and SFMTA entering into Event Mitigation Agreement and ongoing during project operations. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule non-holiday week. | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|---|---|---|
| H. If the SFMTA Director, or his or her designee, receives information that a recurring queue that could affect the operation of the T Third line is imminent or present, SFMTA shall notify the property owner in writing. Upon request, the owner/operator shall hire a qualified transportation consultant to evaluate the conditions at the site for no less than 7 days. The consultant shall prepare a monitoring report to be submitted to SFMTA for review. If SFMTA determines that a recurring queue does exist, the facility owner/operator shall have 45 days from the date of the written determination to abate the excessive recurring queue. Approaches to queue abatement could include but are not limited to: changing parking access and revenue collection system (PARCS) technology to process vehicles more rapidly, adjusting the layout of the garage's ground floor to accommodate more queuing vehicles within the garage, implementing peak-period surge pricing to encourage garage access and egress outside of times with recurrent excessive queues; installing additional variable message signage further upstream from the site to direct drivers to garage access routes away from affected intersections; and/or closing, limiting or controlling Mission Rock Street access from Third Street during times with excessive recurrent queuing and redirecting garage-bound traffic to Terry A. Francois Boulevard. | Infrastructure developer and/or garage operator vertical, SFMTA, Planning Department, Transportation Coordinator, onsite transportation staff, parking garage management staff, event staff. | As may be requested during operations, per written notification by SFMTA With commencement of operation of the Block D2 garage and on-going through the life of the project. If analysis is requested, the analysis shall be conducted during a period that is representative of standard traffic patterns, e.g. on week that does not contain a holiday, is not during winter break, or off-season, etc. The analysis period chosen by the infrastructure developer/garage operator and consultants must be approved by the SFMTA. | SFMTA. | Ongoing during project operations after opening of Block D2 garage. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|---|---|--|
| M-TR-9: Install Traffic Signals and Related Intersection Improvements at Unsignalized Intersections on Fourth Street at Mission Rock Street and Long Bridge Street. Prior to issuance of approval of the third building site permit, but in no event later than the site permit for the Block D2 parking garage, the project sponsor shall provide funding to SFMTA, for a maximum amount of \$1 million for SFMTA to design and construct (1) a traffic signal at the intersection of Fourth Street/Long Bridge Street and (2) a traffic signal at the intersection of Fourth Street/Mission Rock Street. These improvements should be constructed by SFMTA prior to opening of the Block D2 parking garage. | Infrastructure developer, SFMTA. | Payment to SFMTA: Prior to issuance of approval of the third building site permit, but in no event later than the site permit for the Block D2 parking garage. Installation of traffic signals: Prior to opening of the Block D2 parking garage. | SFMTA. | Infrastructure developer's obligations deemed complete once payment is made. SFMTA's obligations deemed complete once traffic signals are constructed. |
| M-TR-10: Bicycle-Truck Interface at Pier 48. The project shall construct a highly visible crossing treatment across the driveway as well as bollards and detectable warning pavers that satisfy ADA requirements at the Pier 48 driveway's beginning and end locations along the Blue Greenway path to warn cyclists and pedestrians of the upcoming driveway crossing. | Pier 48 developer. | Prior to occupancy of Pier 48. | Planning Department will monitor. | Considered complete when crossing treatment is constructed. |
| The project shall provide a traffic control staff at the junction of the Blue Greenway and the driveway to the Pier 48 valley during deliveries to manage bicycle and truck traffic. A flagger shall be provided to manage bicycle and pedestrian travel along the Blue Greenway at the Pier 48 valley driveway whenever trucks back into Pier 48. | Pier 48 developer. | During deliveries. | Pier 48 developer to document arrangement for traffic control staff to manage traffic during deliveries. Planning Department to review documentation. | Ongoing during deliveries. |

| | Implementation | Mitigation | Monitoring/Reporting Responsibility (Public | Monitoring |
|--|--|---|--|--|
| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Responsibility | Schedule | Agency) | Schedule |
| M-TR-11.1: Commercial Loading Supply – Monitor Loading Activity and Implement Additional Loading Management Strategies as Needed. After completion of the first phase of the proposed project and prior to approval of each subsequent phase, the project sponsor shall conduct a study of utilization of commercial loading spaces. The methodology for the study shall be reviewed and approved by the Planning Department prior to completion. If the result of the study indicates that fewer than 15 percent of the commercial loading spaces are available during the peak loading period, the project sponsor shall implement additional loading management strategies and/or provide additional or expanded off-street loading supply sufficient to meet the loading demand in subsequent phases of the project in either the garages or in off-street parking in individual buildings, consistent with the proposed project's design intent. Additional loading strategies could include (but are not limited to): expanding efforts to coordinate with parcel delivery companies to schedule deliveries to the site during hours outside the peak hour of loading, installing parcel lock boxes that allow parcel delivery personnel unsupervised access to enable off-hour deliveries, coordinating delivery services across buildings to enable the delivery of several buildings' packages to a single location, and/or encouraging deliveries to the retail and restaurant components of the projects to happen during early morning or late evening hours. The project sponsor may also address a shortfall by reserving parking spaces for smaller delivery vehicles such as autos or vans, which comprise approximately two-thirds of the vehicle types for freight delivery service, on the ground floor of the Block D2 garage during peak or appropriate business hours for small-vehicle deliveries and, in connection therewith, providing hand trucks, bicycles, or electric wheeled carts for distribution of packages to buildings include a driveway to off-street loading or parking (maximum 10 o | Infrastructure developer, vertical developer(s) or garage operators (as applicable). | Study completion: after completion of the first phase of the proposed project and prior to approval of each subsequent phase. If additional loading management strategies ongoing in subsequent phases are needed: after completion of each phase for which additional strategies are applicable. | Planning Department, in consultation with the SFMTA, will review and approve methodology of utilization study. Infrastructure developer, vertical developer(s), and garage operators (as applicable) will provide report to Planning Department on implementation of additional loading management strategies, if required. | Considered complete for each phase after Planning Department staff reviews and approves the study, in consultation with the SFMTA, and, if deemed necessary, the infrastructure developer, vertical developer(s), and garage operators (as applicable) incorporate provides a report of how it incorporated any additional management strategies for loading into each applicable phase. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|---|---|--|---|
| M-TR-11.2: Coordinate Deliveries and Tenant Moving Activities. The project's transportation coordinator and in-building concierges shall coordinate with building tenants and delivery services to minimize deliveries and moving activities during peak periods, and endeavor to spread deliveries across the full day and moving activities to time periods after regular working hours, thereby reducing activity during the peak hour for loading. Although many deliveries cannot be limited to specific hours, the transportation coordinator and in-building concierges shall work with tenants to find opportunities to consolidate deliveries and reduce the need for peak-period deliveries, wherever possible. | Project Transportation Coordinator and vertical developer(s). | Ongoing. | Planning Department will monitor. | On-going during project operations. |
| M-C-TR-4: Provide Fair-Share Contribution to Improve 10 Townsend Line Capacity Proposed Project. Upon completion and occupancy of Phase 1 and upon completion and occupancy of each subsequent phase of the proposed project as defined in the Disposition and Development Agreement, the project sponsor shall fund a transit capacity study to be reviewed and approved by the SFMTA. The project sponsor shall obtain from SFMTA the current ridership on the 10 Townsend and conduct an assessment of the capacity utilization at the screenline's Maximum Load Point (MLP) for weekday AM and PM peak hour conditions. If the capacity utilization exceeds 85 percent, a fair share payment shall be made to SFMTA by the project sponsor, calculated as further provided in a Transit Mitigation Agreement. Such payment shall be calculated in light of the project's progress towards one or the other of the development scenario (i.e. High Commercial or High Residential) as reflected by all phases of the project that have been completed up to such date. The fair share contributions by phase differ by scenario because the number of transit riders varies due to different mixes of land use. If the capacity utilization based on SFMTA's ridership data is less than 85 percent, then the project sponsor's fair share payment for that phase shall be \$0 and the process will repeat at the next subsequent phase. Each subsequent fair share calculation shall take account of amounts paid for prior phases, to ensure that payments are not duplicative for the same transit rider impacts. | Infrastructure developer and/or vertical developer(s), Transportation Coordinator, and SFMTA. | Prior to issuance of certificate of occupancy of Phase 1 of the proposed project, enter into Transit Mitigation Agreement. Upon issuance of a certificate of occupancy for each phase of development as defined in the Development Agreement, SFMTA to provide ridership data and assess capacity utilization and, if capacity utilization exceeds 85 percent, the infrastructure developer/vertical developer(s) would pay fair share contribution fees as | Infrastructure developer and/or vertical developer(s) and Transportation Coordinator to obtain current ridership on the 10 Townsend from SFMTA and conduct an assessment of the capacity utilization associated with the project as described in the measure. If the capacity utilization of the 10 Townsend line at its maximum load point exceeds 85 percent as measured at the completion of any individual project phase, and the SFMTA has committed to implement M-C-TR-4, the infrastructure developers shall provide the fair share contribution subject to the limits stated in M-C-TR-3 to capital costs for SFMTA to implement one of the designated capacity enhancement measures. | Considered complete upon execution of Transit Mitigation Agreement for each phase of development, for which this measure is determined to be necessary. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|----------------------------------|---|---|------------------------|
| The project sponsor shall enter into a Transit Mitigation Agreement with the SFMTA under which the agreement shall provide for the project sponsor to make a fair share contribution to the cost of providing additional bus service or improving service on the 10 Townsend by paying a fee. The fair share contribution as documented in the Transportation Impact Study from the proposed project shall not exceed the following amounts, in total across all phases: a. \$391,179 for High Commercial b. \$324,595 for High Residential SFMTA may determine that other measures to increase capacity along the route would be more desirable than adding buses and may use the funds provided by the project sponsor to implement these other measures, which | | specified in this measure, which would be used by SFMTA to increase capacity. | | |
| include but are not limited to the following measures: Convert to using higher-capacity vehicles on the 10 Townsend route. In this case, the project sponsor's fair share contribution may be utilized to convert the route to articulated buses. Some bus stops along the route may not currently be configured to accommodate the longer articulated buses. Some bus zones could be extended by removing one or more parking spaces at locations where appropriate space is available. | | | | |
| 2. Instead of adding more buses to a congested route, it would be more desirable to increase travel speeds along the route which would allow for buses to move faster thus increasing efficiency and reliability. In this case, the project sponsor's fair share contribution may be used to fund a study to identify appropriate and feasible improvements and/or implement a portion of the improvements that would increase travel speeds enough to increase capacity along the bus route. Such improvements could include transit only lanes, transit signal priority, and transit boarding improvements. | | | | |
| 3. Another option to increase capacity along the corridor is to add a new Muni service route in this area. If this option is selected, the project sponsor's fair share contribution may fund the purchase of the new vehicles. | | | | |

| NOTE: Each mitigation measure in this document applies to the proposed project and all variants, unless noted otherwise. | | | | |
|---|--|--|--|--|
| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
| Noise and Vibration Mitigation Measures | | | | |
| M-NOI-1: Prepare and Implement a Construction Noise Control Plan to Reduce Construction Noise at Noise-Sensitive Land Uses. The project sponsor shall develop a noise control plan that requires the following: Construction contractors shall specify noise-reducing construction practices that will be employed to reduce construction noise from construction activities. The measures specified by the project sponsor shall be reviewed and approved by the City prior to the issuance of building permits. Measures that can be used to limit noise include, but are not limited to, those listed below. Locate construction equipment as far as feasible from noise-sensitive uses. Require that all construction equipment powered by gasoline or diesel engines have sound control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation. Idling of inactive construction equipment for prolonged periods shall be prohibited (i.e., more than 5 minutes). Prohibit gasoline or diesel engines from having unmuffled exhaust systems. Use noise-reducing enclosures around noise-generating equipment that has the potential to disturb nearby land uses. Ensure that equipment and trucks used for project construction utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, intake silencers, ducts, engine enclosures, acoustically attenuating shields or shrouds) wherever feasible. Monitor the effectiveness of noise attenuation measures by taking noise measurements. A plan for noise monitoring shall be provided to the City for review prior to the commencement of each construction phase. | Infrastructure developer and/or vertical developer(s) (as applicable). | Prior to the issuance of building permits; implementation ongoing during construction. | Infrastructure developer or vertical developer(s) (as applicable) to submit the Construction Noise Control Plan to the Port's Building Permit Group. A A single Noise Control Plan or multiple Noise Control Plans may be produced to address project phasing. | Considered complete upon submittal of the Construction Noise Control Plan to the Port's Building Permit Group. |

The Port may designate another agency, such as the Planning Department, to carry out monitoring and reporting, and any reference to Port responsibilities includes such designated agencies.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|--|--|--|---|
| Impact tools (e.g., jack hammers, pavement breakers, rock drills) used for project construction shall be "quiet" gasoline-powered compressors or electrically powered compressors, and electric rather than gasoline- or diesel-powered engines shall be used to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used; which could achieve a reduction of 5 dBA. Quieter equipment shall be used when feasible, such as drills rather than impact equipment. Construction contractors shall be required to use "quiet" gasoline-powered compressors or electrically powered compressors and electric rather than gasoline- or diesel-powered forklifts for small lifting. Stationary noise sources, such as temporary generators, shall be located as far from nearby receptors as possible; they shall be muffled and enclosed within temporary enclosures and shielded by barriers, which could reduce construction noise by as much as 5 dB, or other measures, to the extent | | | | |
| Prior to the issuance of the building permit, along with the submission of construction documents, the project sponsor shall submit to the Planning Department and Department of Building Inspection a list of measures for responding to and tracking complaints pertaining to construction noise. These measures shall include: Identification of measures that will be implemented to control construction noise. A procedure and phone numbers for notifying the Department of Building Inspection, the Department of Public Health, or the Police Department of complaints (during regular construction hours and off hours). | Infrastructure developer and/or vertical developer(s) (as applicable). | Prior to the issuance of each building permit for duration of the project. | Infrastructure developer and/or vertical developer(s) (as applicable) to submit a list of measures for handling noise complaints to the Planning Department and Department of Building Inspection. | Considered complete upon review and approval of the complaint tracking measures by the Planning Department and Department of Building |
| A sign posted onsite describing noise complaint procedures and a complaint hotline number that shall be answered at all times during construction. Designation of an onsite construction complaint and enforcement manager for the project. | | | | Inspection. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|--|--|---|---|
| A plan for notification of neighboring residents and nonresidential building managers within 300 feet of the project construction area at least 30 days in advance of extreme noise-generating activities (defined as activities that generate noise levels of 90 dBA or greater) about the estimated duration of the activity and the associated control measures that will be implemented to reduce noise levels. | | | | |
| Mitigation Measure M-NOI-2.1: Noise Control Plan for Special Outdoor Amplified Sound. To reduce potential impacts related to noise generated by events in project outdoor use areas, the project sponsor shall develop and implement a Noise Control Plan for operations at the proposed entertainment venues to reduce the potential for noise impacts from public address and/or amplified music. This Noise Control Plan shall contain the following elements: The project sponsor shall comply with noise controls and restrictions in applicable entertainment permit requirements for outdoor concerts, and shall comply with the Port of San Francisco's "Good Neighbor" standards, unless the Port Commission makes a specific finding that a particular condition is unnecessary or infeasible. Speaker systems shall be directed away from the nearest sensitive receptors to the degree feasible. In order to limit or prevent sleep disturbance, events with amplified sound shall, to the extent reasonable and appropriate given the nature and context of the event, end at 10:00 p.m. | Infrastructure developer and/or park manager, the Port, parks management entity and/or parks programming entity. | Prior to the issuance of event permit. | Infrastructure developer and/or park manager, the Port, parks management entity and/or parks programming entity to submit the Noise Control Plan to the Port. | Considered complete upon submission and approval of the Noise Control Plan by the Port, although the Noise Control Plan may be adjusted as needed. |
| Mitigation Measure M-NOI-2.2: Stationary Equipment Noise Controls. Noise attenuation measures shall be incorporated into all stationary equipment (including HVAC equipment and emergency generators) installed on all buildings that include such stationary equipment as necessary to meet noise limits specified in Section 2909 of the Police Code. Interior noise limits shall be met under both existing and future noise conditions, accounting for foreseeable changes in noise conditions in the future (i.e., changes in on-site building configurations). Noise attenuation measures could include provision of sound enclosures/barriers, addition of roof parapets to block noise, increasing setback distances from sensitive receptors, provision of louvered vent openings, location of vent openings away from adjacent residential uses, and restriction of generator testing to the daytime hours. | Vertical developer(s). | Prior to the issuance of certificate of occupancy for each building located on the site. | The Port's Building Permit Group to review construction plans regarding noise attenuation measures for stationary equipment. | Considered complete after submittal and approval of plans including noise attenuation measures by the Port's Building Permit Group. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|---|---|---|---|
| Mitigation Measure M-NOI-2.3: Design of Future Noise-Sensitive Uses. Prior to issuance of a building permit for a residential building on Mission Rock Boulevard between Terry A. Francois Boulevard and Third Street, a noise study shall be conducted by a qualified acoustician to determine the need to incorporate noise attenuation measures into the building design in order to meet Title 24's interior noise limit for residential uses as well as the City's (Article 29, Section 2909(d)) 45-dBA (Ldn) interior noise limit for residential uses. This evaluation shall account for the projected increase in traffic noise as a result of project traffic along Mission Rock Boulevard between Terry A. Francois Boulevard and Third Street and any new shielding benefits provided by surrounding buildings that exist at the time of development, future cumulative traffic noise increases on adjacent roadways, existing and planned stationary sources (i.e., emergency generators, HVAC, etc.), and future noise increases from all known cumulative projects located with direct line-of-sight to the project building. | Vertical developer(s) and qualified acoustician. | Prior to the issuance of the building permit for vertical construction of any residential building on each parcel on Mission Rock Boulevard between Terry A. Francois Boulevard and Third Street. | Port staff to review the noise study. A single noise study or multiple noise studies may be produced to address project phasing. | Considered complete after submittal and approval of the noise study by the Port. |
| Mitigation Measure M-NOI-2.4: Design of Future Noise-Generating Uses near Residential Uses. Future land uses shall be designed to minimize the potential for sleep disturbance (defined as exceeding 45 dBA at residential interiors during the hours of 10 p.m. to 7 a.m.) at any future adjacent residential uses. Design approaches including, but not limited to, the following shall be incorporated into future development plans to minimize the potential for noise conflicts of future uses on the project site: Design of Future Noise-Generating Uses. To reduce potential conflicts between sensitive receptors and new noise-generating land uses located adjacent to these receptors, exterior facilities such as loading areas/docks, trash enclosures, and surface parking lots shall be located on the sides of buildings facing away from existing or planned sensitive receptors (e.g., residences). If this is not feasible, these types of facilities shall be enclosed or equipped with appropriate noise shielding. Design of Future Above-Ground Parking Structure on Block D2. For parking garage on Block D2, the sides of the parking structures facing adjacent or nearby existing or planned residential uses shall be designed to shield residential receptors from noise associated with parking cars. | Garage developer (for Block D2 garage) and vertical developer(s) (for commercial/office buildings), | Prior to the issuance of a building permit for each commercial/office building, and prior to issuance of building permit for Block D2 parking garage. | The Port's Building Permit Group to review construction plans to confirm that future noise-generating land uses meet the requirements of this Measure M-NOI-2.4. | Considered complete after submittal and approval of construction plans by the Port's Building Permit Group. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|--|---|---|--|
| M-NOI-3.1: Pile-Driving Control Measures – Annoyance. To reduce impacts associated with pile driving, a set of site–specific vibration attenuation measures shall be implemented under the supervision of a qualified acoustical consultant during the project construction period. These attenuation measures shall include as feasible, in consideration of technical and structural requirements and conditions, the following control strategy, as well as any other effective strategies to the extent necessary to achieve a PPV vibration level at neighboring properties of less than the strongly perceptible level of 0.10 in/sec. The project sponsor shall require the construction contractor to limit pile-driving activity so that the PPV vibration level at neighboring uses is less than 0.10 in/sec to the extent it is practical and necessary, and, to the extent it is practical, implement "quiet" pile-driving technology, such as predrilling piles, using sonic pile drivers, or using more than one pile driver to shorten the total duration of pile driving. | Infrastructure developer and/or vertical developer(s) (as applicable), qualified acoustical consultant. | Prior to issuance of building permit for each proposed building. | Infrastructure developer or vertical developer(s) (as applicable) to submit the Construction Noise Control Plan (detailed in M-NOI-1) to the Port's Building Permit Group documenting site-specific vibration attenuation measures. A single Noise Control Plan or multiple Noise Control Plans may be produced to address project phasing. | Considered complete upon submittal and approval of the Construction Noise Control Plan (including vibration attenuation measures) to the Port's Building Permit Group. |
| M-NOI-3.2: Pile-Driving Vibration Control Measures – Damage. To reduce the potential for damage to Pier 48, the following measures shall be implemented: The Port of San Francisco shall be notified in writing prior to construction activity that construction may occur within 100 feet of the Pier 48 buildings. The project sponsor shall retain a structural engineer, an architectural historian, and a licensed historical architect (hereafter referred to as the building evaluation team) to evaluate potentially affected buildings and determine their susceptibility to damage. The structural engineer shall evaluate the building structure. The architectural historian and licensed historical architect shall evaluate architectural elements. This building evaluation team shall then establish building-specific vibration thresholds that will (a) identify the level of vibration affected historic buildings will tolerate so as to preclude structural damage to the building of a nature that would result in material damage to any historic features of the buildings, and (b) identify the level of vibration at which cosmetic damage may begin to occur to buildings. The building evaluation team shall inventory and document existing cracks in paint, plaster, concrete, and other building elements. | Infrastructure developer and/or vertical developer(s) (as applicable), building evaluation team. | Prior to construction activities adjacent to Pier 48. | Infrastructure developer or vertical developer(s) (as applicable) to submit proposed building-specific vibration thresholds with input from structural engineer, architectural historian, and historic architect; an inventory of the condition of Pier 48; a vibration monitoring plan; and results of the inspection following construction activities to the Port's Building Permit Group for review and approval. | Considered complete upon submittal and approval of documentation incorporating identified measures by the Port's Building Permit Group. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|------------------------|---|------------------------|
| The building evaluation team shall develop a ground-borne vibration monitoring plan that will include monitoring vibration at the buildings of concern to determine if the established thresholds are exceeded. | | | | |
| The project sponsor shall retain a qualified acoustical consultant or engineering firm to implement the vibration monitoring plan at Pier 48. As part of the monitoring plan, the consultant shall conduct regular periodic inspections for cosmetic damage to each building within 160 feet of planned ground-disturbing activity on the project site. | | | | |
| • Should vibration levels be observed in excess of the cosmetic damage threshold or cosmetic damage be observed below that level, the driving of piles within 100 feet of the Pier 48 structure (or within the impact distance determined by the study of building-specific vibration thresholds, per second bullet above, whichever distance is shorter) shall be halted until measures are implemented to prevent cosmetic damage to the extent feasible. These measures include use of alternative construction techniques, including, but not limited to, use of pre-drilled piles if soil conditions allow, use of smaller, lighter equipment, using vibratory hammers in place of impact hammers, and using pile cushioning or equipping the impact hammer with wooden cushion blocks to increase the period of time over which the energy from the driver is imparted to the pile. Should cosmetic damage to a building occur as a result of ground-disturbing activity on the site notwithstanding the use of alternative construction techniques, the building(s) shall be remediated to its pre construction condition at the conclusion of ground-disturbing activity on the site. | | | | |
| • Should vibration levels be observed that reach the threshold designed to protect historic buildings from material damage to historic features, piledriving within impact distances of the Pier 48 building, as determined by the building evaluation team, shall be halted and a structural bracing program or other appropriate protective measures for the potentially affected buildings shall be designed by the building evaluation team and implemented by the project sponsor. The structural bracing program or other protective measures shall be designed to prevent damage to the potentially affected buildings that could materially impair their historic resource status consistent with CEQA Guidelines Section 15064.5(b)(2). | | | | |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|---|--|--|
| In addition, the structural bracing program shall be consistent with the proposed rehabilitation of the Pier 48 buildings and meet the Secretary of the Interior's Standards for Rehabilitation. Following completion of construction, the project sponsor shall conduct a | | | | |
| second inspection to inventory changes in existing cracks and new cracks or damage, if any, that occurred as a result of pile driving. If new damage is found, then the project sponsor shall promptly arrange to have the damage repaired in accordance with recommendations made by the building | | | | |
| evaluation team. | | | | |
| Air Quality Mitigation Measures | | l | | ı |
| Mitigation Measure M-AQ-1.1: Off-Road Construction Equipment Emissions Minimization. The project sponsor shall require all construction contractors to implement the following measures to reduce construction emissions. A. Engine Requirements 1. All off-road equipment greater than 25 horsepower and operating for more than 20 total hours over the entire duration of construction activities shall have engines that meet or exceed either USEPA or ARB Tier 4 Interim off-road emissions standards. Tier 4 final equipment, which may be largely available in the Bay Area, may be used to comply with this requirement (since Tier 4 final engines must comply with a stricter standard than Tier 4 interim engines, Tier 4 final engines meet Tier 4 interim standards and thus comply with this requirement). 2. Where access to alternative sources of power are available, portable diesel engines shall be prohibited. 3. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than 2 minutes at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The contractor shall post legible and visible signs in English, Spanish, and Chinese in designated queuing areas and at the construction site to remind operators of the 2-minute idling limit. | Infrastructure developer and/or vertical developer(s) (as applicable). | Prepare and Implement Construction Emissions Minimization Plan: Prior to issuance of grading, excavation, or demolition permits and ongoing during demolition and construction activities. Quarterly Monitoring Reports: Quarterly after start of construction activities. Final Construction Report: After completion of construction activities but prior to receiving a final certificate of | Infrastructure developer and/or vertical developer(s) (as applicable) or contractor to submit a Construction Emissions Minimization Plan to Port staff for review and approval. Quarterly reports to be submitted to Port staff documenting compliance with the plan for review and approval. Final Construction Report to be submitted to Port staff for review and approval. | Considered complete upon Port review and approval of Construction Emissions Minimization Plan, ongoing review and approval of quarterly reports, and review and approval of final construction report. |

| MEA | SURES ADOPT | ED AS CONDITION | S OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|------|--|--|---|----------------------------------|------------------------|---|------------------------|
| 4. | operators regardir equipment and red | all instruct construction was the maintenance and turquire that such workers an equipment in accordance | ning of construction d operators properly | | | | |
| B. W | aivers | | | | | | |
| 2. | designee may wai from Subsection (infeasible at the p contractor must subsection of the ERO may waif use of a particular compliant engine not produce the doperating modes, hazard or impair we emergency that reinterim-compliant demonstrate to the emissions would for cancer risk and receptors, as identificants the waiver, available off-road | ve the requirement for an A)(2) if an alternative souroject site. If the ERO gradient documentation that eration meets the requirement req | the equipment used for ents of Subsection (A)(1). ments of Subsection (A)(1) ment with a Tier 4 interimble, the equipment would as because of the expected ent would create a safety or there is a compelling ipment that is not Tier 4 the project sponsor shall the resulting construction thresholds of significance ith respect to sensitive r Impact AQ-4. If the ERO he next-cleanest piece of the table below. | | | | |
| Э. | Compliance | Engine Emissions | Emissions | | | | |
| | Alternative | Standard | Control | | | | |
| | 1 | Tier 3 | ARB Level 2 VDECS | | | | |
| | 2 | Tier 2 | Alternative Fuel* | | | | |
| | | d Diesel Emissions Control S are not a VDECS. | trategies | | | | |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|----------------------------------|------------------------|---|------------------------|
| 4. How to use the table: If the ERO determines that the equipment requirements cannot be met, then the project sponsor must attempt to meet Compliance Alternative 1. If the ERO determines that the contractor cannot supply off-road equipment that meets Compliance Alternative 1, then the contractor must meet Compliance Alternative 2. | | | | |
| C. Construction Emissions Minimization Plan Before starting onsite construction activities, the contractor shall submit a Construction Emissions Minimization Plan to the ERO for review and approval. The plan shall state, in reasonable detail, how the contractor shall meet the requirements of Section A. | | | | |
| 1. The plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, as such information is available, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. For VDECS installed, the description may include technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used. Renewable diesel shall be considered an alternative fuel if it can be demonstrated to the Planning Department or the City's air quality specialists that it is compatible with tiered engines and that emissions of ROG and NOx from the transport of fuel to the project site will not offset its NOx reduction potential. | | | | |
| The project sponsor shall ensure that all applicable requirements of the plan have been incorporated into the contract specifications. The plan shall include a certification statement, stating that the contractor agrees to comply fully with the plan. | | | | |
| 3. The contractor shall make the plan available to the public for review onsite during working hours. The contractor shall post at the construction site a legible and visible sign summarizing the plan. The sign shall also state that the public may ask to inspect the plan for the project at any time during working hours and explain how to request | | | | |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|--|--|--|
| to inspect the plan. The contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right of way. D. Monitoring After start of construction activities, the contractor shall submit quarterly reports to the ERO, documenting compliance with the plan. After completion of construction activities but prior to receiving a final certificate of occupancy, the project sponsor shall submit to the ERO a final report, summarizing construction activities, including the start and end dates, the duration of each construction phase, and the specific information required in the plan. | | | | |
| Mitigation Measure M-AQ-1.2: On-Road Material Delivery and Haul Trucks Construction Emissions Minimization. The project sponsor shall require all construction contractors to implement the following measures to reduce construction haul truck emissions. A. Engine Requirements The project sponsor shall also ensure that all on-road heavy-duty diesel trucks with a gross vehicle weight rating of 19,500 pounds or greater used at the project site (such as haul trucks, water trucks, dump trucks, and concrete trucks) be model year 2010 or newer. B. Construction Emissions Minimization Plan As part of the Construction Emissions Minimization Plan identified above for Mitigation Measure M-AQ-1.1 Section C, the contractor shall state, in reasonable detail, how the contractor shall meet the requirements of Section A. The plan shall include estimates of the construction timeline by phase, with a description of how the on-road haul truck fleet required for every construction phase will comply with the engine requirements stated above. The plan shall also include expected fuel usage (or miles traveled) and hours of operation for the on-road haul truck fleet. For on-road trucks using alternative fuels, the description shall also specify the type of alternative fuel being used. Renewable diesel shall be considered as an alternative fuel if it can be demonstrated to the Planning Department or the City's air quality specialists that it is compatible with on-road truck engines and that emissions of ROG and NOx from transport of fuel to the project site will not offset its NOx reduction potential. | Infrastructure developer and/or vertical developer(s) (as applicable). | Prepare and Implement Construction Emissions Minimization Plan including engine requirements: Prior to issuance of a grading, excavation, or demolition permits and ongoing during demolition and construction activities. Quarterly Monitoring Reports: Quarterly after start of construction activities. Final Construction Report: After completion of construction | Infrastructure developer and/or vertical developer(s) (as applicable) or contractor to submit a Construction Emissions Minimization Plan including engine requirements to Port staff for review and approval. Quarterly reports to be submitted to Port staff documenting compliance with the plan for review and approval. Final Construction Report to be submitted to Port staff for review and approval. | Considered complete upon Port review and approval of Construction Emissions Minimization Plan, ongoing review and approval of quarterly reports, and review and approval of final construction report. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|---|--|---|
| a. See Mitigation Measure M-AQ-1.1 Section C, Part 2. b. See Mitigation Measure M-AQ-1.1 Section C, Part 3. C. Monitoring See Mitigation Measure M-AQ-1.1 Section D. | | activities but prior to receiving a final certificate of occupancy. | | |
| Mitigation Measure M-AQ-1.3: Low-VOC Architectural Coatings. The project sponsor shall use low-VOC (i.e., ROG) coatings, beyond local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings), for at least 90 percent of all residential and nonresidential interior and exterior paints. This includes all architectural coatings applied during both construction and reapplications throughout the project's operational lifetime. At least 90 percent of coatings applied must meet the "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint. After start of construction activities, the contractor shall submit quarterly reports to the ERO documenting compliance with this measure by providing an inventory listing the VOC content of all coatings purchased and applied during construction activities. For the reapplication of coatings during the project's operational lifetime, the Declaration of Covenants, Conditions, and Restrictions shall also contain a stipulation that low-VOC coatings must be used and a list of potential coatings shall be provided. A list of "super-compliant" coatings can be found on the South Coast Air Quality Management District's website: http://www.aqmd.gov/home/regulations/compliance/architectural-coatings/super-compliant-coatings. | Vertical developer(s). | At the start of construction activities and quarterly during construction and the project's operational lifetime. | Vertical developer(s) to submit initial report and quarterly reports to the Port's Building Permit Group documenting compliance for review and approval. | Ongoing throughout construction and operation. |
| Mitigation Measure M-AQ-1.4: Best Available Control Technology for In-Water Construction Equipment. The project sponsor shall require all construction contractors to implement the following measures to reduce emissions from in-water equipment. A. Engine Requirements 1. The project sponsor shall ensure that the construction barge shall have engines that meet or exceed USEPA marine engine Tier 3 emissions standards. 2. The project sponsor shall also ensure that the construction work boat engine shall be model year 2005 or newer or meet NOx and PM emissions standards for that model year. | Pier 48 developer. | Prepare and Implement Construction Emissions Minimization Plan including barge and work boat engine requirements: Prior to issuance of a grading, excavation, or demolition permits | Pier 48 developer or contractor to submit a Construction Emissions Minimization Plan including barge and work boat engine requirements to Port staff for review and approval. Quarterly reports to be submitted to Port staff documenting compliance with the plan for review and approval. | Considered complete upon Port review and approval of Construction Emissions Minimization Plan, ongoing review and approval of quarterly reports, and review and |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|----------------------------------|--|--|---|
| B. Construction Emissions Minimization Plan As part of the Construction Emissions Minimization Plan identified above for Mitigation Measure M-AQ-1.1 Section C, the contractor shall state, in reasonable detail, how the contractor shall meet the requirements of Section A. 1. The plan shall include estimates of the construction timeline by phase, with a description of how each in-water equipment piece (e.g. barge engines, work boats) required for every construction phase will comply with the engine requirements stated above. The plan shall also include expected fuel usage and hours of operation for in-water equipment. For in-water equipment using alternative fuels, the description shall also specify the type of alternative fuel being used. Renewable diesel shall be considered as an alternative fuel if it can be demonstrated to the Planning Department or the City's air quality specialists that it is compatible with tiered engines and that emissions of ROG and NOx from transport of fuel to the project site will not offset its NOx reduction potential. a. See Mitigation Measure M-AQ-1.1 Section C, Part 2. b. See Mitigation Measure M-AQ-1.1 Section C, Part 3. C. Monitoring See Mitigation Measure M-AQ-1.1 Section D. | | and ongoing during demolition and construction activities. Quarterly Monitoring Reports: Quarterly after start of construction activities. Final Construction Report: After completion of construction activities but prior to receiving a final certificate of occupancy. | Final Construction Report to be submitted to Port staff for review and approval. | approval of final construction report. |
| Mitigation Measure M-AQ-1.5: Emissions Offsets for Construction and Operational Ozone Precursor Emissions. Prior to the estimated first year of exceedance, the project sponsor, with oversight of the Planning Department, shall elect to either: 1. Directly implement a specific offset project or program to achieve emission reductions of up to 9.6 tons of ozone precursors to offset the combined emissions from construction and operations remaining above significance levels after implementation of identified mitigation measures. To qualify under this mitigation measure, the specific emissions reduction project must result in emissions reductions within the SFBAAB that are real, surplus, quantifiable, and enforceable and would not otherwise be achieved through compliance with existing regulatory requirements or any other legal requirement. Prior to implementation of the offset project, the project sponsor must obtain the | Infrastructure developer. | Implement a specific offset project or program: Prior to the estimated first year of exceedance and notify the Port within 6 months of completion of the offset project. Mitigation Fee: Installment for each development block to be paid | Implementation of specific offset project or program: Port approval of proposed offset program. Port verification of successful completion of offset program. Mitigation Fee: Infrastructure developer, BAAQMD, and Port to determine fee. BAAQMD and infrastructure developer to develop and implement MOU. | Implementation of specific offset project or program: Complete upon Port's verification of successful completion of offset program. Mitigation Fee: Complete for each block upon payment of fee |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|--|---|----------------------------------|
| Planning Department's approval of the proposed offset project by providing documentation of the estimated amount of emissions of ROG and NOx to be reduced (tons per year) within the SFBAAB from the emissions reduction project(s). The project sponsor shall notify the Planning Department within 6 months of completion of the offset project for Planning Department verification. 2. Pay a mitigation offset fee to the BAAQMD Bay Area Clean Air Foundation (Foundation) in installments, as further described below, with each installment_amount to be determined prior to the estimated first year of exceedance. This fee is intended to fund emissions reduction projects to achieve reductions totaling up to 10.5 tons of ozone precursors per year, the estimated maximum tonnage of operational and construction-related emissions offsets required to reduce emissions below significance levels after implementation of other identified mitigation measures. This total emissions offset amount was calculated by summing the maximum daily construction and operational emissions of ROG and NO _X (pounds/day), multiplying by 260 work days per year for construction and 365 days per year for operation, and converting to tons. The amount represents the total estimated operational and construction-related ROG and NOx emissions offsets required. The fee shall be paid in up to 12 installments, each installment payable at the time of application for a site permit for each development block, representing the portion of the 10.5 tons of ozone precursors per year | | with site permit application for each block, if no specific project or program is identified. Enter into MOU with BAAQMD Foundation and pay offset fee in installments for each development block. | | installment outlined in the MOU. |
| attributable to each building, as follows: (a) Blocks A, G, and K: 6.6% or 0.70 tons per each development block; (b) Pier 48: 18.6% or 1.95 tons; (c) Blocks B, C, and D: 9% or 0.95 tons per each development block; (d) Blocks E and F: 10.3% or 1.08 tons per each development block; and (e) Blocks H, I, and J: 4.6% or 0.49 tons per each development block. The mitigation offset fee, currently estimated at approximately \$18,262 per weighted ton, shall not exceed \$35,000 per weighted ton of ozone precursors plus an administrative fee of no more than 5 percent of the total offset to fund one or more emissions reduction projects within the SFBAAB. The not to exceed amount of \$35,000 will be adjusted to reflect annual California Consumer Price Index adjustments between 2017 and the estimated first year of exceedance. Documentation of payment shall be provided to the Planning Department. | | | | |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|----------------------------------|---|--|--|
| Unless directly implementing a specific offset project (or program) as described above, the project sponsor would enter into a Memorandum of Understanding (MOU) with the BAAQMD Foundation in connection with each installment payment described above. The MOU will include details regarding the funds to be paid, the administrative fee, and the timing of the emissions reductions project. Acceptance of this fee by the BAAQMD shall serve as acknowledgment and a commitment to (1) implement an emissions reduction project(s) within a time frame to be determined, based on the type of project(s) selected, after receipt of the mitigation fee to achieve the emissions reduction objectives specified above and (2) provide documentation to the Planning Department and the project sponsor describing the project(s) funded by the mitigation fee, including the amount of emissions of ROG and NOx reduced (tons per year) within the SFBAAB from the emissions reduction project(s). To qualify under this mitigation measure, the specific emissions reduction project must result in emission reductions within the SFBAAB that are real, surplus, quantifiable, and enforceable and would not otherwise be achieved through compliance with existing regulatory requirements or any other legal requirement. | | | | |
| Mitigation Measure M-AQ-2.1: Best Available Control Technology for Operational Diesel Generators. The project sponsor shall ensure that the operational backup diesel generators comply with the following: (1) ARB Airborne Toxic Control Measure (ATCM) emissions standards for model year 2008 or newer engines; and (2) meet or exceed one of the following emission standards for particulate matter: (A) Tier 4 interim certified engine or (B) Tier 2 or Tier 3 certified engine that is equipped with an ARB Level 3 VDECS. A nonverified diesel emissions control strategy may be used if the filter has the same particulate matter reduction as the identical ARB-verified model and BAAQMD approves of its use. The project sponsor shall submit documentation of compliance with the BAAQMD NSR permitting process (Regulation 2, Rule 2, and Regulation 2, Rule 5) and the emissions standard requirement of this measure to the Planning Department for review and approval prior to issuance of a permit for a backup diesel generator from any City agency. | Vertical developer(s). | Prior to issuance of permit for each backup diesel generator from BAAQMD. | Vertical developer(s) shall submit documentation of compliance to the Port for review and approval. | Considered complete upon review and approval of documentation by Port staff. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|--|---|--|
| Mitigation Measure M-AQ-2.2: Reactive Organic Gases Emissions Reduction Measures. To reduce ROG emissions associated with the project, the project sponsor shall provide education for residential and commercial tenants to help reduce area source (e.g., architectural coatings, consumer products, and landscaping) emissions associated with residential and building operations. Prior to receipt of any building permit and every 5 years thereafter, the project sponsor shall work with the San Francisco Department of Environment to develop electronic correspondence, which will be distributed by email annually to tenants of the project that encourages the purchase of consumer products that are better for the environment and generate fewer VOC emissions. The correspondence shall encourage environmentally preferable purchasing and include contact information and links to SF APPROVED. While microbreweries do not typically implement emission control devices, to further reduce ROG (primarily ethanol) emissions associated with Pier 48 industrial operations, the project sponsor shall implement technologies to reduce ethanol emissions if available and practicable. Such measures could include wet scrubbers, ethanol recovery and capture (e.g., carbon absorption) or incineration. At the time when specific designs for the Pier 48 use are submitted to the City for approval, the project sponsor shall provide an analysis that quantifies the emissions, based on the specific design proposal, and evaluates ROG emission control technologies. | Vertical developer(s). | Prior to issuance of any building permit and every 5 years thereafter. | Vertical developer(s) to work with the San Francisco Department of Environment to develop materials. San Francisco Department of the Environment to review and approve materials. | Considered complete after documentation provided to the Department of Environment of distribution of educational materials to residential and commercial tenants. |
| Mitigation Measure M-AQ-2.3: Transportation Demand Management. The project sponsors shall prepare and implement a Transportation Demand Management (TDM) Plan. The TDM Plan shall have a goal of reducing estimated aggregate daily one way vehicle trips by 20 percent compared to the aggregate daily one-way vehicle trips identified in the project's travel demand memo, prepared by Adavant Consulting, dated June 30, 2015 ("Travel Demand Memo"), and attached as Appendix 4-4 to the Draft EIR. The project sponsors shall be responsible for monitoring implementation of the TDM Plan and proposing adjustments to the TDM Plan if its goal is not being achieved, in accordance with the following provisions. The TDM Plan may include, but is not limited to, the types of measures summarized below by way of example. TDM Plan measures shall generally be consistent with the City's adopted TDM Program Standards and the draft | Transportation Coordinator and/ or infrastructure developer to prepare the TDM Plan, which will be implemented by the Transportation Coordinator and will be binding on all development parcels. | Transportation Coordinator and/or Infrastructure developer to prepare TDM Plan and submit to Planning Department staff prior to approval of the project. | Transportation Coordinator to submit the TDM Plan to Planning Department staff for review and approval. Transportation Coordinator to submit monitoring report annually to Planning Department staff and implement TDM Plan Adjustments (if required). | The TDM Plan is considered complete upon approval by the Planning Department staff, in consultation with the SFMTA. Annual monitoring reports would be on-going during project buildout, |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|------------------------|---|---|
| proposed TDM Plan prepared by Nelson Nygaard, dated September 2016, and attached as Appendix 4-5 to the Draft EIR. The TDM Plan describes the scope and applicability of candidate measures in detail, and may include, for example: | | | | or until five consecutive reporting periods |
| Active Transportation: Provision of streetscape improvements to encourage walking, secure bicycle parking, shower and locker facilities for cyclists, subsidized bike share memberships for project occupants, bicycle repair and maintenance services, and other bicycle-related services; | | | | show that the fully-built project has met its reduction goals, |
| Car-Share: Provision of car-share parking spaces and subsidized memberships for project occupants; | | | | at which point reports would be submitted every |
| Delivery: Provision of amenities and services to support delivery of goods to project occupants; | | | | three years. |
| Family-Oriented Measures: Provision of on-site childcare and other amenities to support the use of sustainable transportation modes by families; | | | | |
| High-Occupancy Vehicles: Provision of carpooling/vanpooling incentives and shuttle bus service; | | | | |
| Information and Communications: Provision of multimodal wayfinding signage, transportation information displays, and tailored transportation marketing services; | | | | |
| • Land Use: Provision of on-site affordable housing and healthy food retail services in underserved areas; | | | | |
| Parking: Provision of unbundled parking, short-term daily parking provision, parking cash out offers, and reduced off-street parking supply. | | | | |
| The TDM Plan shall describe each measure, including the degree of implementation (e.g., how long will it be in place, how many tenants or visitors it will benefit, on which locations within the site it will be placed, etc.) and the population that each measure is intended to serve (e.g., | | | | |
| residential tenants, retail visitors, employees of tenants, visitors). The TDM Plan shall commit to monitoring vehicle trips to and from the project site to determine the TDM Plan's effectiveness, as required by TDM Plan | | | | |
| Monitoring and Reporting outlined below. The TDM Plan shall have been approved by the Planning Department prior to site permit application for the first building and the TDM Plan shall be implemented as to each new building upon the issuance of the certificate of occupancy for that building. | | | | |

| | Implementation | Mitigation | Monitoring/Reporting Responsibility (Public | Monitoring |
|--|----------------|------------|--|------------|
| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Responsibility | Schedule | Agency) | Schedule |
| The TDM Plan shall remain a component of the proposed project to be | | | | |
| implemented for the duration of the project. | | | | |
| TDM Plan Monitoring and Reporting: the Transportation Coordinator shall | | | | |
| collect data, prepare monitoring reports and submit them to the Planning | | | | |
| Department. To ensure the goal of reducing by 20 percent the aggregate daily | | | | |
| one-way vehicle trips is reasonably achievable, the project sponsor shall monitor | | | | |
| daily one-way vehicles trips for all buildings that have received a Certificate of | | | | |
| Occupancy, and compare these vehicle trips to the aggregate daily one-way | | | | |
| vehicle trips anticipated for the those buildings based on the trip generation rates | | | | |
| contained within the proposed project Travel Demand Memo. | | | | |
| Timing: The Transportation Coordinator shall collect monitoring data | | | | |
| and shall begin submitting monitoring reports to the Planning | | | | |
| Department beginning 18 months after the completion and | | | | |
| commencement of operation of the proposed garage on Block D. | | | | |
| Thereafter, annual monitoring reports shall be submitted (referred to as | | | | |
| "reporting periods") until five consecutive reporting periods show that | | | | |
| the project has met the reduction goal, at which point monitoring data | | | | |
| shall be submitted to the Planning Department once every 3 years. The | | | | |
| project sponsor shall complete each trip count and survey (see below for | | | | |
| description) within 30 days following the end of the applicable reporting | | | | |
| period. Each monitoring report shall be completed within 90 days | | | | |
| following the applicable reporting period. The project sponsor shall | | | | |
| modify the timing of monitoring reports such that a new monitoring | | | | |
| report is submitted 12 months after adjustments are made to the TDM Plan in order to meet the reduction goal, as may be required under the | | | | |
| "TDM Plan Adjustments" heading, below. In addition, the Planning | | | | |
| Department may modify the timing of monitoring reports as needed to | | | | |
| consolidate this requirement with other monitoring and/or reporting | | | | |
| requirements for the project, such as annual reporting under the | | | | |
| proposed project Development Agreement. | | | | |
| Term: The Project Sponsor shall monitor, submit monitoring reports, | | | | |
| and make plan adjustments as provided below until the earlier of: (i) the | | | | |
| expiration of the Development Agreement, or (ii) the reduction goal has | | | | |
| been met for up to eight consecutive reporting periods as determined by | | | | |
| the Planning Department. Notwithstanding the foregoing or any other | | | | |
| provision of this mitigation measure, all obligations for monitoring, | | | | |
| provision of this integation measure, an obligations for monitoring, | l | 1 | | |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|------------------------|---|------------------------|
| reporting and for making adjustments to the TDM Plan shall terminate if the project sponsor has paid and/or made a commitment to pay the offset fee for any shortfall in the TDM Plan's meeting the reduction goal as provided below. | | | | |
| Components: The monitoring and reporting, including trip counts, surveys and travel demand information, shall include the following components or comparable alternative methodology and components, as approved, accepted or provided by Planning Department staff: Trip Count and Intercept Survey: Provide a site-wide trip count and intercept survey of persons and vehicles arriving and leaving the project site, other than on AT&T Park ballgame or other major event (e.g., concert or other event substantially occupying the capacity of AT&T Park) days or hours, for no less than two days during the reporting period between 6:00 a.m. and 8:00 p.m. One day shall be a Tuesday, Wednesday, or Thursday during one week without federally recognized holidays, and another day shall be a Tuesday, Wednesday, or Thursday during another week without federally recognized holidays. The trip count and intercept survey shall be prepared by a qualified transportation or survey consultant, and the Planning Department shall approve the methodology prior to the Project Sponsors conducting the components of the trip count and intercept survey. The Planning Department anticipates it will have a standard trip count and intercept survey methodology developed and available to project sponsors at the time of data collection. | | | | |
| Travel Demand Information: The above trip count and survey information shall be able to provide the travel demand analysis characteristics (work and non-work trip counts, origins and destinations of trips to/from the project site, and modal split information), as outlined in the Planning Department's <i>Transportation Impact Analysis Guidelines for Environmental Review</i>, October 2002, or subsequent updates in effect at the time of the survey. Documentation of Plan Implementation: The transportation coordinator shall work in conjunction with the Planning Department to develop a survey (online or paper) that can be reasonably | | | | |

NOTE: Each mitigation measure in this document applies to the proposed project and all variants, unless noted otherwise.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|------------------------|---|------------------------|
| Management Association (TMA) staff members to document | | | , , , , , , , , , , , , , , , , , , , | |
| implementation of TDM program elements and other basic | | | | |
| information during the reporting period. The project sponsors shall | | | | |
| include this survey in the monitoring report submitted to the | | | | |
| Planning Department. | | | | |
| Assistance and Confidentiality: The Planning Department will assist | | | | |
| the transportation coordinator with questions regarding the | | | | |
| components of the monitoring report and will assist the transportation | | | | |
| coordinator in determining ways to protect the identity of individual | | | | |
| survey responders. | | | | |
| <u>"DM Plan Adjustments"</u> . The project sponsors shall adjust the TDM Plan | | | | |
| ccording to the monitoring results if three consecutive reporting periods | | | | |
| emonstrate that measures within the TDM Plan are not achieving the | | | | |
| eduction goal. The TDM Plan adjustments shall be made in consultation with | | | | |
| he Planning Department and may require refinements to existing measures | | | | |
| e.g., changes to subsidies, increased bicycle parking), inclusion of new | | | | |
| neasures (e.g., a new technology or project operational changes not inconsistent with any agreements with the Port), or removal of existing | | | | |
| neasures (e.g., measures that are ineffective or induce vehicle trips). ⁵ If three | | | | |
| onsecutive reporting periods' monitoring results demonstrate that measures | | | | |
| within the TDM Plan are not achieving the reduction goal, the project | | | | |
| ponsors shall propose TDM Plan adjustments to be incorporated in the TDM | | | | |
| relan within 270 days following the last reporting period. The project sponsors | | | | |
| hall implement the TDM Plan adjustments until the results of three | | | | |
| onsecutive reporting periods demonstrate that the reduction goal is being | | | | |
| chieved. | | | | |
| f after implementing TDM Plan adjustments as described above, and the | | | | |
| project sponsors have not met the reduction goal for up to eight consecutive | | | | |
| eporting periods as determined by the Planning Department, the project | | | | |
| ponsors may, at any time thereafter, elect to address the shortfall in meeting | | | | |
| he TDM Plan reduction target by, in addition to paying the emission offset | | | | |
| ees set forth in Mitigation Measure M-AQ-1.5, also paying an additional | | | | |

⁵ No parking-related restrictive measures on the project site shall by design or effect, restrict parking on the project site for patrons of AT&T ballpark games or events.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|--|--|---|
| offset fee in accordance with Mitigation Measure M-AQ-1.5, in the amount required to address, both the shortfall in reduction during the previously monitored years and the anticipated shortfall in the remaining expected years of project operations, the latter of which shall be based on the shortfall that occurred in the most recently monitored year. Calculations of emissions to be offset shall be based on the total amount of emissions anticipated to be reduced by achieving the 20 percent TDM goal adjusted for the actual percentage of aggregate daily one way vehicle trip reduction achieved in the most recently monitored year. | | | | |
| Wind and Shadow Mitigation Measures | | | | |
| M-WS-1: Assessment and Mitigation of Wind Hazards on a Building-by-Building Basis. Prior to or as part of the submittal package for the schematic design of a new building (Proposed Building), the Proposed Building developer shall submit to the Planning Department, for its review and approval, a scope of work and, following approval of the scope, a report from a Qualified Wind Consultant (QWC) that reviews the Proposed Building schematic design, absent landscaping.⁶ "QWC" means a wind consultant retained by the Proposed Building(s) developer and approved by the Planning Department for preparation of the report. The EIR wind consultant for the proposed project and any other wind consultant on the City's then approved list or otherwise approved by the City will be considered a QWC. The QWC report shall evaluate whether the Proposed Building(s) would create a Significant Wind Impact. "Significant Wind Impact" means a substantial increase on a site-wide basis in the number of hours per year that the 26 mph wind hazard criterion is exceeded or, if baseline wind conditions are greater than 26 mph, a substantial increase in the area subjected to winds greater than 26 mph. This analysis shall focus on the entire project area that was studied in wind tunnel tests conducted for the EIR and not just the area immediately surrounding the Proposed Building(s). | Vertical developer(s) and qualified wind consultant. Vertical developer(s) to implement architectural or landscaping features, or a combination of such features, that have been demonstrated in wind tunnel to reduce the Proposed Building's wind hazards to a level no greater than those of either | Prior to or as part of the submittal package for the schematic design of a new building. | Vertical developer(s) to submit to the Planning Department and the Port, for their review and approval, a scope of work and, following the approval of the scope of work by Planning Department and Port staff, a report from a qualified wind consultant that determines building-specific wind conditions. | Considered complete upon approval of wind report by the Planning Department and Port. |

⁶ The scope of work for this report shall use the same methodology and wind test point locations as the Wind Study prepared for this EIR.

NOTE: Each mitigation measure in this document applies to the proposed project and all variants, unless noted otherwise.

| | MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|---|----------------------------------|------------------------|---|------------------------|
| ŀ | 3. The QWC shall consider the Proposed Building(s) in the context of the | Wind Study | | | |
| | "Current Project," which, at any given time during construction of the | Configuration A or | | | |
| | Project, shall be defined as the building masses used in the Original Model | Wind Study | | | |
| | (Wind Study Configuration B), ⁷ except as updated to reflect schematic | Configuration B. | | | |
| | design submittals for any previously approved building that has not yet | | | | |
| | commenced construction, and construction permit designs for on-site | | | | |
| | buildings that are under construction or have completed construction. This | | | | |
| | model shall be referred to as the "Current Project" and shall be updated | | | | |
| | over time as architectural design for each proposed project block/building | | | | |
| | is completed. | | | | |
| | 4. The Proposed Building shall be tested in the wind tunnel as proposed, | | | | |
| | including any architectural features that can be shown on plans to mitigate | | | | |
| | wind effects. 8 Testing may not include any existing or proposed onsite | | | | |
| | landscaping. A separate test shall be conducted with existing and proposed | | | | |
| | onsite landscaping included, if required per Section 5, below. The | | | | |
| | accompanying report shall compare the wind tunnel results analyzing the | | | | |
| | Proposed Building in the context of the Current Project to the following | | | | |
| | two baselines: (1) the EIR baseline conditions for the project site (Wind | | | | |
| | Study Configuration A), and (2) Existing Plus Project (i.e., with Mission | | | | |
| | Rock proposed project) conditions used in the EIR (Wind Study | | | | |
| | Configuration B). | | | | |
| | 5. No further analysis shall be required if the QWC concludes, and the | | | | |
| | Planning Department concurs, that the Proposed Building's schematic | | | | |
| | design, absent proposed onsite landscaping, would not create a Significant | | | | |
| | Wind Impact. If the QWC concludes that the Proposed Building's | | | | |
| | schematic design, absent proposed onsite and existing offsite landscaping, | | | | |
| | would create a Significant Wind Impact, as defined above, then a second | | | | |
| | wind tunnel test shall be conducted, taking into account proposed onsite | | | | |
| | landscaping and existing offsite landscaping. The intent of landscaping is | | | | |

⁷ All references to the Wind Study refer to the Mission Rock EIR Pedestrian Wind Study Wind Tunnel Tests Report prepared by RWDI, final report, January 25, 2017, which can be found in Appendix 7-1 to this EIR.

⁸ These could include features such as setbacks, wind baffles, randomized balconies, overhands, canopies, awnings and the like, provided they are consistent with the project's Design Controls and shown on schematic architectural plans for the Proposed Building.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|---|---|--|
| to emulate the function and effect of a manmade wind screen. The following parameters have been determined to be the minimum requirements for landscaping features to be effective in controlling wind:⁹ It is the combined effect of a cluster or group of landscaping features that is most effective, rather than the maturity of one tree. Since a general rule is that vertical wind control features should be taller than the average height of a person, foliage from the ground up is most effective at a height of approximately 6 to 8 feet. Since winds can easily flow under tree crowns, underplantings (e.g., shrub plantings at the base of a tree) should be included where trunks are bare for the first 5 to 6 feet of a tree measured from the ground. Tree crowns with at least 60 percent cover (density of leafage) and even spread of branches are most effective. | | | | |
| Biological Resources Mitigation Measures | | | | |
| M-BI-3.1: Conduct Impact Hammer Pile Driving during Periods that Avoid Special-Status Fish Species' Spawning and Migration Seasons. In-water pile installation using impact hammers shall occur within the work window of June 1 to November 30, which has been established for dredging in San Francisco Bay to reduce potential effects on special-status fish species. | Pier 48 developer. | During the construction work window of June 1 to November 30. | Pier 48 developer to submit detailed construction schedule to Port staff for review and approval. | Considered complete upon approval of construction schedule by Port staff. |
| M-BI-3.2: Pile-Driving Noise Reduction for the Protection of Fish. Prior to the start of pile driving in the Bay, the project sponsor shall develop an underwater noise monitoring and attenuation plan and obtain approval from NMFS. The NMFS-approved plan or any modifications shall be provided to the City Planning Department for determination of consistency with the requirements in this measure. The plan shall provide details regarding the estimated underwater sound levels expected, sound attenuation methods, methods used to monitor and verify sound levels during pile-driving activities, and management practices | Pier 48 developer. | Prior to the start of pile driving in the Bay. | Pier 48 developer to prepare an underwater noise monitoring and attenuation plan and obtain approval from NMFS. The NMFS- approved plan or any modifications to be provided to the Port staff for determination of consistency with the requirements in this | Considered complete upon review and approval of the sound attenuation and monitoring plan by NMFS and consistency determination by |

⁹ RWDI, Landscaping, December 8, 2016.

NOTE: Each mitigation measure in this document applies to the proposed project and all variants, unless noted otherwise.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|------------------------|---|------------------------|
| to be taken to reduce pile-driving sound in the marine environment to below | | | measure. | Port staff. |
| NMFS thresholds for injury to fish. The plan shall incorporate, but not be limited to, the following BMPs: | | | | |
| All steel pilings shall be installed with a vibratory pile driver to the | | | | |
| deepest depth practicable. An impact pile driver may be used only where | | | | |
| necessary, as determined by the contractor and/or project engineer, to | | | | |
| complete installation of the steel pilings, in accordance with seismic safety | | | | |
| or other engineering criteria. • The smallest pile driver and minimum force shall be used to complete the | | | | |
| work necessary to meet NMFS requirements, as determined by the | | | | |
| contractor and/or project engineer. | | | | |
| The hammer shall be cushioned using a 12-inch-thick wood block during | | | | |
| all impact hammer pile-driving operations. | | | | |
| To reduce impacts to levels below injury thresholds, based on | | | | |
| hydroacoustic monitoring and the amount of impact pile driving occurring on a particular day, a bubble curtain, wood block cushion, air | | | | |
| barrier, or similar technology shall be employed during impact pile- | | | | |
| driving activities. | | | | |
| A "soft start" technique shall be employed upon initial pile-driving | | | | |
| activities every day to allow fish an opportunity to vacate the area. | | | | |
| During impact pile driving, the contractor shall limit the number of | | | | |
| strikes per day to the minimum necessary to complete the work, as determined by the contractor and/or project engineer. | | | | |
| No pile driving shall occur at night. | | | | |
| During impact pile driving, a qualified fish biologist shall monitor the | | | | |
| project site for fish that exhibit signs of distress. If fish are observed | | | | |
| exhibiting signs of injury or distress, work shall be halted by the | | | | |
| biologist, and the cumulative SEL up to that point shall be examined. If | | | | |
| the cumulative SEL is close to the threshold or exceeds the threshold, | | | | |
| then pile-driving activities will cease until the next day. | | | | |

¹⁰ Soft starts require an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 1-minute waiting period between subsequent three-strike sets. Soft starts for vibratory hammers will initiate noise at 15 seconds at reduced energy, followed by a 1-minute waiting period between subsequent starts. This process should continue for a period of no less than 20 minutes.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|----------------------------------|--|---|--|
| All pile-driving and pile-removal activity shall be monitored by a NMFS-approved biological monitor before and during all pile driving. The biological monitor shall maintain a monitoring log of daily pile-driving activities, any field sound measurements, fish sightings, and implementation of soft-start and shut-down requirements. A monitoring report shall be prepared for submission to NMFS and the City (submitted monthly and at the completion of all pile-driving/pile-removal activities). | | | | |
| M-BI-3.3: Pile-Driving Noise Reduction for Protection of Marine Mammals. Prior to the start of pile driving in the Bay, as part of the underwater noise monitoring and attenuation plan required by Mitigation Measure M-BI-3.2, the project sponsor shall provide details regarding the estimated underwater sound levels expected, not just from impact hammer pile driving that may affect fish but also from vibratory pile driving and removal because these sound levels may affect marine mammals. The plan shall also address sound attenuation methods, methods used to monitor and verify sound levels during pile-driving activities, and management practices to be taken to reduce pile-driving sound in the marine environment to below NMFS thresholds for injury to marine mammals. As part of implementation of the sound attenuation monitoring plan, the project sponsor shall take actions to reduce the effect of underwater noise transmission on marine mammals. These actions shall include, at a minimum: The establishment of initial safety zones, based on the estimated NMFS injury threshold contours for the different marine mammals (as shown in Table 4.L-8 and Table 4.L-9). The initial size of the safety zones may be modified, based on subsequent analysis of the anticipated noise levels and the actually proposed piles, equipment, and activity prior to construction but only with the approval of NMFS. Hydroacoustic monitoring, according to the NMFS-approved sound attenuation and monitoring plan, shall be completed during initial pile driving to verify projected isopleths for pile driving and removal. The plan shall require real-time hydroacoustic monitoring for a sufficient number of piles to determine and verify modeled noise isopleths. The safety zones established prior to construction may be modified, based on field measurements of noise levels from different pile-driving activities, if the field measurements indicate that different noise threshold contours than those estimated prior to construction are appr | Pier 48 developer. | Prior to the start of pile driving in the Bay. | Pier 48 developer to prepare an underwater noise monitoring and attenuation plan (including estimated underwater sound levels expected) and obtain approval from NMFS. The NMFS-approved plan or any modifications to be provided to Port staff for determination of consistency with the requirements in this measure. | Considered complete upon review and approval of the sound attenuation and monitoring plan by NMFS and consistency determination by Port staff. |

NOTE: Each mitigation measure in this document applies to the proposed project and all variants, unless noted otherwise.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|---|---|---|---|
| Halting of work activities when a marine mammal enters a safety zone (specific to that species) and resumed only after the animal has not been observed within the safety zone for a minimum of 15 minutes. | | | | |
| Use of a "soft start" technique each day upon commencement of pile-driving activity, any time after ceasing pile-driving activity for more than 1 hour, and any time after shutdown due to marine mammal entry into a safety zone. | | | | |
| Monitoring by an NMFS approved biological monitor of all pile-driving and pile-removal activity before and during all pile driving/removal to inspect the work zone and adjacent Bay waters for marine mammals and implement the safety zone requirements described above. The biological monitor shall maintain a monitoring log of daily pile-driving/removal activities, any field sound measurements, marine mammal sightings, and implementation of soft-start, shut-down, and safety-zone requirements. A monitoring report shall be prepared for submission to the City and NMFS (submitted monthly and at the completion of all pile-driving/pile-removal activities). | | | | |
| M-BI-5: Conduct Pre-Construction Surveys for Nesting Migratory Birds. To facilitate compliance with state and federal laws (California Fish and Game Code and the MBTA) and prevent impacts on nesting migratory birds, the project sponsor shall avoid vegetation/structure removal, ground-disturbing activities, and elevated noise levels near suitable nesting habitat during the nesting season (February 1 through August 31) or conduct preconstruction surveys, as described below. Alternatively, the project sponsor may remove vegetation or structures that may support nesting birds outside of the breeding season such that no breeding habitat would be present should construction start in the normal breeding season. | Infrastructure or vertical developer(s) (as applicable), qualified wildlife biologist (if necessary). | Infrastructure or vertical developer(s) (as applicable) to avoid vegetation and/or structure removal, ground-disturbing activities, and elevated noise levels near suitable nesting habitat | Avoid Removal during Nesting Season: contractor to provide detailed construction schedule to Port to confirm affected activities fall outside nesting season or removal of trees and/or structures occurs outside breeding season. Nesting Surveys: If necessary, wildlife biologist to complete a memorandum | Avoid Removal during Nesting Season: complete upon review and approval of construction schedule by Port staff. Nesting Surveys: Considered complete upon review and |

¹¹ Soft starts require an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 1-minute waiting period between subsequent three-strike sets. Soft starts for vibratory hammers will initiate noise at 15 seconds at reduced energy, followed by a 1-minute waiting period between subsequent starts. This process should continue for a period of no less than 15 minutes.

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|----------------------------------|--|---|--|
| If it is not feasible to avoid the nesting season and suitable nesting areas remain on the project site, the project sponsor shall hire a qualified wildlife biologist with demonstrated nest-searching experience to conduct surveys for nesting birds, including raptors. The following list details the nesting bird survey requirements for this project. One nesting bird assessment is required at the beginning of each year, at the start of the nesting bird season (February), to determine if suitable nesting habitat remains or has been reinstated (e.g., the project site is revegetated). If suitable nesting habitat is present, one nesting survey shall be conducted between February and April, and one nesting survey shall be conducted between April and June. Additional nesting surveys are required when construction work stops at a portion of the site where suitable nesting habitat remains for more than 15 days or if construction is phased in such a way that no disturbance has occurred in a portion of the project site. If active nests are observed during construction when the wildlife biologist is not present, all work within 250 feet of the nest shall stop, and wildlife biologist shall be contacted immediately. All personnel shall move at least 250 feet away from the nest. To the extent feasible, after consulting with the wildlife biologist, construction equipment shall be shut down or moved 250 feet away from the nest. | Responsibility | during the nesting season (February 1 through August 31), conduct preconstruction surveys (February through June), or remove vegetation and/or structures outside breeding season. | detailing the survey effort and results and submit the memorandum to the infrastructure developer or vertical developer (s) (as applicable) and Port staff within 7 days of survey completion. Port staff to review and approve report. | approval of nesting surveys by Port staff. |
| Nesting bird surveys shall be performed no earlier than 7 days prior to the commencement of ground-disturbing activities and vegetation removal (including clearing, grubbing, and staging). The area surveyed shall include all construction areas as well as areas within 250 feet outside the boundaries of the areas to be cleared or as otherwise determined by the biologist. If the wildlife biologist finds any active nests (e.g., a nest with eggs, chicks, or young) during the survey, the biologist shall establish no-disturbance species-specific buffer zones for each nest, marked with high-visibility fencing, flagging, or pin flags. No construction activities shall be allowed within the buffer zones. The size of the buffer shall be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer shall remain in effect until the chicks have fledged from the nest or the nest is no longer active, which will be verified by the biologist. | | | | |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|--|--|--|--|
| If inactive nests are identified, the project sponsor or its contractor shall remove those nests from the structure/vegetation and install nest exclusion measures on structures (i.e., fine mesh netting, panels, or metal projectors) outside of the nesting season, if deemed necessary and suitable by the qualified wildlife biologist. All exclusionary devices shall be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. After each survey and/or after nest-deterrence activities are completed, the wildlife biologist shall complete a memorandum detailing the survey effort and results and submit the memorandum to the project sponsor within 7 days of survey completion. | | | | |
| Geology and Soils Mitigation Measures | | | | |
| M-GE-5: Accidental discovery of paleontological resource. Given the potential for paleontological resources to be present at the project site at excavation depths within the Colma Formation, the following measures shall be undertaken to avoid any significant adverse effect from the proposed project on paleontological resources. Before the start of any drilling or pile-driving activities, the project sponsor shall retain a qualified paleontologist, as defined by the SVP, who is experienced in teaching nonspecialists. The qualified paleontologist shall train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, and proper notification procedures should fossils be encountered. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate the significance. If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work near the find and notify the project sponsor and the San Francisco Planning Department. Construction work in the affected areas shall remain stopped or be diverted to allow recovery of fossil remains in a timely manner. The project sponsor shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with SVP guidelines. The recovery plan may include a field survey, construction monitoring, sampling and data recovery | Infrastructure developer and/or vertical developer(s) (as applicable), and qualified paleontologist. | Before the start of any drilling or pile-driving activities. | Infrastructure developer or vertical developer(s) (as applicable) to retain qualified paleontologist and notify Port staff. Port staff to approve selection of paleontologist. If necessary, paleontologist to prepare and submit a recovery plan for Port review and approval. | Considered complete once training is complete, once construction is complete, or once the Planning Department approves the recovery plan and the infrastructure developer or vertical developer(s) and qualified paleontologist implements the plan. |

| | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|--|--|---|--------------------------------------|
| a report of findings. Recommendations in the recovery plan that are determined by the San Francisco Planning Department to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered. The San Francisco Planning Department shall be responsible for ensuring that the monitor's recommendations regarding treatment and reporting are implemented. | | | | |
| IMPROVEMENT MEASURES FOR THE SEAWALL LOT 337 AN | | | | |
| <u>Traffic Control Plan for Construction</u> – To reduce potential conflicts between construction activities and pedestrians, bicyclists, transit and autos during | Infrastructure developer and/or developer(s) (as applicable) (s). | Construction Management Plan for Construction: Prior to the issuance of a grading, excavation, or building permit. Project Construction Updates: ongoing throughout construction activities. | Infrastructure developer and/or vertical developer(s) (as applicable) and construction contractor(s) to submit Traffic Control Plan for Construction to the Port and SFMTA for review and approval. Project construction update materials would be provided in the annual mitigation and monitoring plan. | Ongoing during project construction. |

and transportation facilities from overlapping construction transportation

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|---|----------------------------------|--|---|--|
| impacts. The project sponsor, in conjunction with the adjacent developer(s), should propose a construction traffic control plan that includes measures to reduce potential construction traffic conflicts, such as coordinated material drop-offs, collective worker parking and transit to job site and other measures. Reduce Single-Occupant Vehicle Mode Share for Construction Workers – To | | | | |
| minimize parking demand and vehicle trips associated with construction workers, the project sponsor should require the construction contractor to include in the Traffic Control Plan for Construction methods to encourage walking, bicycling, carpooling, and transit access to the project construction sites by construction workers in the coordinated plan. | | | | |
| Project Construction Updates for Adjacent Residents and Businesses – To minimize construction impacts on access for nearby residences, institutions, and businesses, the project sponsor should provide nearby residences and adjacent businesses with regularly updated information regarding construction, including construction activities, peak construction vehicle activities (e.g., concrete pours), travel lane closures, and lane closures via a newsletter and/or website. | | | | |
| I-TR-7: Garage Access – Pedestrian Design Features. During the final design process for the parking facilities and the pedestrian realm of adjacent streets, improvements should be designed for the safe interface of vehicles and pedestrians at parking facility driveways. This design shall include adequate sight distance, signing, striping, warning devices, and lighting. | Garage developer. | During the final design process for the parking facilities and the pedestrian realm of adjacent streets. | Garage developer to design parking facilities and pedestrian realm for the safe interface of vehicles and pedestrians. SFMTA, in consultation with the Planning Department to review and approve plans. | Considered complete once SFMTA and Planning Department signs off on final plans. |
| I-TR-10: Garage Access – Bicycle-Vehicle Design Features. During the final design process for Long Bridge Street, adequate sight distance should be provided through a combination of signing, striping, and lighting improvements, which should be designed for the safe interface of vehicles and cyclists at the two Block D2 parking facility driveways. | Garage developer. | During final design process for Long Bridge Street. | Garage developer to design Long Bridge Street with adequate sight distance. SFMTA to review and approve plans. | Considered complete once SFMTA signs off on final plans. |

| MEASURES ADOPTED AS CONDITIONS OF APPROVAL | Implementation Responsibility | Mitigation Schedule | Monitoring/Reporting Responsibility (Public Agency) | Monitoring Schedule |
|--|-------------------------------------|------------------------|--|-------------------------------------|
| I-TR-12: Strategies to Enhance Transportation Conditions During Large Events. The project's Transportation Coordinator should participate as a member of the Mission Bay Ballpark Transportation Coordination Committee and provide at least 1-month notification prior to the start of any large event that would overlap with an event at AT&T Park. | Project Transportation Coordinator. | Ongoing. | Transportation Coordinator to provide at least 1-month notification to Port, Planning Department, and SFMTA prior to the start of any large event that would overlap with an event at AT&T Park. | On-going during project operations. |