RECORD OF DECISION

CENTRAL SUBWAY PROJECT

Phase 2 of the Third Street Light Rail Project
City and County of San Francisco, California
By the
San Francisco Municipal Transportation Agency

Decision

The U.S. Department of Transportation (DOT), Federal Transit Administration (FTA) has determined that the requirements of the National Environmental Policy Act (NEPA) of 1969 have been satisfied for the Central Subway Project proposed by the San Francisco Municipal Transportation Agency (SFMTA). This FTA decision applies to Alternative 3B, Fourth/Stockton Alignment, which is described and evaluated in the Central Subway Final Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report (Final SEIS/SEIR). The Response to Comments, Volume II of the Final SEIR was issued by the City and County of San Francisco in July 2008, and the Final SEIS/SEIR Volume I was issued by FTA in September 2008.

The Central Subway Project is Phase 2 of the Third Street Light Rail Project, which began operation in April 2007. The Project consists of a 1.7 mile extension, along Fourth and Stockton Streets, from the existing Third Street Light Rail Station at Fourth and King Streets to a new terminus in Chinatown at Stockton and Jackson streets. The Project would operate as a surface double-track light rail in a primarily semi-exclusive median on Fourth Street between King and Bryant streets. The rail would transition to a subway operation at a portal under the I-80 Freeway, between Bryant and Harrison streets, and continue underground along Fourth Street in a twin-tunnel configuration, passing under the BART / Muni Market Street tube and continuing north under Stockton Street to the Chinatown Station. The Project would have four stations: one surface station between Brannan and Bryant streets and three subway stations: Moscone, Union Square/Market Street, and Chinatown. Twin construction tunnels would extend under Stockton Street beyond the Chinatown Station, located under Stockton Street between Clay and Jackson streets, and continuing north under Stockton Street to Columbus Avenue in the vicinity of Washington Square. This temporary construction tunnel would be used for the extraction of the Tunnel Boring Machines. Alternative 3B was selected as the Locally Preferred Alternative (LPA) by the SFMTA on February 19, 2008

This Record of Decision covers final design and construction of the Phase 2, Central Subway Project, to complete the 7.1-mile long Third Street Light Rail Project. The Project was adopted by the SFMTA Board on August 19, 2008.

Background

The Bayshore System Planning Study completed by the San Francisco Municipal Railway in December 1993 was the first step in the planning process to implement major public transportation improvements in the southeastern quadrant of San Francisco The study recommended implementation of light rail service along the Third Street Corridor, linking Visitacion Valley in the south with the Bayview Hunters Point, Mission Bay, South of Market, Downtown and Chinatown and promoting economic revitalization in these congested neighborhoods along the corridor within San Francisco.

The Federal environmental review process for the Third Street Light Rail Project, that included both the Phase 1 Initial Operating Segment, and the Phase 2 Central Subway, was initiated with a Notice of Intent published in the Federal Register on October 25, 1996 and the Final EIS/EIR was completed in November 1998. FTA issued a Record of Decision (ROD) for the Initial Operating Segment in March 1999 Approval of the Phase 2 Central Subway Project was deferred until the Third Street Light Rail was included in MTC's Regional Transportation Plan, which occurred in 2001 and made the Project eligible for federal funding Preliminary engineering studies were initiated in 2003 to re-evaluate the feasibility of alignment and station alternatives, construction methods and tunnel portal locations. These studies were presented to the Community Advisory Group (CAG) beginning in 2003 and to the public beginning in 2004 and resulted in changes to the Project As a result of these changes and with the approval of FTA, a Supplemental environmental review was initiated in 2005.

Public Opportunity to Comment

A Notice of Preparation (NOP) for the Supplemental Environmental Impact Report for The Central Subway Project was sent to the State Clearinghouse and was circulated by the San Francisco Planning Department in June of 2005. A second NOP was sent to all property owners and occupants within 300 feet of the alignment alternatives in September 2006 A Scoping meeting was held on June 21, 2005 and a Scoping Report was transmitted to FTA on November 27, 2006.

The Central Subway project has had an extensive public outreach program as a continuation of the outreach activities for the Initial Operating Segment (Phase 1) of the Third Street Light Rail. The outreach activities for the Central Subway, Phase 2 of the Project, include:

- Twenty-five community and Community Advisory Group meetings were held at various locations along the alignment to address issues of importance to local residents and businesses
- Over 150 presentations by SFMTA project staff to agencies, organizations and community groups throughout the City and the Bay Area.
- A project website, www.sfmta.com/central, was continually updated with the latest information.

- A project hotline, 415.701.4371, and an email address, central subway@sfmta.com, was provided for the submission of comments and questions about the Project.
- Project newsletters were written in English, Chinese and Spanish
- A Community Advisory Group, with over 20 members representing major associations and stakeholder groups, was formed.
- A news conference was held on October 17, 2007, to announce the release of the Draft Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report (Draft SEIS/SEIR)
- A press conference was held by Mayor Gavin Newsom in Chinatown on February 19, 2008
- The Project website incorporated an electronic version of the Draft SEIS/SEIR which increased the public's ability to review and comment on the document.
- Two widely publicized community meetings were held in the fall of 2007 immediately following the release of the Draft SEIS/SEIR.
- A Public Hearing on November 15, 2007 occurred to receive public input on the Draft Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report (Draft SEIS/SEIR).
- Presentations were made to several City agencies and Commissions.

The Draft Supplemental Environmental Impact Statement/Environmental Impact Report ("Draft SEIS/SEIR") was prepared and distributed to the public (affected agencies and organizations and individuals who had requested a copy of the document) on October 17, 2007. The Notice of availability of the Draft SEIS/SEIR was published in the San Francisco Examiner newspaper and was sent to a standard San Francisco Planning Department mailing list, including public libraries and persons requesting notification, and to those individuals expressing interest in the project. A Notice of Availability for the Draft SEIS was published in the Federal Register (Vol. 72, No 207, page 60847), October 26, 2007. The Notice of Availability was also posted in English and Chinese along the project corridor, including along both Third Street and Fourth Street beginning at King Street to Market Street and along Stockton Street to Washington Square. Newsletters were sent to the project mailing list announcing the availability of the Draft SEIS/SEIR. A postcard, announcing public meetings held on October 30, 2007 and November 8, 2007 to discuss the Draft SEIS/SEIR, were mailed to property owners and occupants within 300 feet of the project corridor. The Draft SEIS/SEIR was available for on-line review on the SFMTA web site. Over 160 copies in printed and compact disc versions, of the Draft SEIS/SEIR were mailed to agencies and individuals, including the State Clearinghouse.

The document was also available for review at the following locations:

- San Francisco Planning Department, 1660 Mission Street, First Floor Public Information Center;
- SFMTA Central Subway Project office at 821 Howard Street, 2nd floor

- San Francisco Central Library, 100 Larkin Street;
- Hastings College of Law Library, 200 McAllister Street;
- Chinatown Library, 1135 Powell Street;
- North Beach Library, 2000 Mason Street;
- San Francisco State University Library, 1630 Holloway Street;
- Institute of Governmental Studies Library, Moses Hall, at University of California, Berkeley; and,
- Stanford University Libraries, Stanford, CA.

In addition to the public meetings held over the course of the Project, three community meetings to share information about the Draft SEIS/SEIR were held in 2007 (October 30 at the Pacific Energy Center at 851 Howard Street; November 8, at the Gordon J. Lau Elementary School in Chinatown, and November 13 at One South Van Ness with the Community Advisory Group). The Public Hearing on the Draft SEIS/SEIR was held on November 15, 2007 at the San Francisco Planning Commission in San Francisco City Hall. Forty written comments on the Draft SEIS/SEIR were received and 23 persons commented at the Public Hearing

Alternatives Considered in the Supplemental EIS/EIR

The No Project / No Build/TSM Alternative consists of the existing T-Third LRT and existing Muni bus service with projects programmed in the financially constrained Regional Transportation Plan. It includes growth and proposed development in San Francisco in the 2030 horizon year. Under this alternative it is assumed that bus service would increase by about 80 percent by 2015 to meet demand and increased frequencies on the 30 Stockton and 45-Union bus line would be among bus changes.

The No Build/TSM Alternative is rejected for the following reasons:

- Fails to Accommodate Year 2030 Transit Demand of 99,600 weekday bus passengers, an increase over existing ridership of 30,900 bus passengers.

- Fails to complete the Third Street LRT (T-Line) as described in the 1998 EIR/EIS, and is not consistent with the 1995 Four Corridor Plan or Regional Transportation Plan.

- Fails to Create a Transit Oriented Development – The No Build Alternative will not facilitate the development of high density mixed use development south of Market (Moscone Station) or in the Chinatown area that would encourage the use of environmentally friendly transportation thereby reducing transportation impacts of the development

- The No Project / No Build Alternative would result in reduced transit service reliability, increased transit travel times, increased energy consumption, and increased air pollution when compared to some or all of the Build Alternatives.

The No Build/TSM Alternative would also be less consistent than the Locally Preferred Alternative (LPA) with many of the policies and goals of the General Plan including, but not limited to: transit services would not keep pace with future travel demand in the Study Area. As the quality and efficiency of public transit service deteriorates users could be attracted to alternative modes of transportation, including use of private vehicles. For this reason, the No Project/TSM Alternative would be inconsistent with transportation policies contained in Area Plans that encourage accommodating future employment and population growth in San Francisco through transit, rather than private automobiles. For the economic, social, travel demand and other considerations set forth herein and in the Final SEIS/SEIR, the No Build Alternative is rejected as infeasible.

Under the Build Alternatives, Alternative 2 is the same alignment along King, Third, Fourth, Harrison, Kearny, Geary, and Stockton streets with a shallow subway crossing of Market Street as presented in the 1998 FEIS/FEIR, but with the addition of above-ground emergency ventilation shafts, off-sidewalk subway station entries where feasible, and the provision of a closed barrier fare system. This alternative includes one surface platform at Third and King Streets and four subway stations at Moscone, Market Street, Union Square and Chinatown.

Alternative 2 is rejected for the following reasons:

- The Community Advisory Group (CAG) and public input did not prefer this alternative; and in particular, the residents along Third Street expressed concern that the Third Street surface alignment portion of this alternative would significantly disrupt their neighborhood.
- The split alignment (along a section of Third Street and Fourth Street) made operation of the T-Third/Central Subway system less efficient for operation than the straight alignment of Alternative 3A and 3B. Alternative 2 has the highest incremental cost per hour of transportation system-user benefit of all of the build alternatives (+$9 per hour over 3A and 3B) and would be assigned a low cost effectiveness rating based on FTA criteria.
- The Alternative 2 connection to the BART/Muni Market Street Subway at Montgomery Station involves a long narrow pedestrian walkway as compared to the more direct connection to the BART/Muni Market Street Subway at Powell Street Station for Alternatives 3A and 3B.
- The Capital Cost of this Alternative would be $1,685 million in the year of expenditure (YOE) dollars which is higher than either Alternative 3A ($1,407 million) or 3B ($1,235 million).
- This alternative would not offer fewer environmental impacts than Alternatives 3A or 3B and would impact Union Square with vent shafts and visual changes to the eastern stairway of the Park; would displace 59 off-street parking spaces; would result in impacts (shadow and visual) to Willie "Woo Woo" Wong Park from the station at 814-828 Stockton Street in Chinatown; would displace 10 small businesses compared with eight small businesses in Alternative 3B; would potentially impact 14 highly sensitive prehistoric archaeological sites, three sensitive historical archaeological sites, and three historical architectural properties (as compared to seven highly sensitive prehistoric archaeological

properties for Alternative 3B LPA); and would have significant traffic impacts at the intersections at Third and King streets and Sixth and Brannan Streets.

Alternative 3A is the same alignment as Alternative 3B (the LPA and the Proposed Project) but differs from Alternative 3B in the station locations and station platform size and tunnel length and has no surface station. Alternative 3A is rejected for the following reasons:

- The Capital Cost of this alternative would be $1,407 million (YOE) compared with the cost of Alternative 3B at $1,235 million (YOE), a $172 million difference.
- The Chinatown Station located at 814-828 Stockton Street is one block further from the core of Chinatown retail district than the Chinatown Station in Alternative 3B.
- The property at 814-828 Stockton Street would need to be demolished for the station, and this building has been identified as potentially historic (built in 1923) and a contributor to the potential Chinatown Historic District.
- This alternative would displace ten small business compared with eight for Alternative 3B.
- The Chinatown station at 814-828 Stockton would have significant impacts to the Willie "Woo Woo" Wong Park to the east including visual, shadow, pedestrian traffic, and noise impacts during construction This alternative is not preferred by the Recreation and Park Commission.
- The station at Union Square/Market Street would have a vent shaft in Union Square and the entry to the station in the middle of the steps along the east side (Stockton Street) of the Park; this was not preferred by the Recreation and Park Commission when compared with Alternative 3B because of the vent shafts in the Park and the cross-Park pedestrian traffic to the entry on the Stockton Street side of the Park.

Basis for the Record of Decision

The Central Subway Project has been the subject of a series of environmental and planning studies supported by preliminary engineering. These studies were used to help identify a series of alternatives for evaluation in the SEIS/SEIR planning process that began in early 2004.

The Draft SEIS/SEIR presented a complete analysis of the environmental impacts of alternatives. During the Draft SEIS/SEIR comment period members of the public and agencies suggested several additional alternatives or refinements to the existing alternatives These alternatives and refinements were considered by the SFMTA and used to help define the Locally Preferred Alternative (LPA).

The Fourth/Stockton Alignment 3B Alternative is selected as the LPA because it has the following major advantages:

- Lowest capital cost of all Build Alternatives and is the only Build Alternative that can be completed within the currently identified Project funding commitment.
- Least impact of the Build Alternatives to Union Square Park because the station entry would be on the Geary Street terraced side of the Square, not in the middle of the steps to the plaza on the east side of the park on Stockton Street. This alternative has been approved to have "de minimis" impacts to Section 4(f) resources by the San Francisco Recreation and Park Commission. No shadow impacts would result from the Geary Street station entry on Union Square Park because the station entry would be incorporated into the terraced edge of the Park below the Park plaza and visual impacts would be less-than-significant.
- Reduced construction duration and less surface disturbance and other construction-related impacts as compared to Alternative 2 as a result of using deep (TBM) tunneling methods.
- Reduced impacts associated with archaeological and historical resources, utility relocations, noise and vibration, and park and recreation facility impacts compared to the other Build Alternatives.
- Semi-exclusive right-of-way for light rail vehicles (similar to much of the N-Judah and the Third Street operation) on most of the surface portion of the rail line, thereby improving rail operations by reducing potential delays associated with traffic congestion on Fourth Street and improving travel times for Central Subway patrons on the surface portion of the rail line.

Measures to Minimize Harm

All mitigation measures set forth in the Final SEIS/SEIR are reproduced in Attachment 1, Mitigation Monitoring and Reporting Program (MMRP) None of the mitigation measures set forth in the Final SEIS/SEIR are rejected Responsibility for implementation and monitoring are identified in the MMRP. FTA finds that the measures presented in the Final SEIS/SEIR and MMRP will mitigate, reduce, or avoid the significant environmental effects of the Project. The MMRP was adopted by SFMTA as part of Project approval on August 19, 2008 Mitigation measures will be incorporated into the final plans and specifications for the project and will be implemented by San Francisco City Departments (including SFMTA in cooperation with the Transbay Joint Powers Authority, the Golden Gate Bridge, Highway and Transportation District), with applicable jurisdiction as set forth in the MMRP.

The mitigation measures also include mitigation in the areas of traffic, freight and loading, socioeconomics, archaeological resources, geology and seismicity, hydrology and water quality, noise and vibration, hazardous materials during construction, air emissions, and visual/aesthetics during construction. SFMTA is responsible for making sure that all mitigation measures are implemented during construction and operation of the Project.

The City and County of San Francisco, in accordance with federal and state law, and to the extent it is within its jurisdiction, will mitigate the impacts of property acquisition and relocations required by the Project providing information and relocation assistance to those as set forth therein Future development of the Moscone and Chinatown stations

with retail space and low-income housing units will further reduce impacts of relocated businesses and residents

Final design of the proposed Transit Oriented Development above the Chinatown Station at 933-949 Stockton Street will be under the jurisdiction of the San Francisco Planning Department. The Final SEIS/SEIR and the Memorandum of Agreement (MOA) with the State Historic Preservation Officer (SHPO) includes mitigation for the demolition of this potentially historic resource that incorporates partial preservation of the building at 933-949 Stockton Street, which has been concurred with by the SFMTA. FTA thereby urges the City of San Francisco Planning, in approving any new development of the parcel, to require the incorporation of historic elements of the building façade into the design of the station. In proposing final design, SFMTA and City of San Francisco Planning should work cooperatively with representatives of the Chinatown community in developing the final design and with the SF Landmarks Preservation Advisory Board and the SHPO as described in Attachment 2, Memorandum of Agreement. The final station design will undergo independent environmental review.

Determination and Findings

The environmental record for the Central Subway project is included in the Final SEIS, Volume II, dated July 11, 2008, and the Final SEIS, Volume I, dated September 23, 2008. These documents present the detailed statement required by NEPA and U.S.C. 5324(b) and include:

- The environmental impacts of the Project;
- The adverse environmental impacts that cannot be avoided should the Project be implemented; and,
- Alternatives to the proposed Project.

Comments Received on SFEIS within 30-day Comment Period

In response to the public notice of availability published in the Federal Register on October 3, 2008, the Federal Transit Administration received one response letter, from the United States Environmental Protection Agency (EPA), Region IX office (see Attachment 3). The letter noted EPA's ongoing support of several of the project's goals for minimizing environmental impacts, maximizing transit use, and meeting community needs. EPA also requested further clarification on whether the trucks removing excavated soil from the project site will be subject to the same air quality mitigation requirements as on-site construction vehicles The air quality control measures, as outlined on pages 6-112 and 6-112a of the Central Subway Final SEIS/SEIR, Volume I September 2008 will be applied, where feasible, to soil haul trucks as well as to construction vehicles operating on-site to meet EPA standards These control measures will be incorporated into the construction specifications and contract documents. With the implementation of these control measures, no significant air quality impacts were identified for the implementation of the Central Subway Project.

On August 7, 2008, the San Francisco Planning Commission certified the Final Supplemental Environmental Impact Report. The SFMTA adopted the Project Findings,

the Mitigation Monitoring and Reporting Program, and the Statement of Overriding Considerations on August 19, 2008. Three appeals of the Final SEIR certification by the Planning Commission were filed with the San Francisco Board of Supervisors; however two were withdrawn prior to the public hearing held before the Board of Supervisors on September 16, 2008. At the Board of Supervisors hearing, eleven individuals spoke in support of the appellant and nine individuals spoke in support of the certification for the environmental document. The Board of Supervisors voted to uphold the Planning Commission's certification of the Final SEIR (see Attachment 4)

On the basis of the evaluation of the social, environmental and economic impacts contained in the final SEIS and the written and oral comments offered by the public and other agencies, FTA has determined, in accordance with 49 U.S.C. 5324(b) that:

- Adequate opportunity was afforded for the presentation of views by all parties with vested economic, social or environmental interest in the Project and that fair consideration has been given to the preservation and enhancement of the environment and to the interests of the community in which the proposed Project is to be located; and
- All reasonable steps have been taken to minimize the adverse environmental effects of the proposed Project and where adverse environmental effects remain, no reasonable alternative to avoid or further mitigate such effects exists.

Conformity with Air Quality Plans

The Federal Clean Air Act, as implemented by 40 CFR Parts 51 and 93, as amended, requires that transportation projects conform with the State Implementation Plan's (SIP) purpose of eliminating or reducing the severity and number of violations of the national ambient Air Quality Standards (NAAQS) and of achieving expeditious attainment of such standards. The Environmental Protection Agency (EPA) regulation implementing this provision of the Clean Air Act establishes criteria for demonstrating that a transportation project conforms to the applicable air quality plans. The performance of the selected light rail project in meeting the conformity criteria contained in the EPA regulation was evaluated in the Draft and Final SEIS, Section 5.11. The Project meets the criteria in 40 CFR Parts 51 and 93 for projects from a conforming plan and Transportation Improvement Program (TIP) and conforms to air quality plans for the Bay Area Region and the Clean Air Act Amendments of 1990.

Section 4(f) Coordination and Determination

A total of three publicly-owned parks and recreation areas and one potentially historic property protected by Section 4(f) of the Department of Transportation Act of 1966, amended in 2005 as part of SAFETEA-LU (Section 6009(a)) to address "de minimis, or minor impacts and simplify the review and approval process, are addressed in the SEIS FTA concurs with the San Francisco Recreation and Parks Department with the de minimis finding for impacts to Union Square, Willie "Woo Woo" Wong and Washington Square parks. Attachment 5 describes the San Francisco Recreation and Parks

unanimous vote to support a de minimis finding by FTA. Coordination and concurrence with San Francisco regarding the temporary impacts is found in the Final SEIS.

FTA's rule establishing procedures for determining that the use of a Section 4(f) property has a de minimis impact on the property is found at 23 CFR 771 and 774. In accordance with the provisions of 23 CFR Part 774.7 (b), FTA has determined there is sufficient supporting documentation to demonstrate that the impacts to Section 4(f) property, after avoidance, minimization, mitigation, or enhancement measures are taken into account, are de minimis as defined in Part 774.17 and the coordination required in Part 774.5 (b) has been completed.

Section 106

The Programmatic Agreement between FTA and the SHPO and SFMTA signed in 1998 for the Third Street Light Rail Project (that included the Phase 2 Central Subway), has been revised in a MOA (Attachment 2) to address the treatment plan and documentation and mitigation for the Central Subway, Alternative 3B. The MOA addresses both archaeological resources for the sub-surface excavation/tunneling, and the historic property for Transit Oriented Development (TOD) above the Chinatown Station at 933-949 Stockton Street. The final design for the TOD portion of the station will be under the jurisdiction of the San Francisco Planning Department and will include input from architectural historians, the Chinatown community, and the Landmarks Preservation Advisory Board consistent with the mitigation measures in the MOA and MMRP.

Based on the findings in the Final SEIS, and the MOA for the Section 106 properties, FTA and the California SHPO agree that a finding of adverse effect will occur at 933-949 Stockton Street. SFMTA will abide by all MOA requirements.

Finding

On the basis of the determinations made in compliance with relevant provisions of federal law, FTA finds the Central Subway, Phase 2 of the Third Street Light Rail Project, has satisfied the requirements of the National Environmental Policy Act of 1969, the Clean Air Act of 1970, and the U.S. Department of Transportation Act of 1966, all as amended.

Leslie T. Rogers
Regional Administrator, Region IX

NOV 26 2008
Date

ATTACHMENT 1

MITIGATION MONITORING AND REPORTING PROGRAM
for the

Central Subway Project
Locally Preferred Alternative 3B

City and County of San Francisco, California

by the

San Francisco Municipal Transportation Agency

July 2008

The California Environmental Quality Act (CEQA) requires public agencies adopt mitigation measures and a Mitigation Monitoring and Reporting Program (MMRP) that would avoid or substantially lessen the identified significant impacts of the project, assuming such measures are feasible. This MMRP includes objectives, criteria, and specific responsibilities and procedures to administer responsibilities under the CEQA Act and the CEQA Guidelines. This document lists mitigation measures and commitments that will fulfill these requirements for the Central Subway project.

The mitigation measures table summarizes the significant impacts for construction and operations of the Central Subway Project as identified in the SEIS/SEIR and the action(s) that the Project will undertake to mitigate those effects. The mitigation actions will reduce the effects of the Project to less than significant levels, except as they relate to traffic, residential and small business displacement, archaeological resources, and historical architectural resources,. The table is organized as follows:

Impact Area: The table is divided into 29 sections (Operation - Transit, Operation - Traffic, Operation - Freight and Loading, Operation - Parking, Operation - Pedestrians, Operation - Bicycles, Operation - Emergency Vehicle Access, Operation – Socioeconomic, Operation – Community Facilities, Operation - Historic Architectural Resource Impacts, Operation - Visual and Aesthetic Resources, Operation - Noise and Vibration, Construction - Transit, Construction - Traffic, Construction - Freight and Loading, Construction - Parking, Construction - Pedestrians, Construction - Bicycles, Construction - Emergency Vehicle Access, Construction - Land Use, Construction - Community Facilities, Construction - Prehistoric and Historical Archaeological Resources, Construction - Historical Architectural Resources, Construction - Visual and Aesthetic Resources, Construction - Utilities, Construction - Geology and Seismicity, Construction – Hydrology and Water Quality, Construction - Biological and Wetland Resources, Construction - Hazardous Materials, Construction - Noise and Vibration. Each section identifies the potentially significant impacts and mitigation measures for a particular resource.

Impact Summary: Provides a brief description of the impact or effect of the Central Subway Alternative 3B project that is to be mitigated.

Mitigation Measures/Improvement Measures: Provides a brief description of the mitigation and/or improvement measures that San Francisco Municipal Transportation Agency (SFMTA) is required to implement to mitigate the significant impact or effect of the undertaking. Improvement measures are measures that will be undertaken to further reduce the project's less-than-significant impacts. The Final MMRP is part of the project Final SEIS/SEIR and adopted project and CEQA findings. The measures approved by SFMTA will be part of construction bid documents and will be enforced.

Monitoring and Reporting Program: Identifies the milestones at which the mitigation measure must be finalized and implemented.

- Check Final Engineering Documents indicates that the mitigation must be incorporated into the construction plans and specifications.
- Monitor Construction indicates that construction will be monitored to see that the project is constructed pursuant to the construction documents, that field modifications cannot be made

without review and concurrence, and that the change is consistent with the intent of the mitigation measures and that monitoring results will be reported monthly to SFMTA and quarterly to the Planning Department and the FTA.

- Test Operations During Pre-Revenue Testing indicates that the mitigation has potential for adjustment and that the system must be tested for effectiveness during pre-revenue testing.
- Real property acquisition, relocation, demolition, and clean-up will be performed by the SFMTA in accordance with Real Property Acquisition Procedures established by the Project. The Project will have to monitor and audit those activities to insure compliance with the established procedures and the federal law (Uniform Relocation Act).
- Section 106 Memorandum of Agreement requires the development of Research Design and Treatment Plans. The Mitigation Monitoring Plan will have to monitor both the development and implementation of these plans to insure conformity with the MOA.

Responsibility: In all instances SFMTA. Actions or activities are assigned to parties working for or reporting to the SFMTA.

- The Project Engineering Team (PE) is responsible for seeing that all mitigations that require design solutions and/or conditions in the construction specifications are implemented. An independent Environmental Compliance Manager will be retained by SFMTA to work with the PE to monitor construction activities and report to City Planning, SFMTA, and the FTA.
- The SFMTA is responsible for acquiring the real property necessary for the Project and delivering the necessary ROW to the Project free and clear of any physical or legal encumbrances. SFMTA is responsible for auditing the acquisition process for compliance with established procedures and federal law.
- Mitigation measures that are implemented pursuant to the Memorandum of Agreement will have to be accomplished in consultation with the City, FTA and the State Historic Preservation Coordinator ("SHPO") and reports will go to the SHPO.
- Construction activities will be overseen by SFMTA who will be responsible for ensuring that all construction related mitigation measures are implemented. The SFMTA may retain a construction management consultant (CMC) to assist in the mitigation oversight.
- Contractors will be responsible for the actual implementation of construction related mitigation measures.

Enforcement Agency: Identifies the agency responsible for ensuring that mitigation measures are implemented. In most cases it is the SFMTA.

Monitoring Agency: Identifies the agencies that must approve or concur with the method of implementation of the mitigation measure. In most cases this approval will come in the form of construction permits to develop the project, or in the form of an interagency agreement.

Implementation Schedule: Identifies the milestones at which the monitoring action must occur. Mitigation measures associated with system operations will have to be tested for effectiveness during pre-revenue testing and monitored during on-going operational services. The SFMTA Mitigation Monitoring Manager must approve that the mitigation measure is adequately addressed at each phase of project development.

ATTACHMENT A –MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME AND CASE NO. CENTRAL SUBWAY PROJECT 96.28IE

Impact No.	Impact Summary	Mitigation Measures (MM) or Improvement Measures (IM)	Monitoring and Reporting Program		
			Implementation and Reporting	Monitoring and Reporting Actions	Implementation Schedule
OPERATION – TRANSIT (TST)					
TST-1	In 2030 passenger demand could slightly exceed the capacity of proposed light rail service and 9AX bus services during certain peak hours.	**IM TST-1a:** SFMTA will monitor transit ridership and increase the number, frequency, and/or size of trains and buses through modification of the operating plan as warranted to increase the capacity.	**Responsibility:** SFMTA	Monitor operations post construction.	Post construction (2030)
TST-2	The Powell Street Station may experience capacity issues at the concourse level due to increased passenger activity at the northeast end of the station.	**IM TST-2a:** The SFMTA and BART will prepare and enter into a Station Improvement Coordination Plan for the Powell Street Station that will provide for, at a minimum, implementation of the allocation of cost for any station infrastructure improvements necessary to maintain pedestrian safety and a pedestrian level of service of D or better at the Powell Street Station as a result of the Central Subway Project.	**Responsibility:** SFMTA	Monitor passenger flow on Concourse level of station in BART shared-use area.	Post construction
OPERATION – TRAFFIC (TRF)					
TRF-1	The Fourth/Harrison Street intersection would degrade to LOS F conditions during the p.m. peak hour due to the number of right turns from Fourth Street to Harrison Street.	**MM TRF-1a:** Improve conditions by adding, via striping changes, a shared through and right-turn lane from Fourth Street to Harrison Street. This migration measure would require parking removal on the east side of Fourth Street, from Harrison Street to a point about 200 feet to the north for lane transition purposes. Signal timing	**Responsibility:** SFMTA	Check Final Traffic Engineering documents for compliance.	Post construction

ATTACHMENT A –MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME AND CASE NO. CENTRAL SUBWAY PROJECT 96.28IE

Impact No.	Impact Summary	Mitigation Measures (MM) or Improvement Measures (IM)	Monitoring and Reporting Program		
			Implementation and Reporting	Monitoring and Reporting Actions	Implementation Schedule
		changes would also help improve the operating conditions by allocating the appropriate amount of green time to all approaches. These improvements are projected to return intersection operations to LOS B.			
TRF-2	The portal at Fourth Street under I-80 may restrict large truck movements onto Stillman Street.	**MM TRF-2a:** SFMTA will explore with the TJPA, Caltrans, and Golden Gate Transit options, such as providing alternate truck routes, that will permit truck access to Stillman Street to reduce the impacts to a less-than-significant level	**Responsibility:** SFMTA with TJPA, Caltrans, and Golden Gate Transit.	Check Final Traffic Engineering documents for compliance.	Final Traffic Engineering documents.
OPERATION - FREIGHT AND LOADING (FRT)					
FRT-1	Provision of the light rail station platform on Fourth Street at Brannan Street, the surface alignment along Fourth Streets, and the location of the subway portal would displace some loading zones between King and Harrison Streets.	**IM FRT-1a:** Areas for new, permanent, on-street loading zones may be identified along Fourth Street (between King and Bryant Streets) and/or appropriate side streets. Some of the new loading zones may need to displace existing parking spaces.	**Responsibility:** SFMTA	Check Final Traffic Engineering documents for compliance.	Final Traffic Engineering documents
FRT-2	The portal at Fourth Street under I-80 may restrict large truck movements onto Stillman Street.	**IM FRT-2a:** SFMTA will coordinate with the TJPA and Golden Gate Transit to identify options, such as providing alternate truck routes that will permit truck access to Stillman Street.	**Responsibility:** SFMTA with TJPA, Caltrans, and Golden Gate Transit.	Check Final Engineering documents for compliance.	Final Traffic Engineering documents

ATTACHMENT A –MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME AND CASE NO. CENTRAL SUBWAY PROJECT 96.28IE

Impact No.	Impact Summary	Mitigation Measures (MM) or Improvement Measures (IM)	Monitoring and Reporting Program		
			Implementation and Reporting	Monitoring and Reporting Actions	Implementation Schedule
OPERATION – PEDESTRIANS (PED)					
PED-1	Sidewalk widths on Geary Street would be reduced adjacent to the Union Square Station.	**IM PED-1a:** During final design, consideration will be given to ensure that stairways and escalators would not compete with sidewalk space for pedestrians. **IM PED-1b:** Elevator shafts should be located so as not to block the line of sight of motorists exiting the garage to maximize pedestrian safety. **IM PED-1c:** During final design, elevators, escalators, and stairways should be kept as close as possible to the primary circulation path to facilitate disabled access.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance.	Design has been changed to avoid reduction in sidewalk widths. In-process design reviews.
OPERATION – BICYCLES (BIC)					
BIC-1	Diversion of traffic from Fourth Street, resulting from increased congestion associated with the project implementation could permanently impact the proposed bicycle lanes on Second and Fifth Streets.	**IM BIC-1a:** Implementation of the Second and Fifth Street bicycle projects are recommended to facilitate bicycle travel in the South of Market area.	**Responsibility:** SFMTA	Monitor progress on these independent projects.	The Citywide Bicycle Plan is currently under environmental review. Implementation schedule will be monitored.
OPERATION - EMERGENCY VEHICLE ACCESS (EMER)					
EMER-1	The introduction of a double-track median in the	**IM EMER-1a:** SFDPT will be upgrading traffic signals with	**Responsibility:** SFMTA	Traffic signal pre-emptions	Traffic signal pre-emptions

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	middle of Fourth Street would require emergency vehicles from Fire Station #8 (36 Bluxome Street) to cross the entire trackway to reach the intersection of Fourth and Brannan Streets.	emergency vehicle preemption equipment in order to minimize the emergency response time and to improve the signal operation at several intersections near fire stations along the Corridor.		have been implemented. .	have been implemented.
OPERATION - SOCIOECONOMIC (POPULATION AND HOUSING) (PH)					
PH-1	Acquisition of one parcel for the Chinatown Station at 933-949 Stockton would displace of 8 small businesses and 17 low income residential units.	**MM PH-1a:** Redevelopment of the Chinatown Station site will incorporate affordable housing and ground floor retail where possible. **MM PH-1b**: State and federal relocation regulations will be implemented.	**Responsibility:** SFMTA	Redevelopment plans for the station areas are in the early stages of discussion by SFMTA Real Estate.	Pre-Construction coordination and construction or post construction implementation.
OPERATION - COMMUNITY FACILITIES (CF)					
CF-1	The placement of station entries and elevators in Union Square Plaza would permanently remove 1,690 square feet of open space for transportation purposes in Union Square Park.	**IM CF-1a:** During final design, minimize the footprint of station entrances to the subway in Union Square plaza would be designed and located in such a manner as to minimize the station entrance footprint and minimize disruption to park users. **IM CF-1b:** Design subway entrances so they are visually integrated with the existing park design.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Coordinate with Recreation and Parks Department Planners to review plans and monitor progress.	Post construction

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OPERATION - HISTORIC ARCHITECTURAL RESOURCE IMPACTS (HARC)					
HARC-1	Demolition of the historic building at 933-949 Stockton Street, which is a contributor to a NRHP-eligible district, would create a visual break in the cohesive grouping of contextually-related buildings within the block.	**MM HARC-1a:** Partial preservation of 933-949 Stockton Street or incorporation of elements of the building into the design of the new station building; salvage significant architectural features from the building for conservation into a historical display or exhibit in the new Chinatown station or in museums; and/or develop a permanent interpretive display for public use on the T-Third line cars or station walls. Conform to MOA between SHPO, FTA, and SFMTA. **MM HARC-1b:** The final design of the Chinatown Station will be reviewed by the Environmental Review Officer, the City Preservation Coordinator, and a historic architect hired by MTA for compliance with the Secretary of Interior's standards based on their compatibility with the character-defining features of the district. **MM HARC-1c:** Prior to demolition of the 933-949 Stockton Street building a Historic American Buildings Survey/Historic American engineering Record documentation will be	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. .	In-process design reviews.

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		completed.			
HARC-2	Station entrances located in Union Square would permanently alter the recently redesigned plaza and parking garage.	**IM HARC-2a:** Less-than-significant visual impacts at Union Square Station will be minimized through the use of design and architectural materials that would be compatible with the surrounding structures and landscape. The final design for the station will be subject to review by the Recreation and Parks Department.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Coordinate with Recreation and Parks Department	In-process design reviews
OPERATION - VISUAL AND AESTHETIC RESOURCES (VAES)					
VAES-1	Station entrances for the Union Square Station would be visible in the plaza from Stockton and Geary Streets.	**MM VAES-1a:** Station architectural treatment for the exterior façade in the visually sensitive Union Square Park would be developed in consultation with the Planning, Recreation and Parks Departments, and the Union Square business associations.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Coordinate with city agencies and community/ business groups during design development.	In-process design reviews.
VAES-1	The demolition of an existing building to accommodate the Chinatown Station and the construction of a new station entrance and transit-oriented development in the future would visually change the street façade along	Exterior treatment of the Chinatown Station and vent shaft would be developed in consultation with the Planning Department, Architectural historians, the City Historic Preservation Coordinator, and the Chinatown community during preliminary and final design.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Coordinate with city agencies and community/ business groups during design development.	In-process design reviews.

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	Stockton Street.				
OPERATION - NOISE AND VIBRATION (NV)					
NV-1	The FTA vibration criteria of 72 VdB would be exceeded at one residential building at 570 Fourth Street at Freelon Alley.	**MM NV-1a:** Vibration propagation testing will be conducted at this location during final engineering to determine the predicted impacts and finalize the mitigation measures. MTA will implement high resilience (soft) direct fixation fasteners at this location for embedded track. Implementation of this measure would reduce the vibration impacts to a less-than-significant level.	**Responsibility:** SFMTA	Testing pre-construction.	In-process design reviews.
NV-2	Noise impacts could occur from operation of Emergency Vent Shafts and Traction Power Sub-stations (TPSS).	**IM NV-2a:** Noise control improvement measures used to meet the San Francisco Noise Ordinance will be determined during final design, but could include enclosing TPSS in masonry structures with sound-rated doors or gates and providing sound attenuation on all emergency ventilation openings of any ancillary facility buildings.	**Responsibility:** SFMTA	Design has already been modified to place TPSS substations underground to provide sound attenuation. Check Final Engineering documents for compliance related to Emergency Vent Shafts.	Design has already been modified to place TPSS substations underground to provide sound attenuation. In-process design reviews.
CONSTRUCTION – TRANSIT (CNTST)					
CNTST-1	Temporary reduction in traffic lanes on Fourth and Stockton Streets during construction would disrupt transit operations. The	**IM CNTST-1a:** SFDPT would develop and implement detour routes for non-transit traffic to minimize disruption to transit routes.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

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	rerouting of the 30-Stockton and 45-Union/Stockton may be required.	**IM CNTST-1b:** Overhead wires for the 30-Stockton and the 45-Union/Stockton lines will be temporarily relocated or reconstructed to alternative routes where feasible or motor coaches would be temporarily substituted on alternative routes.			
CNTST-2	Excavation of the construction shaft under the I-80 freeway between Bryant and Harrison Streets would also impact Golden Gate Transit bus operations.	IM CNTST-2a: SFMTA would coordinate with Transbay Joint Powers Authority (TJPA) and Golden Gate Bridge, Highway, and Transit District (GGBHTD) to minimize construction impacts on Golden Gate Transit. SFMTA would stage excavation shaft construction and utility relocation to maintain access to the bus storage facility by Golden Gate buses and work with GGBHTD to develop bus detour routing plans for continued access. Access to the construction shaft would be scheduled to avoid conflict with the active bus periods.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CNTST-3	Temporary disruption of BART service could occur during construction. The BART entry at One Stockton Street would need to be closed temporarily during construction.	IM CNTST-3a: SFMTA and BART will prepare and enter into a Station Improvement Coordination Plan to include construction management procedures and processes to address any and all construction and operational impacts resulting from the tunnel boring. SFMTA will also	**Responsibility:** SFMTA	SFMTA monitoring and report to BART	Construction

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		coordinate with BART to develop bus bridges, if needed, public outreach, and other programs to minimize impacts to transit riders during construction.			
CONSTRUCTION – TRAFFIC (CNTRF)					
CNTRF-1	Temporary reduction in traffic lanes on Fourth and Stockton Streets and the subway crossing of Market Street would disrupt traffic.	**IM CNTRF-1a:** SFMTA has identified potential traffic detours. Prior to final design, the SFMTA would select the most appropriate detour routes and develop temporary transportation system management measures along these routes, e.g., additions of turn lanes at key intersections, conversion of parking lanes into peak period travel lanes, etc. Detour routes would be advertised prior to construction in the appropriate media. When detours are initially implemented, traffic control police would monitor critical locations along the detours to promote uncongested traffic flow. All traffic detour measures would be implemented in coordination with other concurrent construction projects.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CONSTRUCTION - FREIGHT AND LOADING (CNFRT)					
CNFRT-1	During construction, temporary disruption to truck traffic flow and removal of on-street	**IM CNFRT-1a:** To alleviate some of the congestion that would result adjacent to construction of the light rail line, the SFDPT has identified potential	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

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	loading zones adjacent to construction work areas would occur along the Corridor on Fourth and Stockton Streets.	traffic detours. **MM CNFRT-1b:** A portion of the curb parking lanes remaining open in the construction area, or just upstream or downstream of the construction area, may be converted to short-term loading zones to enable truck loading and unloading and delivery of goods to nearby businesses. **MM CNFRT-1c:** Temporary truck loading zones on the side streets may need to be established for the duration of the Project construction to offset any impacts along the streets that are directly affected by construction.			
CNFRT-2	Cumulative construction impacts could occur on the block bounded by Perry, Third, Stillman, and Fourth Streets due to sequential construction of the I-80 retrofit, Golden Gate Transit bus storage facility, and the Central Subway projects.	**MM CNFRT-2a:** SFDPT will work with the property and business owners on Perry and Stillman Streets to develop temporary detour routes for traffic to maintain property access during construction and reduce the impacts to a less-than-significant level.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor traffic during construction.	In-process design reviews. Construction.
CONSTRUCTION – PARKING (CNPRK)					
CNPRK-1	All on-street parking would be temporarily prohibited in construction	**IM CNPRK-1a:** During construction signs denoting alternative parking areas (e.g., public parking garages) could be	**Responsibility:** SFMTA	Check Final Engineering documents for compliance.	In-process design reviews.

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	zones.	placed upstream of and through the construction zones. **IM CNPRK-1b:** To improve the accessibility to businesses in the Corridor, it is recommended that retained and added (where applicable) parking spaces be designated for short-term parking and loading, especially in commercial districts.		Monitor construction.	Construction.
CONSTRUCTION – PEDESTRIANS (CNPED)					
CNPED-1	There will be temporary sidewalk closures during excavation of each of the subway stations and the west sidewalk of Stockton Street would be closed during construction of the Chinatown Station.	**IM CNPED-1a:** During excavation of the subway stations, access to all abutting businesses would be maintained either through the existing or a reduced sidewalk area or via temporary access ways, e.g., ramps, planking, etc. Signs would be installed indicated that the businesses are "open during construction." All temporary access ways would be in compliance with the ADA. Temporary pedestrian walkways, as required by the City, would be covered to help protect pedestrians from noise, dust, and visual annoyances during construction.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CONSTRUCTION – BICYCLES (CNBIC)					
CNBIC-1	During construction, congestion on Fourth Street resulting from the	**IM CNBIC-1a:** Retain a wide curb or outside travel lane to facilitate bicycle travel. Where this is not possible,	**Responsibility:** SFMTA	Check Final Engineering documents for compliance.	In-process design reviews.

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	temporary lane reduction could divert traffic to Second and Fifth Streets, thereby impacting bicycle travel on Bicycle Routes #11 and #19, respectively. Temporary diversion of traffic from Geary and Stockton Streets could impact bicycle travel, especially on Route #17.	signage could be erected indicating temporary alternative routes, e.g. Second and Fifth Streets for bicyclists. **IM CNBIC-1b:** Implementation of the new bicycle routes on Second and Fifth Streets would facilitate bicycle travel on these streets.		Monitor bicycle use on 2nd and 5th Streets construction.	Construction.
CONSTRUCTION - EMERGENCY VEHICLE ACCESS (CNENE)					
CNEMER-1	Emergency response times from Fire Station #8 (36 Bluxome Street) would be impacted by construction along Fourth Street for approximately 18 to 24 months and from Fire Station #2 (1340 Powell Street) by temporary lanes closures on the west side of Stockton Street between Washington and Jackson Streets for the construction of the Chinatown Station.	**IM CNEMER-1a:** DPT will develop and implement alternative detour routes for all general traffic to minimize the construction disruption to traffic flows. **IM CNEMER-1b:** Contractor will be required to develop a site specific emergency access response plan as part of compliance with bid specifications.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor emergency access during construction.	In-process design reviews. Construction.
CONSTRUCTION - LAND USE (CNLND)					
CNLND-1	There will be temporary construction impacts	**IM CNLND-1a:** Public information programs, including signage, as well as	**Responsibility:** SFMTA	Check Final Engineering documents for compliance.	In-process design reviews.

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	associated with parking and access to land uses in the Study Area.	steps to ensure uninterrupted access to all uses along the Corridor, shall be used to minimize the construction impacts on neighboring land uses.		Monitor parking in study area during construction.	Construction.
CONSTRUCTION - COMMUNITY FACILITIES (CNCF)					
CNCF-1	Construction could temporarily disrupt access to community facilities and parks along the Corridor (Union Square).	**IM CF-1a:** Pedestrian access would be maintained to all community facilities, parks, and recreation areas during construction. **IM CF-1b:** Traffic detours will be put in place to minimize disruption to traffic and public transit along the Corridor.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CNCF-2	Lane closures during construction could affect emergency vehicle access time, particularly for Fire Station #8 (36 Bluxome Street) which is located on Bluxome.	**IM CF-2a:** Alternative vehicular and pedestrian circulation patterns that permit continued access to community and public facilities in these locations during construction would be developed and clearly identified during final design, in consultation with Department of Parking and Traffic (DPT) staff.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CNCF-3	Construction of the entrance to the Union Square/Market Street Station and construction adjacent to Yerba Buena Gardens would result in	**IM CF-3a:** City noise regulations will be included in the bid specifications to ensure that construction is in compliance.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor noise levels during construction.	In-process design reviews. Construction.

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	temporary noise and dust impacts for park users.				
CNCF-4	Emergency access and circulation could be temporarily disrupted on streets leading to construction sites.	**IM CNCF-4a:** Use a traffic control officer, at construction sites to facilitate traffic flows if circulation is disrupted.	**Responsibility:** SFMTA	Monitor construction.	Construction.
CONSTRUCTION - PREHISTORIC AND HISTORICAL ARCHAEOLOGICAL RESOURCES (CNPRE)					
CNPRE-1	Excavation for the project will potentially affect Historical Archaeological Resources, including: 6 locations identified for the possible presence of sensitive prehistoric archaeological resources, one known archaeological resource, and 13 locations where historical archaeological resources might be uncovered.	**MM CNPRE-1a:** Consistent with the SHPO MOA with the City, FTA, and SFMTA shall work with a qualified archaeologist to ensure that all state and federal regulations regarding cultural resources and Native American concerns are enforced. **MM CNPRE-1b:** Limited subsurface testing in identified archaeologically sensitive areas shall be conducted once an alignment has been selected. **MM CNPRE-1c:** During construction, archaeological monitoring shall be conducted in those sections of the alignment identified in the completed HCASR and through pre-construction testing as moderately to highly sensitive for prehistoric and historic-era archaeological deposits. **MM CNPRE-1d:** Upon completion of archaeological field investigations, a	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

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		comprehensive technical report shall be prepared for approval by the San Francisco Environmental Review Officer that describes the archaeological findings and interpretations in accordance with state and federal guidelines. **MM CNPRE-1e:** If unanticipated cultural deposits are found during subsurface construction, soil disturbing activities in the vicinity of the find shall be halted until a qualified archaeologist can assess the discovery and make recommendations for evaluation and appropriate treatment to the ERO for approval in keeping with adopted regulations and policies.			
CONSTRUCTION - HISTORICAL ARCHITECTURAL RESOURCES (CNHARC)					
CNHARC-1	One historic architectural resource located at 933-949 Stockton Street will be demolished and replaced by the proposed Chinatown Station during construction of the project.	**MM CNHARC-1a:** Partial preservation of 933-949 Stockton Street or incorporation of elements of the building into the design of the new station building; salvage significant architectural features from the building for conservation into a historical display or exhibit in the new Chinatown station or in museums; and/or develop a permanent interpretive display for public use on the T-Third line cars or station walls.	**Responsibility:** SFMTA The level of documentation in the HABS/HAER will be prescribed in consultation with the City Historic Preservation Coordinator, FTA, and SHPO.	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

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		MM CN-HARC-1b: If the 933-949 Stockton Street building is demolished, perform a Historic American Buildings Survey/Historic American engineering Record documentation.			
CNHARC-2	There are 25 historic architectural resources along the alignment that could be impacted by construction-related ground borne vibration and visual disturbance.	**MM CNHARC-2a:** Pre-drilling for pile installation in areas that would employ secant piles with ground-supporting walls in the cut-and-cover areas would reduce the potential effects of vibration. **MM CNHARC-2b:** Vibration monitoring of historic structures adjacent to tunnels and portals will be specified in the construction documents to ensure that historic properties do not sustain damage during construction. Vibration impacts would be mitigated to a less-than-significant level. If a mitigation monitoring plan provides the following: • The contractor will be responsible for the protection of vibration-sensitive historic building structures that are within 200 feet of any construction activity. • The maximum peak particle vibration (PPV) velocity level, in any direction, at any of these historic structures should not exceed 0.12 inches/second for any length of	**Responsibility:** SFMTA	Design team has selected a drilled pile system that minimizes vibration and the need for pre-drilling. Check Final Engineering documents for compliance. Monitor vibration during construction.	Design team has selected a drilled pile system that minimizes vibration and the need for pre-drilling. In-process design reviews. Construction.

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		time. • The Contractor will be required to perform periodic vibration monitoring at the closest structure to ground disturbing construction activities, such as tunneling and station excavation, using approved seismographs. • If at any time the construction activity exceeds this level, that activity will immediately be halted until such time as an alternative construction method can be identified that would result in lower vibration levels.			
CONSTRUCTION - VISUAL AND AESTHETIC RESOURCES (CNVAES)					
CNVAES-1	The presence of construction equipment at the Moscone, Union Square, and Chinatown Station locations and the North Beach tunnel excavation shaft would temporarily obstruct public views of these scenic landscapes and would temporarily change the streetscape along the Corridor.	**IM CNVAES-1a:** Construction staging areas and excavation sites in these areas may be screened from view during construction to minimize potential visual impacts. **IM CN-VAES-1b:** In visually sensitive landscapes, like Union Square and Chinatown, temporary screening or physical barriers around the station construction sites and shaded night lights may be used to reduce the visual effects of construction equipment and to reduce glare.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

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CONSTRUCTION – UTILITES (CNUTL)					
CNUTL-1	Construction of the subway and stations would require major utility relocation work, which could affect private parcel connections to main utility lines and result in short-term utility service disruption as relocated utility lines are reconnected to the utility system. Utility relocation would require street and sidewalk excavations that would impact traffic and pedestrian flows adjacent to the relocation areas. Permanent vacation of sub-surface sidewalk basements may be required.	**IM CNUT-1a:** Utility relocation coordination would take place during detailed design in consultation with the utility agencies and the design team and would be phased to ensure that pedestrian and vehicular traffic flows are maintained.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CONSTRUCTION – GEOLOGY AND SEISMICITY (CNSET)					
CNSET-1	Construction period settlement could cause damage to existing building foundations, subsurface utilities, and surface improvements.	**MM CNSET-1a:** Provisions such as concrete diaphragm walls to support the excavation and instrumentation to monitor settlement and deformation would be used to ensure that structures adjacent to tunnel alignments are not affected by excavations.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

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		MM CNSET-1b: Tunnel construction methods that minimize ground movement, such as pressure-faced TBMs, Sequential Excavation Method, and ground improvement techniques such as compensation grouting, jet grouting or underpinning will be used. **MM CNSET-1c:** Rigorous geomechanical instrumentation would be used to monitor underground excavation and grouting or underpinning will be employed to avoid displacement of structures.			
CNSET-2	Construction of the deep subway crossing under the BART tunnel could result in the potential displacement of the BART structures.	**MM CNSET-2a:** Automated ground movement monitoring will be used to detect distortion on the BART/Muni Metro tunnels and grout pipes will be placed prior to tunnel excavation to allow immediate injection of compensation grouting to replace ground losses if deformation exceeds established thresholds.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CONSTRUCTION – HYDROLOGY AND WATER QUALITY (CNHWQ)					
CNHWQ-1	Construction activities at the Union Square Station could increase or otherwise disrupt flow of ground water to the Powell Street Station.	**MM CNHWWQ-1a:** Watertight shoring and fully waterproof station structures will be designed and constructed to avoid compounding ground water inflows to the Powell Street Station.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

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CONSTRUCTION - BIOLOGICAL AND WETLAND RESOURCES (CNBIO)					
CNBIO-1	Construction could result in the removal of existing street trees along the surface segment of Fourth Street, at station entries on Fourth and Stockton Streets, and at the One Stockton entrance to Chinatown.	**IM CNBIO-1a:** Any street trees removed or damaged as part of construction would be replaced along the street at a 1:1 ratio.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CNBIO-2	During construction of the North Beach Tunnel Variant for removal of the tunnel boring machine at Columbus Avenue and Union Street, adjacent to Washington Square Park, exposure of roots of mature trees could occur.	**IM CNBIO-2a:** A certified arborist would be present as needed during excavation of the Columbus Avenue TBM retrieval shaft to monitor protection of tree roots.	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.
CONSTRUCTION - HAZARDOUS MATERIALS (CNHAZ)					
CNHAZ-1	Previous subsurface soils investigations indicate the potential for exposure of site workers and the public to potentially hazardous materials, including metals, volatile organic compounds (VOCs), and	**MM CNHAZ-1a:** Implementation of mitigation measures similar to those required for properties under the jurisdiction of Article 20: preparation of a Site History Report; Soil Quality Investigation, including a Soils Analysis Report and a Site Mitigation Report (SMR); description of	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

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	semi-VOCs, during site excavation or transport of excavated soil materials (13,000 cubic yards) which would be disposed of at a Class I facility. Servicing and fueling of diesel-powered construction equipment on-site could result in exposure to lubricants, diesel fuel, antifreeze, motor oils, degreasing agents, and other hazardous materials. Properties landside of the 1851 highwater mark that are not subject to Article 20 would have potential for exposure to hazardous materials.	Environmental Conditions; Health and Safety Plan (HSP); Guidelines for the Management and Disposal of Excavated Soils; and a Certification Statement that confirms that no mitigation is required or the SMR would mitigate the risks to the environment of human health and safety. This measure would ensure that the project impacts are mitigated to a less-than-significant level.			
CONSTRUCTION - NOISE AND VIBRATION (CNNV)					
CNNV-1	Historic buildings within 200 feet of a construction area may be subject to adverse vibration impacts if the maximum peak particle vibration (PPV) velocity level in any direction exceeds 0.12 inches/second for any	**MM CNNV-1a:** The Contractor shall be required to perform periodic vibration monitoring using approved seismographs at the historic structure closest to the construction activity. If the construction activity exceeds a 0.12 inches/second level, the construction activity shall be immediately halted until an alternative construction method that would result in lower vibration	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor construction.	In-process design reviews. Construction.

ATTACHMENT A –MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME AND CASE NO. CENTRAL SUBWAY PROJECT 96.28IE

Impact No.	Impact Summary	Mitigation Measures (MM) or Improvement Measures (IM)	Monitoring and Reporting Program		
			Implementation and Reporting	Monitoring and Reporting Actions	Implementation Schedule
	length of time.	levels can be identified. **MM CNNV-1b:** During construction, an acoustical consultant will be retained by the contractor to prepare a more detailed construction noise and vibration analysis to address construction staging areas, tunnel portals, cut-and-cover construction, and underground mining and excavation operations.			
CNNV-2	Noise in the range of 85 to 89 dBA at 100 feet would be generated from construction activities along surface portions of the alignment and staging areas and station or portal construction areas. Vibration levels of 58 to 112 Lv at 25 feet would be experienced as a result of equipment used during at-grade construction activities. Vibration impacts on buildings could result from equipment used for underground construction, particularly from tunneling.	**IM CNNV-2a:** The incorporation of noise control measures would minimize noise impacts during construction: noise control devices such as equipment mufflers, enclosures, and barriers; stage construction as far away from sensitive receptors as possible; maintain sound reducing devices and restrictions throughout construction period; replace noisy with quieter equipment; schedule the noisiest construction activities to avoid sensitive times of the day; the contractor will hire an acoustical consultant to oversee the implementation of the Noise Control and Monitoring Plans; prepare a Noise Control Plan; comply with the nighttime noise variance provisions; conduct periodic noise measurements to ensure compliance with the Noise	**Responsibility:** SFMTA	Check Final Engineering documents for compliance. Monitor noise during construction at 100 feet from activity.	In-process design reviews. Construction.

ATTACHMENT A –MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME AND CASE NO. CENTRAL SUBWAY PROJECT 96.28IE

Impact No.	Impact Summary	Mitigation Measures (MM) or Improvement Measures (IM)	Monitoring and Reporting Program		
			Implementation and Reporting	Monitoring and Reporting Actions	Implementation Schedule
		Monitoring Plan; and use equipment certified to meet specified lower noise level limits during nighttime hours.			

ATTACHMENT 2

MEMORANDUM OF AGREEMENT

between the

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION

and the

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

and the

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

regarding the

CENTRAL SUBWAY/THIRD STREET LIGHT RAIL PHASE 2,
IN THE CITY AND COUNTY OF SAN FRANCISCO, CALIFORNIA

WHEREAS, A Programmatic Agreement among the Federal Transit Administration, the California Historic Preservation Officer and the Advisory Council on Historic Preservation for the construction of the Third Street Light Rail/New Central Subway was included as part of the Record of Decision for the 1998 Final EIS/EIR; and

WHEREAS, The Federal Transit Administration (FTA) plans to assist the San Francisco Municipal Transportation Agency (SFMTA) to implement the Central Subway, Phase 2 of the Third Street Light Rail (undertaking) pursuant to the New Starts Funds process under Section 5309 of Title 49 of the United States Code, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); and

WHEREAS, 36 CFR 800 et seq. requires that federal agencies take into account the effects of their projects on historic properties; and

WHEREAS, The undertaking consists of the construction of an underground subway, one surface station and three subway station facilities, to connect the existing T-Third light rail system at Fourth and King Streets with the Bay Area Rapid Transit District (BART) at Market Street and under Stockton Street into Chinatown; and

WHEREAS, FTA and SFMTA have thoroughly considered alternatives to the Undertaking, including a No-Build Alternative (Alternative 1) and three Build Alternatives (2, 3A, and 3B) that have been analyzed in the Draft and Final Supplemental Environmental Impact Statement/Environmental Impact Report (SEIS/SEIR); and

WHEREAS, On February 19, 2008, the SFMTA Board of Directors selected Alternative 3B as the Locally Preferred Alternative; and

WHEREAS, FTA has defined the undertaking's Area of Potential Effects (APE) as described in Attachment A; and

WHEREAS, FTA has determined that the undertaking may have an adverse effect on the historic properties described in Attachment B, several of which are listed in and others eligible for listing in the National Register of Historic Places, as well as additional archaeological properties as yet unidentified, and has consulted with the California Historic Preservation Officer (SHPO) pursuant to 36 CFR 800 of the regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f). One historic architectural resource (814-828 Stockton Street for Alternative 3A or 933-949 Stockton Street for Alternative 3B- the Locally Preferred Alternative), identified as a contributor to the NRHP-eligible Chinatown Historic District, would be demolished, constituting an adverse effect to historic properties; and

WHEREAS, Upon full execution of this MOA, SFMTA will administer the undertaking with the guidance and approval of FTA; and

WHEREAS, SFMTA and the San Francisco Planning Department Major Environmental Analysis section (SF-MEA) have participated in this consultation and have been invited to sign this MOA as concurring parties; and

WHEREAS, SF- MEA has consulted with the San Francisco Architectural Heritage Commission, the San Francisco Landmarks Preservation Advisory Board, and the Chinatown Community Development Center regarding the effects of the undertaking on historic properties**;** and

WHEREAS, In accordance with 36 CFR 800.6(a)(1), FTA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation and has invited the ACHP to participate in the consultation pursuant to 36 CFR 800.6(a)(1)(iii). The ACHP has declined to participate.

NOW, THEREFORE, FTA, the SHPO and SFMTA agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the adverse effect of the Undertaking on historic properties and further agree that these Stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

FTA shall ensure that the following measures are carried out:

I. ADMINISTRATIVE PROVISIONS

A. STANDARDS

1. **Definitions.** The definitions provided at 36 CFR 800.16 are applicable throughout this MOA.
2. **Professional Qualifications**. All activities regarding history, historic preservation, historic architecture, architectural history, historical archaeology, and prehistoric archaeology that are performed pursuant to this MOA will be carried out by or under the direction of persons meeting, at a minimum, the Secretary of the Interior's Professional Qualification Standards (48 FR 44738-9) in the appropriate discipline.
3. **Documentation Standards**. Written documentation of activities regarding history, historic preservation, historic architecture, architectural history, historical archaeology, and prehistoric archaeology that are carried out pursuant to this MOA will conform to the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716-44740) as well as to the applicable standards and guidelines established by the ACHP and the California Office of Historic Preservation.
4. **Archaeological Curation and Curation Standards**. Records and archaeological materials resulting from all archaeological investigations and other treatments that are carried out pursuant to this MOA will be curated in accordance with Curation of Federally-Owned and Administered Archeological Collections (36 CFR 79).

II. TREATMENT OF HISTORIC PROPERTIES

FTA shall ensure that the adverse effects of the Undertaking on archaeological resources and historic buildings and structures are resolved by implementing the Mitigation Measures and Historic Properties Treatment Plan (HPTP) specified in the Final Supplemental Environmental Impact Statement/Environmental Impact Report (SEIS/SEIR) and included as Attachment C to this MOA. FTA or SFMTA will not authorize the execution of any Undertaking activity that may affect (36 CFR Section 800.16(i)) historic properties in the Area of Potential Effects (APE) prior to the completion of

the processes that the HPTP in Attachment C of this MOA prescribes. Future changes to the HPTP would not require an amendment to this MOA.

III. NATIVE AMERICAN CONSULTATION

FTA or designee shall ensure that all State and federal laws and regulations regarding Native American concerns are strictly enforced. Prior to construction, FTA or its designee shall initiate consultation with a representative of the Native American group having traditional authority over the APE. The goal of this consultation will be to come to agreement on protocols to be followed if prehistoric resources are discovered. A consultant from this Native American group shall be solicited and, if possible, engaged to monitor all testing and excavation on prehistoric archaeological sites. Though there is no federally recognized tribe whose traditional territory includes San Francisco, the area was traditionally Ohlone. The practice for projects in San Francisco is to contact an individual who is listed as Ohlone on the State of California Native American Heritage Commission's contact list.

IV. TREATMENT OF HUMAN REMAINS

The MOA parties agree that the treatment of human remains and associated or unassociated funerary objects discovered during any project activity shall comply with applicable State (Section 7050.5(b) of the California Health and Safety Code) and Federal laws. This shall include immediate notification to the Coroner of the City and County of San Francisco if human remains are discovered. In the event the Coroner determines that the human remains are Native American, the Coroner shall notify the California State Native American Heritage Commission, which shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The archeological consultant, FTA or its designee, and the MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 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.

V. CONFIDENTIALITY

The MOA parties acknowledge that the historic properties covered by this MOA are subject to the provisions of Section 304 of the National Historic Preservation Act of 1966 and Section 6254.10 of the California Government code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that

all actions and documentation prescribed by this MOA are consistent with said sections.

VI. POST REVIEW DISCOVERIES

If previously unidentified historic properties are discovered or unanticipated effects on known historic properties are found, FTA shall implement the Post-Review Discovery Plan described in Appendix C.

VII. MONITORING AND REPORTING

FTA or designee shall provide all parties to this MOA a summary report detailing work undertaken pursuant to its terms annually on the anniversary of the execution of this MOA until it expires or is terminated. This report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in FTA's efforts to carry out the terms of this MOA.

VIII. DISPUTE RESOLUTION

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FTA shall consult with such party to resolve the objection. If FTA determines that such objection cannot be resolved, FTA will:

A. Forward all documentation relevant to the dispute, including FTA's proposed resolution, to the ACHP. The ACHP shall provide FTA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FTA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. FTA will then proceed according to its final decision.

B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, FTA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FTA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.

C. FTA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

IX. AMENDMENTS

Any signatory party to this MOA may propose that this MOA be amended, whereupon all signatory parties shall consult for no more than thirty (30) days to consider such amendment. The amendment will be effective on the date a copy signed by all of the original signatories is filed with the ACHP. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation X below. Potential changes to the HPTP described in Appendix C would not require an amendment to this MOA.

X. TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation IX, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, FTA must either (a) execute an MOA pursuant to 36 CFR 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR 800.7. FTA shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by the FTA and SHPO and implementation of its terms evidence that FTA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

XI. ANTI-DEFICIENCY ACT

FTA's obligations under this MOA are subject to the availability of appropriated funds, and the stipulations of this MOA are subject to the provisions of the Anti-Deficiency Act. FTA will make reasonable and good faith efforts to secure the necessary funds to implement this MOA in its entirety. If compliance with the Anti-Deficiency Act alters or impairs FTA's ability to implement the stipulations of this agreement, FTA will consult in accordance with the amendment and termination procedures found at Stipulations IX and X of this agreement.

XII. BUDGET AND FISCAL PROVISIONS

SFMTA's obligations under this MOA are subject to the budget and fiscal provisions of the Charter of the City and County of San Francisco. SFMTA will make reasonable and good faith efforts to secure the necessary funds to implement this MOA in its entirety. If compliance with the Charter alters or impairs SFMTA's ability to implement the stipulations of this agreement, SFMTA will consult in accordance with the amendment and termination procedures found at Stipulations IX and X of this agreement.

XIII. EFFECTIVE DATE AND DURATION

This MOA will take effect on the date that it has been executed by FTA, SFMTA and the SHPO. Execution of this MOA and filing with the ACHP in accordance with 36 CFR 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR 800.6(c), that FTA intends this MOA as the vehicle by which adverse effects of the Undertaking are to be resolved, and shall further evidence that FTA has afforded the ACHP an opportunity to comment on the Undertaking and its effect on historic properties, and that SFMTA has taken into account the effect of the Undertaking on historic properties. This MOA will be null and void if its terms are not carried out within fifteen (15) years from the date of execution.

SIGNATORIES:

FEDERAL TRANSIT ADMINISTRATION

_____ Date 10/23/08

For **Leslie T. Rogers**
Regional Administrator

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

_____ Date 11/5/08

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

CITY AND COUNTY OF SAN FRANCISCO
San Francisco Municipal Transportation Agency

_____ Date 10/15/08

Nathaniel P. Ford, Sr.
Executive Director/CEO

Approved as to Form:
Dennis J. Herrera, City Attorney

_____

Robin M. Reitzes
Deputy City Attorney

ATTACHMENTS

ATTACHMENT A: HPSR (including APE maps)
ATTACHMENT B: Finding of Adverse Effect
ATTACHMENT C: Historic Properties Treatment Plan
ATTACHMENT D: SHPO's letter concurring with FTA's evaluations of historic properties within the APE (11/5/07) and SHPO's letter concurring with FTA's Finding of Adverse Effect (7/9/08)

Attachment A

Historic Property Survey Report (HPSR)

Including Area of Potential Effects (APE)

HISTORIC PROPERTY SURVEY REPORT
AND
FINDING OF HISTORIC PROPERTIES AFFECTED
FOR THE
CENTRAL SUBWAY,
PHASE 2 OF THE THIRD STREET LIGHT RAIL PROJECT
SAN FRANCISCO, CALIFORNIA

OHP#- FTA980703A (FTA970609A)

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March 2008

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CONFIDENTIAL INFORMATION

Attachments have been removed because they contain confidential information.