

1 [Agreement Amendment - Transbay Joint Powers Authority - Municipal Transportation Agency
2 - Transbay Transit Center Program Services - No Additional Cost]

3 **Resolution approving the Fourth Amendment to Contract No. CS-159 between the**
4 **Municipal Transportation Agency and the Transbay Joint Powers Authority for**
5 **Transbay Transit Center Program Services pursuant to Charter, Section 9.118, to**
6 **extend the term of the agreement for a total term of July 21, 2009, through**
7 **December 31, 2019, and reallocate funding within task budgets at no additional cost.**

8
9 WHEREAS, The San Francisco Municipal Transportation Agency (SFMTA) is a
10 governmental entity which is comprised of the San Francisco Municipal Railway (Muni) and
11 former Department of Parking and Traffic (DPT); and

12 WHEREAS, On July 21, 2009, the SFMTA and the TJPA entered into Contract No. CS-
13 159, SFMTA Transbay Transit Center Program Services, under which the TJPA agreed to
14 reimburse the SFMTA for engineering services related to re-routing of Muni's trolley coach
15 service to accommodate the new TJPA temporary bus terminal; and

16 WHEREAS, On August 9, 2010, the SFMTA and the TJPA entered into a First
17 Amendment to the Contract No. CS-159, for additional SFMTA services, including SFMTA
18 Parking Control Officer services, for the operation of the Temporary Transbay Terminal during
19 key commute hours, increased the agreement amount by \$997,698, for a total not to exceed
20 amount of \$3,280,677, and extended the agreement term to December 15, 2015; and

21 WHEREAS, On May 17, 2013, the SFMTA Board of Directors and the TJPA entered
22 into a Second Amendment to provide additional services associated with the bus storage
23 facility and Transbay Transit Center, as well as the Beale Street temporary traffic bridge, Muni
24 traction power duct bank, and bus ramp, increase the agreement amount by \$2,113,000,
25

1 resulting in a not-to-exceed agreement amount of \$5,393,677, and extend the term of the
2 Agreement to December 31, 2017; and

3 WHEREAS, On December 8, 2017, the SFMTA Board of Directors and the TJPA
4 entered into a Third Amendment to provide additional services related to the installation of
5 ticket vending machines in the new Transbay Transit Center, reallocate task budgets, and
6 extend the term of the Agreement to June 30, 2018, at no additional cost, and

7 WHEREAS, The Fourth Amendment to Contract No. CS-159 authorizes the
8 realignment of task budgets within the overall existing budget of \$5,393,677, and extends the
9 term of the Agreement to December 31, 2019, at no additional cost, and

10 WHEREAS, On May 21, 2019, the SFMTA Board of Directors adopted Resolution
11 No. 190521-054, approving the Fourth Amendment to the Contract No. CS-159 and
12 requesting San Francisco Board of Supervisors approval pursuant to Charter, Section 9.118;
13 now, therefore, be it

14 RESOLVED, That the San Francisco Board of Supervisors approves the Fourth
15 Amendment to Contract No. CS-159, SFMTA Transbay Transit Center Program Services,
16 pursuant to Charter, Section 9.118, and authorizes the Director of Transportation of the
17 SFMTA, on behalf of the City, to execute the Fourth Amendment; and, be it

18 FURTHER RESOLVED, That within 30 days of the Fourth Amendment to the Contract
19 No. CS-159, documents being fully executed by all parties, the final documents shall be
20 provided to the Clerk of the Board for inclusion in the official file.

**FOURTH AMENDMENT TO
INTERGOVERNMENTAL AGREEMENT BETWEEN THE
TRANSBAY JOINT POWERS AUTHORITY AND THE
SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY**

This Amendment is made this _____ day of _____, 2019, in the City and County of San Francisco, State of California, by and between the Transbay Joint Powers Authority (the "TJPA") and the City and County of San Francisco, a municipal corporation (the "City") acting by and through its San Francisco Municipal Transportation Agency ("SFMTA").

RECITALS

WHEREAS, SFMTA and the TJPA have entered into an intergovernmental agreement dated July 21, 2009, for traffic engineering, overhead contact system ("OCS") design, and construction management services related to the Temporary Transbay Terminal, demolition of the then existing Transbay Terminal, utility relocation, Bus Storage Facility, and transit center work for the Transbay Transit Center Program ("Agreement"); and

WHEREAS, SFMTA and the TJPA entered into a First Amendment to the Agreement on August 9, 2010, adding SFMTA parking control officer services for the operation of the Temporary Terminal during key commute hours to the scope of work, increasing the contract amount and extending the term of the Agreement; and

WHEREAS, SFMTA and the TJPA entered into a Second Amendment to the Agreement on May 17, 2013, to provide additional services associated with the Bus Storage Facility and the transit center, as well as the Beale Street temporary traffic bridge, Muni traction power duct bank, and Bus Ramp, increasing the contract amount and extending the term of the Agreement; and

WHEREAS, SFMTA and the TJPA entered into a Third Amendment to the Agreement on December 8, 2017, to provide additional services associated with the installation of ticket vending machines within the Transit Center, as well as reallocation of funds for tasks associated with the Temporary Terminal, transit center, and Bus Ramp, and extending the term of the Agreement to June 30, 2018; and

WHEREAS, Since the Third Amendment to the Agreement assumed transit operations would begin at the TJPA transit center in early 2018 but the actual opening did not occur until August 2018, this Fourth Amendment extends the term of the Agreement to continue support for initial transit operations from July 2018 to December 2019, and reallocates funding within the task budgets of Exhibits A5 and A7, with no change in the total not-to-exceed budget of \$5,393,677; and

WHEREAS, SFMTA and the TJPA wish to further amend the Agreement on the terms and conditions set forth herein;

NOW, THEREFORE, the TJPA and the SFMTA agree as follows:

- 1. Definitions.** The following definitions shall apply to this Amendment:

- a. **Agreement.** The term "Agreement" shall mean the Intergovernmental Agreement between the Transbay Joint Powers Authority and the San Francisco Municipal Transportation Agency, dated July 21, 2009, including the First Amendment dated August 9, 2010, the Second Amendment dated May 17, 2013, and the Third Amendment dated December 8, 2017.
- b. **Other Terms.** Terms used and not defined in this Amendment shall have the meanings assigned to such terms in the Agreement.

2. Modifications to the Agreement. The Agreement is hereby modified as follows:

a. Exhibits A5 (Bus Storage) and A7 (Temporary Terminal Operations)

Amended Exhibits A5 and A7 are attached to this Amendment and incorporated by reference as though fully set forth herein, and replace the prior Exhibits A5 and A7 in their entirety.

b. Section III. Term; Termination

Subsection A shall be replaced in its entirety to read as follows:

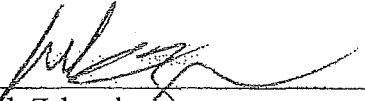
- A. Term.** This Agreement will commence on the Effective Date and terminate on December 31, 2019, unless extended by the parties or terminated earlier by the parties.

3. Legal Effect. Except as expressly modified by this Fourth Amendment, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties execute this Agreement in San Francisco as of the date first mentioned above.

TRANSBAY JOINT POWERS AUTHORITY

**CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION
AGENCY**

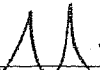


Mark Zabaneh
Executive Director

Edward D. Reiskin
Director of Transportation

APPROVED AS TO FORM:

APPROVED AS TO FORM:

By 

Deborah L. Miller
TJPA Legal Counsel

Dennis J. Herrera, City Attorney
By _____
John I. Kennedy
Deputy City Attorney

Transbay Joint Powers Authority
Board of Directors

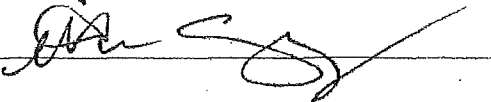
SFMTA Board of Directors

Resolution No. 19-008

Resolution No. _____

Adopted: April 11, 2019

Dated: _____

Attest: 

Attest:

Secretary, SFMTA Board

Board of Supervisors
Resolution No. _____

Adopted: _____

Attest: _____
Clerk of the Board

AMENDED EXHIBIT A5
BUS STORAGE FACILITY
TRAFFIC PLANNING BY SFMTA

A. Scope of SFMTA (DPT) Traffic Engineering Services:

- I. SFMTA shall provide traffic planning and engineering services for the new Bus Storage Facility (BSF) located between Perry and Stillman streets and 2nd and 3rd streets.
- II. The scope of SFMTA's services is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA, City departments, and the consultants for the Bus Storage Facility.
 - Attend regular meetings and review the traffic routing and traffic circulation needs to accommodate the Bus Storage Facility.
 - Review final specifications and estimates for traffic engineering services to accommodate the Bus Storage Facility.

Not to Exceed Budget \$29,000

B. Scope of SFMTA (MUNI) Project Management, Planning and Coordination, Engineering, Construction Management Support, and Inspection Services:

- I. The TJPA is constructing a Bus Storage Facility (BSF) on a block bounded by Second, Third, Stillman, and Perry Streets. The BSF will require the relocation of a combined OCS/streetlight pole and foundation, the relocation of an existing SFMTA bus shelter on Third Street, construction of a bulb-out at the SE corner of Third and Stillman Streets, traffic lane restriping and other site work. The SFMTA shall provide planning and coordination support, engineering, construction management support, and inspection services for the construction of the BSF.
- II. The scope of SFMTA's MUNI services is limited to the following:
 - Provide construction plans, sequencing plans, specifications, and construction cost estimates for the OCS including new wires, support spans and bracket arms.
 - Relocate existing trolley poles to allow proper clearance for buses entering and exiting the proposed storage yard.
 - Provide demolition design of existing trolley poles where required.
 - Review site investigation/existing as-built documents.
 - Participate in coordination meetings with City agencies, TJPA and TJPA's design team.
 - Provide as-needed services in conjunction with the bidding of the contract documents.
 - Coordinate and interface with project team members including TJPA, TJPA contractor through TJPA Construction Manager consultant (CM), and SFMTA (including SFMTA resident engineer, inspectors, Muni Maintenance and Operations).

- Assist TJPA in coordinating needed Muni trolley coach re-routes/stop changes during construction shutdowns.
- Assist TJPA CM-Resident Engineer in submitting contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
- Call in and close out daily OCC clearances.
- Provide inspection services (days, nights, and weekends) for the work.
- Issuing daily inspector reports for the work.
- Provide full-time monitoring whenever contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure that contractor's work does not negatively impact SFMTA's operations or safety.
- Attend progress, coordination, and traffic management meetings for the work.
- Assist TJPA CM-Resident Engineer in reviewing submittals and RFIs by providing comments and recommendations.
- Assist TJPA CM-Resident Engineer in reviewing work progress and contractor's submitted work plan.
- Assist TJPA CM-Resident Engineer in processing progress payments by issuing recommendations for quantity measurement and completion.
- Assist TJPA CM-Resident Engineer in the management of change orders related to the work that affects SFMTA's operations.
- Assist TJPA CM-Resident Engineer in reviewing Contract Change Order Requests and changes related to the work.

III. The scope of SFMTA's services is based upon the following assumptions:

- Baseline survey, existing underground utility information, and BSF drawings will be provided to SFMTA.
- The design and relocation of existing utilities not owned by the SFMTA shall be addressed and designed by other parties. OCS installation may require the relocation of such existing utilities.
- Additional work triggered by the relocation of trolley poles (curb ramp reconstruction, traffic signal, mast arm, and traffic sign relocation, etc.) shall be addressed and designed by others.
- All associated civil design elements (e.g., passenger boarding islands) shall be designed and addressed by other parties.
- All new poles shall be designed using standard poles with standard cobra type streetlights.
- Sub-sidewalk basement special foundations, and eyebolts to buildings, if any, shall be addressed and designed by other parties.

Not to Exceed Budget: \$90,000

C. Scope of SFMTA Traffic Engineering and Shop Services:

I. SFMTA shall provide traffic engineering services for the construction of the BSF.

II. The scope of SFMTA's Traffic Engineering and Shop services is limited to the following:

- Review and approve design of Stillman Street bulb-out at Third Street, traffic lane re-striping on Third Street and other related work.
- Approve relocation of SFMTA bus shelter on Third Street.
- Review of two driveways into the BSF at Third Street and at Stillman Street.
- Review plans for link ramp construction.
- Coordination with SFMTA shops for installation of signs, pavement markings and parking meters; prepare work authorizations as required.
- Prepare legislation as required.
- Attended weekly progress meeting

SFMTA Traffic Engineering \$60,000

SFMTA Shop Services \$50,000

Not to Exceed Budget: \$110,000

AMENDED EXHIBIT A7
**TEMPORARY TERMINAL OPERATIONS
PARKING CONTROL OFFICER SERVICES**

A. Scope of SFMTA (DPT) Parking Control Officer Services:

- I. TJPA is constructing a Temporary Transbay Terminal at Howard Street between Beale and Main streets. SFMTA shall provide two parking control officers (PCOs) at key intersections to facilitate bus movement between the Temporary Terminal and the Bay Bridge as indicated in Temporary Transbay Terminal Posts for PM Commutes. The SFMTA shall be reimbursed for these services based on the rates set forth in Transbay Transit Center Program Reduced City Traffic Control Estimate.

- II. The scope of SFMTA's services is limited to the following:
 - Prior to scheduled opening of the Temporary Terminal, participate in initial planning session with TJPA to identify intersections where budgeted PCOs will be stationed.
 - In accordance with attached spreadsheet, provide PCOs on City streets at key commute hours to manage and direct traffic on the streets around the Temporary Terminal and the streets leading up to the Essex St. on ramp to the Bay Bridge as directed by the TJPA.

Not to Exceed Budget **\$1,112,698**

**THIRD AMENDMENT TO
INTERGOVERNMENTAL AGREEMENT BETWEEN THE
TRANSBAY JOINT POWERS AUTHORITY AND THE
SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY**

This Amendment is made this day of December 8, 2017, in the City and County of San Francisco, State of California, by and between the Transbay Joint Powers Authority (the "TJPA") and the City and County of San Francisco, a municipal corporation (the "City") acting by and through its San Francisco Municipal Transportation Agency ("SFMTA").

RECITALS

WHEREAS, SFMTA and the TJPA have entered into an intergovernmental agreement dated July 21, 2009, for traffic engineering, overhead contact system ("OCS") design, and construction management services related to the Temporary Transbay Terminal, demolition of the then existing Transbay Terminal, utility relocation, Bus Storage Facility, and Transbay Transit Center for the Transbay Transit Center Program ("Agreement"); and

WHEREAS, SFMTA and the TJPA entered into a First Amendment to the Agreement on August 9, 2010, adding SFMTA parking control officer services for the operation of the Temporary Terminal during key commute hours to the scope of work, increasing the contract amount and extending the term of the Agreement; and

WHEREAS, SFMTA and the TJPA entered into a Second Amendment to the Agreement on February 14, 2013, to provide additional services associated with the Bus Storage Facility and the Transit Center, as well as the Beale Street temporary traffic bridge, Muni traction power duct bank, and Bus Ramp, increasing the contract amount and extending the term of the Agreement; and

WHEREAS, Cubic Transportation Systems has provided a quote for the provision and installation of four ticket vending machines within the Transit Center, TJPA has agreed to accept and fund Cubic Transportation Systems' proposal through the SFMTA for a not-to-exceed amount of \$40,000; and

WHEREAS, SFMTA and TJPA have agreed to reallocate funding within the task budgets of Exhibits A1, A2, A3, A4, A6, A7, A8, A9, and A10 while remaining within the total not-to-exceed-budget of \$5,393,677; and

WHEREAS, SFMTA and TJPA have agreed to clarify language related to the Exhibit A3, SFMTA Muni OCS and Traction Power Project Management, Planning and Coordination, Engineering, Construction Management Support and Inspection Services; and

WHEREAS, the Second Amendment to the Agreement assumed transit operations would begin at the Transit Center by December 31, 2017, Amendment Three extends the term of the Agreement to accommodate an anticipated start of transit operations at the Transit Center in early 2018; and

WHEREAS, SFMTA and the TJPA wish to further amend the Agreement on the terms and conditions set forth herein;

NOW, THEREFORE, the TJPA and the SFMTA agree as follows:

1. **Definitions.** The following definitions shall apply to this Amendment:
 - a. **Agreement.** The term "Agreement" shall mean the Intergovernmental Agreement between the Transbay Joint Powers Authority and the San Francisco Municipal Transportation Agency, dated July 21, 2009, including the First Amendment to the Agreement dated August 9, 2010, and the Second Amendment dated February 14, 2013.
 - b. **Other Terms.** Terms used and not defined in this Amendment shall have the meanings assigned to such terms in the Agreement.
2. **Modifications to the Agreement.** The Agreement is hereby modified as follows:
 - a. **Section I, "Scope of Services."**

Section I paragraph D shall be amended as follows:

 - D.** For construction of the Transit Center, the SFMTA shall provide to the TJPA project management, traffic planning, traffic engineering, and shop services, and on-going planning, coordination, and engineering. *The SFMTA shall also provide and install four (4) ticket vending machines within the Transit Center.*
 - b. **Exhibits A1 (Temporary Terminal), A2 (Existing Terminal Demolition), A3 (Utility Relocation), A4 (Transit Center), A6 (Miscellaneous Service), A7 (Temporary Terminal Operations), A8 (Temporary Bridge), A9 (Bus Ramp), and A10 (Construction Coordination Support)**

Exhibits A1, A2, A3, A4, A6, A7, A8, A9, and A10 are attached to this Amendment and incorporated by reference as though fully set forth herein.
 - c. **Section III. Term; Termination**


Subsection A shall be replaced in its entirety to read as follows:

 - A. Term.** This Agreement will commence on the Effective Date and terminate on June 30, 2018, unless extended by the parties or terminated earlier by the parties.
3. **Legal Effect.** Except as expressly modified by this Third Amendment, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

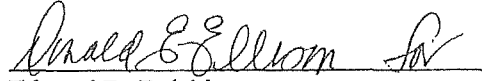
IN WITNESS WHEREOF, the parties execute this Agreement in San Francisco as of the date first mentioned above.

TRANSBAY JOINT POWERS AUTHORITY

**CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY**




Mark Zabaneh
Executive Director



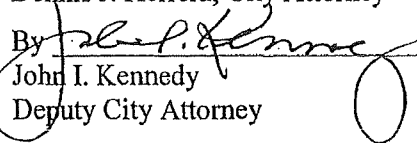
Edward D. Reiskin
Director of Transportation

APPROVED AS TO FORM:

APPROVED AS TO FORM:

By 

Deborah L. Miller
TJPA Legal Counsel

Dennis J. Herrera, City Attorney
By 

John I. Kennedy
Deputy City Attorney

TJPA Board of Directors

SFMTA Board of Directors

Resolution No. 17-029


Resolution No. 171017-129

Date: July 13, 2017

Dated: October 17, 2017

Attest:



Nila Gonzales, Secretary
TJPA Board of Directors

Attest:


Roberta Boomer, Secretary
SFMTA Board of Directors

Board of Supervisors
Resolution No. 429-17

Adopted: 12/08/17

Attest: 

Clerk of the Board

AMENDED EXHIBIT A1
TEMPORARY TERMINAL

**PROJECT MANAGEMENT, ENGINEERING SUPPORT, CONSTRUCTION
MANAGEMENT, AND SIGNAGE, STRIPING & METER SERVICES BY SFMTA**

A. Scope of SFMTA (MUNI) Construction Management, Inspection, and Engineering Services:

- I. TJPA is constructing a Temporary Transbay Terminal at Howard Street between Beale and Main streets. The SFMTA shall provide construction administration, inspection and engineering support services for the installation of the overhead contact system (OCS) to support the Temporary Transbay Terminal. SFMTA construction staff will work with the TJPA Construction Management-Resident Engineer,

- II. The scope of SFMTA's services is limited to the following:
 - Coordinating and interfacing with project team members including TJPA, TJPA Contractor through TJPA Construction Management, and SFMTA (including SFMTA Resident Engineer, Inspectors, MUNI Maintenance and Operations).
 - Assisting TJPA Construction Management-Resident Engineer in coordinating with MUNI Street Operations to request vehicles to test the OCS.
 - Assisting TJPA Construction Management-Resident Engineer in submitting Contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
 - Calling in and closing out daily OCC clearances.
 - Providing inspection services (days, nights, and weekends) for the OCS work.
 - Issuing daily inspector reports for the OCS work.
 - Providing fulltime monitoring whenever OCS Contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure that Contractor's work does not negatively impact SFMTA's operations or safety.
 - Attending progress, coordination, and traffic management meetings for the OCS work.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing OCS submittals and RFIs by providing comments and recommendations.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing OCS work progress and Contractor's submitted work plan.
 - Assisting TJPA Construction Management-Resident Engineer in processing progress payments by issuing recommendations for OCS quantity measurement and completion.
 - Assisting TJPA Construction Management-Resident Engineer in the management of change orders related to OCS work that affects SFMTA's operations.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing Contract Change Order Requests and changes related to the OCS.
 - Providing SFMTA passengers with advance and timely information regarding changes to bus stops from the Existing Terminal to the Temporary Terminal

- Providing for SFMTA street supervision during planned overhead shutdowns/reroutes and initial test of trains/trolleys as part of OCS construction.

Not to Exceed Budget: \$100,000

B. Scope of SFMTA (DPT) Construction Administration, Engineering and Inspection Services:

- I. SFMTA shall provide engineering and inspection services for the construction of new traffic signals and parking meters, and for the reconfiguration of roadways to support the Temporary Terminal.
- II. The scope of SFMTA's services is limited to the following:
 - Attend regular meetings, coordinate with various agencies and departments to minimize vehicular, pedestrian and transit impacts due to construction.
 - Review the traffic routing to accommodate the demolition of the public right-of-way.
 - Review the traffic routing needs to accommodate the relocation of utilities adjacent to the Temporary Terminal.
 - Review and comment on the traffic routing plans as needed.
 - Provide inspection services and recommend operational adjustments to accommodate the reconfiguration of the roadways and traffic controls.
 - Provide electrical inspection for traffic signal construction work.

Not to Exceed Budget: \$200,000

C. Scope of SFMTA (DPT) Signage, Striping and Parking Meter Relocation Services:

- I. SFMTA shall relocate and install new traffic control signs, remove and relocate all parking meters and furnish and install all final street striping in accordance with the approved Temporary Terminal plans.
- II. The scope of SFMTA's services is limited to the following:
 - Provide all labor and materials necessary to remove existing City owned traffic control signs and guide signs and install new signage in the public right-of-way.
 - Provide all labor and materials necessary to remove existing parking meters and install new City-owned parking meters in the public right-of-way.
 - Provide all labor and materials necessary to grind existing striping and install final striping for the project.

Not to Exceed Budget: \$350,000

AMENDED EXHIBIT A2

**EXISTING TERMINAL DEMOLITION
OCS PROJECT MANAGEMENT, ENGINEERING SUPPORT &
CONSTRUCTION MANAGEMENT SERVICES BY SFMTA**

A. Scope of SFMTA (MUNI) Construction Management, Inspection, and Engineering Services:

I. The TJPA will demolish the existing Transbay Terminal on Mission Street between Fremont and First streets. The SFMTA shall provide engineering and construction management services for the demolition of the existing Transbay Terminal. SFMTA construction staff will work with TJPA Construction Management-Resident Engineer.

II. The scope of SFMTA's services is limited to the following:

- Assisting TJPA Construction Management-Resident Engineer in coordinating with MUNI Street Operations to request vehicles to test the OCS project.
- Assisting TJPA Construction Management-Resident Engineer in submitting Contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
- Calling in and closing out daily OCC clearances.
- Providing inspection services (days, nights, and weekends) for the OCS work.
- Issuing daily inspector reports for the OCS work.
- Providing fulltime monitoring whenever OCS Contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure Contractor's work does not negatively impact SFMTA's operations and safety.
- Attending progress, coordination, and traffic management meetings for the OCS project.
- Assisting TJPA Construction Management-Resident Engineer in reviewing OCS submittals and RFIs by providing comments and recommendations.
- Assisting TJPA Construction Management-Resident Engineer in reviewing OCS work progress and Contractor's submitted work plan.
- Assisting TJPA Construction Management-Resident Engineer in processing progress payments by issuing recommendations for OCS quantity measurement and completion.
- Assisting TJPA Construction Management-Resident Engineer in the management of change orders related to OCS work that affects SFMTA's operations.
- Assisting TJPA Construction Management-Resident Engineer in reviewing Contract Change Order Request and changes related to the OCS.
- Providing SFMTA street supervision for vehicle re-routing during planned shutdowns of the OCS system.
- Providing SFMTA passengers with timely information regarding changes to bus line routes and stops during the transition to the temporary terminal.

Not to Exceed Budget: \$180,389

B. Scope of SFMTA (DPT) Traffic Engineering Services:

- I. SFMTA shall provide engineering and construction management services to support the demolition of the existing Transbay Terminal.
- II. The scope of SFMTA's services is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic during the demolition of the existing Transbay Terminal.
 - Review final specifications and estimates for traffic routing for demolition.
 - Attend regular meetings and review and comment on traffic routing to accommodate the demolition of the existing Transbay Terminal.

Not to Exceed Budget: **\$53,611**

**AMENDED EXHIBIT A3
UTILITY RELOCATION
TRAFFIC PLANNING AND ENGINEERING SERVICES BY SFMTA**

A. Scope of SFMTA Project Management and Engineering Services:

- I. The TJPA is relocating utility lines on Mission, Fremont, Beale and First streets as part of the Transit Center Relocation of Utilities Project. The SFMTA shall provide traction power analysis and engineering services to support the Transit Center Relocation of Utilities Project.
- II. The scope of SFMTA's services is limited to the following:
 - Review the impact of TJPA's relocation of SFMTA facilities and make recommendations to the TJPA design team based on traction power analysis.
 - Perform traction power analyses to determine the need for new traction power infrastructure (conduits, duct bank, cable, manholes) and make recommendations to TJPA design team.

Not to Exceed Budget: \$55,000

B. Scope of SFMTA Traffic Planning and Project Management Services:

- I. SFMTA shall provide traffic planning, traffic engineering and project management services to support the Transit Center Utility Relocation.
- II. The scope of work is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic during the relocation of utilities adjacent to the Transit Center.
 - Review final specifications and estimates for traffic routing during the relocation of utilities.
 - Attend regular meetings and work with various agencies to minimize the impacts to the public during the utility relocation.
 - Provide SFMTA street supervision for vehicle re-routes.
 - Provide for any needed relocation of SFMTA overhead contact system (OCS), including support for re-routes/bus substitution during any period of OCS shutdown.

**Not to Exceed Budget: \$95,500 (DPT)
 \$15,000 (MUNI)**

C. *Scope of SFMTA Muni OCS and Traction Power Project Management, Planning and Coordination, Engineering, Construction Management Support and Inspection Services:*

- I. *The TJPA is constructing a reconfigured OCS and traction power system at the new Transit Center. SFMTA shall provide project management, planning and coordination, construction management support, engineering and inspection services for the new system.*

- II. *The scope of SFMTA's services is limited to the following:*
 - *Provide new OCS and traction power design to TJPA.*
 - *Provide existing record as-built documents when requested and available.*
 - *Coordinate and interface with project team members including TJPA, TJPA contractor through TJPA Construction Management Oversight (CMO) consultant, and SFMTA (including SFMTA Resident Engineer, Inspectors, MUNI Maintenance and Operations).*
 - *Assist TJPA in coordinating needed MUNI trolley coach re-routes/stop changes during construction.*
 - *Assist TJPA CMO-Resident Engineer in submitting contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.*
 - *Call in and close out daily OCC clearances.*
 - *Provide inspection services (days, nights, and weekends) for the work.*
 - *Issuing daily inspector reports for the work.*
 - *When authorized, issue directives or other required actions (such as stop work orders) to ensure that contractor's work does not negatively impact SFMTA's operations or safety.*
 - *Attend progress, coordination, and traffic management meetings for the work.*
 - *Assist TJPA CMO-Resident Engineer in reviewing submittals and RFIs by providing comments and recommendations.*
 - *Assist TJPA CMO-Resident Engineer in reviewing work progress and contractor's submitted work plan.*

Not to Exceed Budget: \$676,979

**AMENDED EXHIBIT A4
TRANSIT CENTER
TRAFFIC PLANNING AND ENGINEERING SERVICES BY SFMTA**

A. Scope of SFMTA Project Management and Engineering Services:

- I. TJPA is constructing a new Transit Center at Mission Street between Fremont and Beale streets. The SFMTA shall provide project management and engineering design services for the overhead contact system (OCS) project related to the new Transit Center. (See enclosed preliminary sketch, alignments are subject to change.)

- II. The scope of SFMTA's services is limited to the following:
 - Provide construction plans, sequencing plans, specifications, and construction cost estimates, including new trolley pole foundations, trolley poles, wires, wood troughs support spans and bracket arms.
 - Reconfigure existing special OCS.
 - Provide design of existing streetlight transfer to new trolley poles where required; remove existing streetlight poles as needed.
 - Participate in coordination meetings with City agencies, TJPA and TJPA's design team.
 - Coordinate and obtain approval from SFMTA Operations and Maintenance on the bus plaza design.

- III. The scope of SFMTA's services is based upon the following assumptions:
 - a. Baseline survey, existing underground utility information and new Transbay Transit Center drawings to be provided to SFMTA.
 - b. The design and relocation of existing utilities not owned by the SFMTA shall be addressed and designed by other parties. OCS installation may require the relocation of such existing utilities.
 - c. Additional work triggered by the relocation of trolley poles (curb ramp reconstruction, traffic signal and mast arm relocation, and the relocation of traffic signs, etc.) shall be addressed and designed by others.
 - d. All associated civil design elements (e.g. passenger boarding islands) shall be designed and addressed by other parties.
 - e. All new poles shall be designed using standard poles with standard cobra type streetlights.
 - f. Sub-sidewalk basement special foundations, and eyebolts to buildings, if any, shall be addressed and designed by other parties.
 - g. The Conceptual Engineering Report, which is the basis for the Overhead Contact System detailed design.

Not to Exceed Budget: \$661,000

B. Scope of SFMTA Traffic Engineering Services:

- I. SFMTA shall provide traffic planning and engineering services for the new Transit Center.
- II. The scope of SFMTA's services is limited to the following:
- Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic for the new Transit Center.
 - Provide review of conceptual traffic signal plans.
 - Review preliminary specifications and estimates of traffic routing for the new Transit Center.
 - Attend regular meetings and review traffic routing needs to accommodate the construction of the new Transit Center.

Final designs and services for new or modified signage, striping, and traffic signals are outside the scope of proposed SFMTA (MUNI & DPT) services and subject to a separate agreement between TJPA and SFMTA.

Not to Exceed Budget: **\$115,500**

C. Scope of SFMTA Traffic Engineering and Shop Services:

- I. SFMTA shall provide traffic engineering services for the construction by TJPA of the Transit Center on blocks generally bounded by Minna, Natoma, Beale, and Second streets.
- II. The scope of SFMTA's services is limited to the following:
- Review revised Transbay Transit Center design for traffic signal timing and pole locations proposed at the entry and exit of the Bus Plaza, crosswalk, and traffic lane striping.
 - Review proposed Beale Street sidewalk and roadway reconfiguration.
 - Provide type and location of regulatory traffic signs, curb allocations, etc.
 - Coordinate with SFMTA shops for installation of signs, pavement markings, traffic signals and parking meters; prepare work authorizations as required.
 - Prepare legislation as required.

SFMTA Traffic Engineering \$280,800

SFMTA Shop Services \$100,000

Not to Exceed Budget: **\$380,800**

AMENDED EXHIBIT A6

**MISCELLANEOUS PROJECT MANAGEMENT, ENGINEERING SUPPORT &
CONSTRUCTION MANAGEMENT SERVICES BY SFMTA**

A. Scope of SFMTA's (DPT & MUNI) Project Management, Engineering Construction Management, and Inspection Support and Coordination Services:

- I. SFMTA shall provide general planning, project management, engineering support, and construction management services and coordination to support TJPA for the Transbay Transit Center Program.
- II. The scope of work is limited to the following:
 - Providing general project management support and coordination.
 - Providing general engineering support and coordination.
 - Providing general construction management and inspection support and coordination.
 - Providing general traffic planning and engineering support and coordination.
 - *Provide and install four (4) ticket vending machines in the Transit Center.*

Not to Exceed Budget: \$40,000

AMENDED EXHIBIT A7
TEMPORARY TERMINAL OPERATIONS
PARKING CONTROL OFFICER SERVICES

A. Scope of SFMTA (DPT) Parking Control Officer Services:

III. TJPA is constructing a Temporary Transbay Terminal at Howard Street between Beale and Main streets. SFMTA shall provide two parking control officers (PCOs) at key intersections to facilitate bus movement between the Temporary Terminal and the Bay Bridge as indicated in Temporary Transbay Terminal Posts for PM Commutes. The SFMTA shall be reimbursed for these services based on the rates set forth in Transbay Transit Center Program Reduced City Traffic Control Estimate.

IV. The scope of SFMTA's services is limited to the following:

- Prior to scheduled opening of the Temporary Terminal, participate in initial planning session with TJPA to identify intersections where budgeted PCOs will be stationed.
- In accordance with attached spreadsheet, provide PCOs on City streets at key commute hours to manage and direct traffic on the streets around the Temporary Terminal and the streets leading up to the Essex St. on ramp to the Bay Bridge as directed by the TJPA.

Not to Exceed Budget ***\$1,072,698***

**AMENDED EXHIBIT A8
TEMPORARY BRIDGE
PROJECT MANAGEMENT, PLANNING AND COORDINATION, ENGINEERING,
CONSTRUCTION MANAGEMENT SUPPORT, INSPECTION, AND TRAFFIC
ENGINEERING SUPPORT BY SFMTA**

A. Scope of SFMTA Project Management, Planning and Coordination, Engineering, Construction Management Support, and Inspection Services

- I. TJPA is constructing a Temporary Bridge on Beale Street mid-block between Mission and Howard streets. SFMTA shall provide project management, planning and coordination, engineering, and construction management support and inspection services for the overhead contact system (OCS) to support the Beale Street Temporary Bridge.

- II. The scope of SFMTA's services is limited to the following:
 - Provide construction plans, sequencing plans, specifications, and construction cost estimates for the OCS including new wires, support spans and bracket arms.
 - Reconfigure existing OCS special work.
 - Add or replace existing trolley poles and foundations as required to support new or relocated OCS.
 - Provide demolition design of existing trolley poles where required.
 - Review site investigations/existing OCS as-built documents.
 - Participate in coordination meetings with City agencies, TJPA, and TJPA's design team.
 - Provide as-needed services in conjunction with the bidding of the OCS contract documents.
 - Coordinate and interface with project team members including TJPA, TJPA contractor through TJPA Construction Management Oversight consultant (CMO), and SFMTA (including SFMTA resident engineer, inspectors, Muni Maintenance and Operations).
 - Assist TJPA in coordinating needed Muni trolley coach re-routes/stop changes during OCS construction shutdowns.
 - Assist TJPA CMO-Resident Engineer in coordinating with Muni Street Operations to request vehicles to test the OCS.
 - Assist TJPA CMO-Resident Engineer in submitting contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
 - Call in and close out daily OCC clearances.
 - Provide inspection services (days, nights, and weekends) for the OCS work.
 - Issuing daily inspector reports for the OCS work.
 - Provide fulltime monitoring whenever OCS contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure that contractor's work does not negatively impact SFMTA's operations or safety.
 - Attend progress, coordination, and traffic management meetings for the OCS work.
 - Assist TJPA CMO-Resident Engineer in reviewing OCS submittals and RFIs by providing comments and recommendations.
 - Assist TJPA CMO-Resident Engineer in reviewing OCS work progress and contractor's submitted work plan.

- Assist TJPA CMO-Resident Engineer in processing progress payments by issuing recommendations for OCS quantity measurement and completion.
- Assist TJPA CMO-Resident Engineer in the management of change orders related to OCS work that affects SFMTA's operations.
- Assist TJPA CMO-Resident Engineer in reviewing Contract Change Order Requests and changes related to the OCS.

III. The scope of SFMTA's services is based upon the following assumptions:

- a. Baseline survey, existing underground utility information, and new Transit Center drawings will be provided to SFMTA.
- b. The design and relocation of existing utilities not owned by the SFMTA shall be addressed and designed by other parties. OCS installation may require the relocation of such existing utilities.
- c. Additional work triggered by the relocation of trolley poles (curb ramp reconstruction, traffic signal and mast arm relocation, and the relocation of traffic signs, etc.) shall be addressed and designed by others.
- d. All associated civil design elements (e.g., passenger boarding islands) shall be designed and addressed by other parties.
- e. All new poles shall be designed using standard poles with standard cobra type streetlights.
- f. Sub-sidewalk basement special foundations, foundations through new Transit Center decking, and eyebolts to buildings, if any, shall be addressed and designed by other parties.

Not to Exceed Budget: \$0

B. Scope of SFMTA Traffic Engineering Services:

- I. TJPA is constructing Temporary Bridges on Beale Street mid-block between Mission and Howard streets, and Fremont Street mid-block between Mission and Howard streets. SFMTA shall provide traffic engineering services to support the installation and removal of the Temporary Bridges.
- II. The scope of SFMTA's Traffic Engineering services is limited to the following:
 - Review and recommend approval of contractor submittal for vehicular and pedestrian traffic configuration of temporary bridges, including safety features to be installed.
 - Coordinate comments and approvals with other City agencies.
 - Provide traffic engineering services, such as review of signal, striping and signage plans and prepare supporting legislation, as required.
 - Coordinate signal testing and turn-ons with the SFMTA Signal Shop, prepare signal timing cards, and prepare work orders.
 - Coordinate with SFMTA Sign Shop and SFMTA Paint Shop for their respective areas of work in the public right-of-way; prepare work authorizations as required.

Not to Exceed Budget: \$128,000

**AMENDED EXHIBIT A9
BUS RAMP
TRAFFIC ENGINEERING SERVICES BY SFMTA**

A. Scope of SFMTA Traffic Engineering and Shop Services

- I. TJPA is constructing elevated bus ramp structures that will span above the public right-of-way in seven streets: Natoma, Howard, Tehama, Clementina, Folsom, Harrison, and Second streets. The SFMTA shall provide traffic engineering and shop services for the Bus Ramps.
- II. The scope of SFMTA's services is limited to the following:
- Provide parameters to be required by SFMTA to permit work and ensure safety during construction of the elevated bus ramp structures over roadways and sidewalks in the public right-of-way.
 - Determine that the schedule and scope of other activity to be permitted by SFMTA Interdepartmental Staff Committee on Construction and Other Projects in affected streets is coordinated with the schedule for Bus Ramps construction.
 - Coordinate comments and approvals with other City agencies.
 - Review traffic control plans proposed by the contractor to ensure conformance with SFMTA parameters.
 - At direction of SFMTA SSD, SFMTA Sign Shop to install regulatory and warning traffic signs and perform work under its jurisdiction.
 - At direction of SFMTA SSD, SFMTA Paint Shop to layout and paint traffic lane markings, and perform other work under its jurisdiction.
 - At direction of SFMTA SSD, SFMTA Signal Shop to test, adjust and interconnect signals; prepare traffic signal timing changes and perform other work under its jurisdiction.

<i>SFMTA Traffic Engineering</i>	<i>\$0</i>
<i>SFMTA Shop Services</i>	<i>\$0</i>
<i>Not to Exceed Budget:</i>	<i>\$0</i>

**AMENDED EXHIBIT A10
ON-GOING CONSTRUCTION COORDINATION SUPPORT,
PROJECT MANAGEMENT, PLANNING AND COORDINATION, TRAFFIC
ENGINEERING, AND SHOP SERVICES BY THE SFMTA**

A. Scope of SFMTA Services:

- I. The SFMTA shall provide planning support and project management support services for ongoing construction in the public right-of-way to support the construction and future operations of the Transbay Transit Center.
- II. The scope of SFMTA's services is limited to providing support and coordination for the following:
 - Provide general project management and planning support and coordination.
 - Review contractor requests for special traffic permits for on-street construction that will affect Muni operations.
 - Coordinate with Muni Operations for Muni re-route/OCS de-energizing/stop changes related to on-street utility work requested by TJPA contractors.
 - Advise TJPA contractors and CMO personnel on the acceptable parameters of on-street work that could affect Muni operations.
 - Review contractor proposals for on-street and sidewalk work that impacts pedestrian flow and safety.

Budget: \$300,000

B. Scope of SFMTA Traffic Engineering and Shop Services:

- I. SFMTA shall provide traffic engineering and shop services to support the ongoing construction and future operations of the Transbay Transit Center.
- II. The scope of SFMTA's Traffic Engineering and Shop services is limited to the following:
 - Attend weekly and special coordination meetings with CMO team, Transbay contractors, utility agencies/contractors and neighboring project representatives to assess work planned in the public right-of-way.
 - Provide guidance to contractors on traffic control plans and in advance of issuing Special Traffic Permits. Review submitted traffic control plans.
 - Coordinate SFMTA enforcement coverage for major events.
 - Undertake field investigations to ensure adequacy of detours, signage, etc. in order to provide for pedestrian and vehicular safety.
 - Provide input and guidance on operational issues related to the Temporary Terminal and major events in the area of Transit Center construction.
 - Direct the SFMTA Sign Shop to install regulatory traffic signs and perform other work under its jurisdiction.
 - Direct the SFMTA Signal Shop to test, adjust, and interconnect traffic signals; prepare traffic signal timing cards and perform other work under its jurisdiction.

- Direct the SFMTA Striping Shop to layout and paint traffic lane markings, and perform other work under its jurisdiction.
- Direct the SFMTA Meter Shop to install and remove parking meters and perform other work under its jurisdiction as requested or required.
- As directed by SFMTA SSD traffic engineers, SFMTA shops to perform work.

Not to Exceed Budget: \$ 400,200

**SECOND AMENDMENT TO
INTERGOVERNMENTAL AGREEMENT BETWEEN THE TRANSBAY JOINT
POWERS AUTHORITY AND THE SAN FRANCISCO MUNICIPAL
TRANSPORTATION AGENCY**

This Amendment is made this _____ day of _____, 2013, in the City and County of San Francisco, State of California, by and between the Transbay Joint Powers Authority (the "TJPA") and the City and County of San Francisco, a municipal corporation (the "City") acting by and through its San Francisco Municipal Transportation Agency ("SFMTA").

RECITALS

WHEREAS, SFMTA and the TJPA have entered into an Intergovernmental Agreement dated July 21, 2009, for Traffic Engineering, overhead contact system ("OCS") Design, and Construction Management services related to the Temporary Transbay Terminal, demolition of the Existing Terminal, Utility Relocation, Bus Storage Facility, and Transit Center work for the Transbay Transit Center Project and related structures ("Agreement"); and

WHEREAS, SFMTA and the TJPA entered into a First Amendment to the Agreement on August 9, 2010, adding SFMTA Parking Control Officer services for the operation of the Temporary Transbay Terminal during key commute hours to the scope of work, increasing the contract amount, and extending the term of the Agreement; and

WHEREAS, SFMTA and the TJPA desire to further amend the Agreement on the terms and conditions set forth herein;

NOW, THEREFORE, the TJPA and the SFMTA agree as follows:

1. **Definitions.** The following definitions shall apply to this Amendment:
 - a. **Agreement.** The term "Agreement" shall mean the Intergovernmental Agreement between the Transbay Joint Powers Authority and the San Francisco Municipal Transportation Agency, dated July 21, 2009, including the First Amendment to the Agreement, dated August 9, 2010.
 - b. **Other Terms.** Terms used and not defined in this Amendment shall have the meanings assigned to such terms in the Agreement.
2. **Modifications to the Agreement.** The Agreement is hereby modified as follows:
 - a. **Section I, "Scope of Services."**

Section I shall be amended to add the following services to be provided under the Agreement:

 - A. For construction of the Temporary Terminal, the SFMTA shall provide to the TJPA construction management, OCS inspection and engineering support services. The SFMTA shall also provide and install traffic signage; street striping and parking meters.
 - B. For demolition of the Existing Terminal, the SFMTA shall provide to the TJPA OCS design, construction management, OCS inspection and engineering support services. The SFMTA shall also provide traffic engineering services.
 - C. For Utility Relocation, the SFMTA shall provide to the TJPA project management, engineering support services, and traffic planning, including project

management, planning and coordination, construction management support, and inspection services for a Muni Traction Power duct bank to accommodate Muni cables supplying power for the reconfigured OCS at the Transit Center.

D. For construction of the Transit Center, the SFMTA shall provide to the TJPA project management, traffic planning, traffic engineering, and shop services, and on-going planning, coordination, and engineering.

E. For construction of the Bus Storage Facility, the SFMTA shall provide to the TJPA traffic engineering and shop services, project management, planning and coordination, engineering, construction management support, and inspection services.

F. For installation and removal of the Temporary Bridge (interim roadway structure required for the construction of the Transit Center below grade concrete box structure), the SFMTA shall provide to the TJPA project management, construction management, inspection, and engineering support services for the OCS, and traffic engineering support services related to the temporary bridge installation and removal for the Transit Center.

H. For construction of Bus Ramps, the SFMTA shall provide traffic engineering services.

Specifically, the required additional work to be performed by the SFMTA through the Capital Programs and Construction and Sustainable Streets Divisions under this Second Amendment to the Agreement is set forth as follows:

Amended Exhibit A3	Utility Relocation;
Amended Exhibit A4	Transit Center;
Amended Exhibit A5	Bus Storage Facility;
Exhibit A8	Temporary Bridge
Exhibit A9	Bus Ramps
Exhibit A10	On-going Construction Coordination Support
Exhibit A11	Signal Work

All applicable work shall be performed consistent with the SFMTA *Conceptual Engineering Report* (August 2012) attached hereto as Exhibit A12.

Amended Exhibits A3, A4, and A5, and Exhibits A8, A9, A10, A11, and A12 are attached to this Amendment Agreement and incorporated by reference as though fully set forth herein.

b. Appendix B, Exhibits B-1 and B-2.

Appendix B shall be replaced in its entirety with Exhibits B-1 and B-2 that are attached to this Second Amendment to the Agreement to reflect current SFMTA wage rates, and incorporated by reference as though fully set forth herein.

c. Section II. Contract Amount and Terms of Payment.

Subsection A shall be replaced in its entirety to read as follows:

A. **Reimbursement for SFMTA Transbay Work Elements.** Compensation under this agreement shall be on a cost reimbursement basis only. The TJPA agrees to reimburse the SFMTA for all actual, allowable, reasonable costs incurred for the SFMTA Transbay Work performed under this Agreement. The salary rates of SFMTA personnel, including overhead rates, are set forth in

Exhibit B. These rates reflect actual salaries paid to SFMTA employees who will be carrying out the work. Said rates are subject to change, depending on negotiated cost of living and other increases in applicable City collective bargaining agreements. Such changes shall not be subject to the prior approval of the TJPA; however, the SFMTA shall notify the TJPA in writing whenever hourly labor rates by classification are changed. Such notice shall be given prior to or along with the first invoice that reflects the changed hourly labor rates.

Subsection B shall be replaced in its entirety to read as follows:

B. Estimated Contract Amount. In no event shall the total compensation under this Agreement exceed \$5,393,677 without a written amendment to this Agreement. The parties agree to amend this Agreement to increase the Contract Amount if the actual approved costs for the work exceed the Estimated Contract Amount.

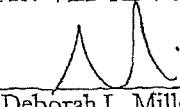
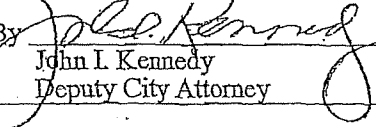
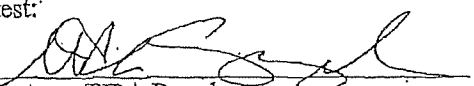
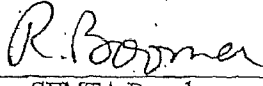
d. Section III. Term; Termination

Subsection A shall be replaced in its entirety to read as follows:

A. Term. This Agreement will commence on the Effective Date and terminate on December 31, 2017, unless extended by the parties or terminated earlier by the parties.

3. **Legal Effect.** Except as expressly modified by this Second Amendment, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties execute this Agreement in San Francisco as of the date first mentioned above.

TRANSBAY JOINT POWERS AUTHORITY	CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY
Maria Ayerdi-Kaplan Executive Director	Edward D. Reiskin Director of Transportation
APPROVED AS TO FORM: By  Deborah L. Miller TJPA Legal Counsel	APPROVED AS TO FORM: Dennis J. Herrera, City Attorney By  John I. Kennedy Deputy City Attorney
TJPA Board of Directors Resolution No. <u>13-004</u> Dated: <u>February 14, 2013</u> Attest:  Secretary, TJPA Board	SFMTA Board of Directors Resolution No. <u>13-018</u> Dated: <u>February 5, 2013</u> Attest:  Secretary, SFMTA Board

**AMENDED EXHIBIT A3
UTILITY RELOCATION
TRAFFIC PLANNING AND ENGINEERING SERVICES BY SFMTA**

A. Scope of SFMTA Project Management and Engineering Services:

- I. The TJPA is relocating utility lines on Mission, Fremont, Beale and First streets as part of the Transit Center Relocation of Utilities Project. The SFMTA shall provide traction power analysis and engineering services to support the Transit Center Relocation of Utilities Project.
- II. The scope of SFMTA's services is limited to the following:
 - Review the impact of TJPA's relocation of SFMTA facilities and make recommendations to the TJPA design team based on traction power analysis.
 - Perform traction power analyses to determine the need for new traction power infrastructure (conduits, ductbank, cable, manholes) and make recommendations to TJPA design team.

Budget: \$55,000

B. Scope of SFMTA Traffic Planning and Project Management Services:

- I. SFMTA shall provide traffic planning, traffic engineering and project management services to support the Transit Center Utility Relocation.
- II. The scope of work is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic during the relocation of utilities adjacent to the Transit Center.
 - Review final specifications and estimates for traffic routing during the relocation of utilities.
 - Attend regular meetings and work with various agencies to minimize the impacts to the public during the utility relocation.
 - Provide SFMTA street supervision for vehicle re-routes.
 - Provide for any needed relocation of SFMTA overhead contact system (OCS), including support for re-routes/bus substitution during any period of OCS shutdown.

Not to Exceed Budget: \$95,500 (DPT)
\$15,000 (MUNI)

C. Scope of SFMTA Muni DUCT BANK Project Management, Planning and Coordination, Engineering, Construction Management Support and Inspection Services:

I. *The TJPA is constructing a duct bank on Mission Street between Anthony and Main streets (Duct Bank) to accommodate MUNI cables supplying power for the reconfigured OCS at the new Transit Center. SFMTA shall provide project management, planning and coordination, construction management support, and inspection services for the Duct Bank.*

II. *The scope of SFMTA's services is limited to the following:*

- *Review TJPA's duct bank design and provide comments.*
- *Provide as-built documents when available.*
- *Coordinate and interface with project team members including TJPA, TJPA contractor through TJPA Construction Management Oversight (CMO) consultant, and SFMTA (including SFMTA Resident Engineer, Inspectors, MUNI Maintenance and Operations).*
- *Assist TJPA in coordinating needed MUNI trolley coach re-routes/stop changes during construction.*
- *Assist TJPA CMO-Resident Engineer in submitting contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.*
- *Call in and close out daily OCC clearances.*
- *Provide inspection services (days, nights, and weekends) for the work.*
- *Issuing daily inspector reports for the work.*
- *When authorized, issue directives or other required actions (such as stop work orders) to ensure that contractor's work does not negatively impact SFMTA's operations or safety.*
- *Attend progress, coordination, and traffic management meetings for the work.*
- *Assist TJPA CMO-Resident Engineer in reviewing submittals and RFIs by providing comments and recommendations.*
- *Assist TJPA CMO-Resident Engineer in reviewing work progress and contractor's submitted work plan.*

Not to Exceed Budget: \$70,000

**AMENDED EXHIBIT A4
TRANSIT CENTER
TRAFFIC PLANNING AND ENGINEERING SERVICES BY SFMTA**

A. Scope of SFMTA Project Management and Engineering Services:

- I. TJPA is constructing a new Transit Center at Mission Street between Fremont and Beale streets. The SFMTA shall provide project management and engineering design services for the overhead contact system (OCS) project related to the new Transit Center. (See enclosed preliminary sketch, alignments are subject to change.)

- II. The scope of SFMTA's services is limited to the following:
 - Provide construction plans, sequencing plans, specifications, and construction cost estimates, including new trolley pole foundations, trolley poles, wires, wood troughs support spans and bracket arms.
 - Reconfigure existing special OCS.
 - Provide design of existing streetlight transfer to new trolley poles where required; remove existing streetlight poles as needed.
 - Participate in coordination meetings with City agencies, TJPA and TJPA's design team.
 - Coordinate and obtain approval from SFMTA Operations and Maintenance on the bus plaza design.

- III. The scope of SFMTA's services is based upon the following assumptions:
 - a. Baseline survey, existing underground utility information and new Transbay Transit Center drawings to be provided to SFMTA.
 - b. The design and relocation of existing utilities not owned by the SFMTA shall be addressed and designed by other parties. OCS installation may require the relocation of such existing utilities.
 - c. Additional work triggered by the relocation of trolley poles (curb ramp reconstruction, traffic signal and mast arm relocation, and the relocation of traffic signs, etc.) shall be addressed and designed by others.
 - d. All associated civil design elements (e.g. passenger boarding islands) shall be designed and addressed by other parties.
 - e. All new poles shall be designed using standard poles with standard cobra type streetlights.
 - f. Sub-sidewalk basement special foundations, and eyebolts to buildings, if any, shall be addressed and designed by other parties.
 - g. *The Conceptual Engineering Report, which is the basis for the Overhead Contact System detailed design, which is attached as Exhibit A12.*

Not to Exceed Budget: \$480,000

B. Scope of SFMTA Traffic Engineering Services:

- I. SFMTA shall provide traffic planning and engineering services for the new Transit Center.
- II. The scope of SFMTA's services is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic for the new Transit Center.
 - Provide review of conceptual traffic signal plans.
 - Review preliminary specifications and estimates of traffic routing for the new Transit Center.
 - Attend regular meetings and review traffic routing needs to accommodate the construction of the new Transit Center.

Final designs and services for new or modified signage, striping, and traffic signals are outside the scope of proposed SFMTA (MUNI & DPT) services and subject to a separate agreement between TJPA and SFMTA.

Not to Exceed Budget: \$90,500

C. Scope of SFMTA Traffic Engineering and Shop Services:

- I. SFMTA shall provide traffic engineering services for the construction by TJPA of the Transit Center on blocks generally bounded by Minna, Natoma, Beale, and Second streets.
- II. The scope of SFMTA's services is limited to the following:
 - Review revised Transbay Transit Center (TCC) design for traffic signal timing and pole locations proposed at the entry and exit of the Bus Plaza, crosswalk, and traffic lane striping.
 - Review proposed Beale Street sidewalk and roadway reconfiguration.
 - Provide type and location of regulatory traffic signs, curb allocations, etc.
 - Coordinate with SFMTA shops for installation of signs, pavement markings, traffic signals and parking meters; prepare work authorizations as required.
 - Prepare legislation as required.

SFMTA Traffic Engineering \$280,800

SFMTA Shop Services \$100,000

Not to Exceed Budget: \$380,800

**AMENDED EXHIBIT A5
BUS STORAGE FACILITY
TRAFFIC PLANNING BY SFMTA**

A. Scope of SFMTA Traffic Engineering Services:

- I. SFMTA shall provide traffic planning and engineering services for the new Bus Storage Facility (BSF) located between Perry and Stillman streets and 2nd and 3rd streets.
- II. The scope of SFMTA's services is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA, City departments, and the consultants for the Bus Storage Facility.
 - Attend regular meetings and review the traffic routing and traffic circulation needs to accommodate the Bus Storage Facility.
 - Review final specifications and estimates for traffic engineering services to accommodate the Bus Storage Facility.

Not to Exceed Budget \$29,000

B. Scope of SFMTA Project Management, Planning and Coordination, Engineering, Construction Management Support, and Inspection Services:

- I. *The TJPA is constructing a Bus Storage Facility (BSF) on a block bounded by Second, Third, Stillman, and Perry Streets. The BSF will require the relocation of a combined OCS/streetlight pole and foundation, the relocation of an existing SFMTA bus shelter on Third Street, construction of a bulb-out at the southeast corner of Third and Stillman Streets, traffic lane restriping and other site work. The SFMTA shall provide planning and coordination support, engineering, construction management support, and inspection services for the construction of the BSF.*
- II. *The scope of SFMTA's services is limited to the following:*
 - *Provide construction plans, sequencing plans, specifications, and construction cost estimates for the OCS including new wires, support spans and bracket arms.*
 - *Relocate existing trolley poles to allow proper clearance for buses entering and exiting the proposed storage yard.*
 - *Provide demolition design of existing trolley poles where required.*
 - *Review site investigation/existing as-built documents.*
 - *Participate in coordination meetings with City agencies, TJPA, and TJPA's design team.*
 - *Provide as-needed services in conjunction with the bidding of the contract documents.*
 - *Coordinate and interface with project team members including TJPA, TJPA contractor through TJPA Construction Manager consultant (CM), and SFMTA (including SFMTA resident engineer, inspectors, Muni Maintenance and Operations).*

- Assist TJPA in coordinating needed Muni trolley coach re-routes/stop changes during construction shutdowns.
- Assist TJPA CM-Resident Engineer in submitting contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
- Call in and close out daily OCC clearances.
- Provide inspection services (days, nights, and weekends) for the work.
- Issuing daily inspector reports for the work.
- Provide full-time monitoring whenever contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure that contractor's work does not negatively impact SFMTA's operations or safety.
- Attend progress, coordination, and traffic management meetings for the work.
- Assist TJPA CM-Resident Engineer in reviewing submittals and RFIs by providing comments and recommendations.
- Assist TJPA CM-Resident Engineer in reviewing work progress and contractor's submitted work plan.
- Assist TJPA CM-Resident Engineer in processing progress payments by issuing recommendations for quantity measurement and completion.
- Assist TJPA CM-Resident Engineer in the management of change orders related to the work that affects SFMTA's operations.
- Assist TJPA CM-Resident Engineer in reviewing Contract Change Order Requests and changes related to the work.

III. The scope of SFMTA's services is based upon the following assumptions:

- Baseline survey, existing underground utility information, and BSF drawings will be provided to SFMTA.
- The design and relocation of existing utilities not owned by the SFMTA shall be addressed and designed by other parties. OCS installation may require the relocation of such existing utilities.
- Additional work triggered by the relocation of trolley poles (curb ramp reconstruction, traffic signal, mast arm, and traffic sign relocation, etc.) shall be addressed and designed by others.
- All associated civil design elements (e.g., passenger boarding islands) shall be designed and addressed by other parties.
- All new poles shall be designed using standard poles with standard cobra type streetlights.
- Sub-sidewalk basement special foundations, and eyebolts to buildings, if any, shall be addressed and designed by other parties.

Not to Exceed Budget: \$130,000

C. Scope of SFMTA Traffic Engineering and Shop Services:

- I. SFMTA shall provide traffic engineering and shop services for the construction of the BSF.
- II. The scope of SFMTA's Traffic Engineering and Shop services is limited to the following:
 - Review and approve design of Stillman Street bulb-out at Third Street, traffic lane re-striping on Third Street and other related work.
 - Approve relocation of SFMTA bus shelter on Third Street.
 - Review of two driveways into the BSF at Third Street and at Stillman Street.
 - Review plans for link ramp construction.
 - Coordination with SFMTA shops for installation of signs, pavement markings and parking meters; prepare work authorizations as required.
 - Prepare legislation as required.
 - Attended weekly progress meetings with the TJPA.

SFMTA Traffic Engineering \$60,000

SFMTA Shop Services \$50,000

Not to Exceed Budget: \$110,000

EXHIBIT A8
TEMPORARY BRIDGE
PROJECT MANAGEMENT, PLANNING AND COORDINATION, ENGINEERING,
CONSTRUCTION MANAGEMENT SUPPORT, INSPECTION, AND TRAFFIC
ENGINEERING SUPPORT BY SFMTA

A. Scope of SFMTA Project Management, Planning and Coordination, Engineering, Construction Management Support, and Inspection Services

- I. TJPA is constructing a Temporary Bridge on Beale Street mid-block between Mission and Howard streets. SFMTA shall provide project management, planning and coordination, engineering, and construction management support and inspection services for the overhead contact system (OCS) to support the Beale Street Temporary Bridge.
- II. The scope of SFMTA's services is limited to the following:
- Provide construction plans, sequencing plans, specifications, and construction cost estimates for the OCS including new wires, support spans and bracket arms.
 - Reconfigure existing OCS special work.
 - Add or replace existing trolley poles and foundations as required to support new or relocated OCS.
 - Provide demolition design of existing trolley poles where required.
 - Review site investigations/existing OCS as-built documents.
 - Participate in coordination meetings with City agencies, TJPA, and TJPA's design team.
 - Provide as-needed services in conjunction with the bidding of the OCS contract documents.
 - Coordinate and interface with project team members including TJPA, TJPA contractor through TJPA Construction Management Oversight consultant (CMO), and SFMTA (including SFMTA resident engineer, inspectors, Muni Maintenance and Operations).
 - Assist TJPA in coordinating needed Muni trolley coach re-routes/stop changes during OCS construction shutdowns.
 - Assist TJPA CMO-Resident Engineer in coordinating with Muni Street Operations to request vehicles to test the OCS.
 - Assist TJPA CMO-Resident Engineer in submitting contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
 - Call in and close out daily OCC clearances.
 - Provide inspection services (days, nights, and weekends) for the OCS work.
 - Issuing daily inspector reports for the OCS work.
 - Provide fulltime monitoring whenever OCS contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure that contractor's work does not negatively impact SFMTA's operations or safety.
 - Attend progress, coordination, and traffic management meetings for the OCS

work.

- Assist TJPA CMO-Resident Engineer in reviewing OCS submittals and RFIs by providing comments and recommendations.
- Assist TJPA CMO-Resident Engineer in reviewing OCS work progress and contractor's submitted work plan.
- Assist TJPA CMO-Resident Engineer in processing progress payments by issuing recommendations for OCS quantity measurement and completion.
- Assist TJPA CMO-Resident Engineer in the management of change orders related to OCS work that affects SFMTA's operations.
- Assist TJPA CMO-Resident Engineer in reviewing Contract Change Order Requests and changes related to the OCS.

III. The scope of SFMTA's services is based upon the following assumptions:

- a. Baseline survey, existing underground utility information, and new Transit Center drawings will be provided to SFMTA.
- b. The design and relocation of existing utilities not owned by the SFMTA shall be addressed and designed by other parties. OCS installation may require the relocation of such existing utilities.
- c. Additional work triggered by the relocation of trolley poles (curb ramp reconstruction, traffic signal and mast arm relocation, and the relocation of traffic signs, etc.) shall be addressed and designed by others.
- d. All associated civil design elements (e.g., passenger boarding islands) shall be designed and addressed by other parties.
- e. All new poles shall be designed using standard poles with standard cobra type streetlights.
- f. Sub-sidewalk basement special foundations, foundations through new Transit Center decking, and eyebolts to buildings, if any, shall be addressed and designed by other parties.

Not to Exceed Budget: \$181,000

B. Scope of SFMTA Traffic Engineering Services:

- I. TJPA is constructing Temporary Bridges on Beale Street mid-block between Mission and Howard streets, and Fremont Street mid-block between Mission and Howard streets. SFMTA shall provide traffic engineering services to support the installation and removal of the Temporary Bridges.
- II. The scope of SFMTA's Traffic Engineering services is limited to the following:
 - Review and recommend approval of contractor submittal for vehicular and pedestrian traffic configuration of temporary bridges, including safety features to be installed.
 - Coordinate comments and approvals with other City agencies.
 - Provide traffic engineering services, such as review of signal, striping and signage plans and prepare supporting legislation, as required.
 - Coordinate signal testing and turn-ons with the SFMTA Signal Shop, prepare signal timing cards, and prepare work orders.

- Coordinate with SFMTA Sign Shop and SFMTA Paint Shop for their respective areas of work in the public right-of-way; prepare work authorizations as required.

Not to Exceed Budget: \$ 128,000

**EXHIBIT A9
BUS RAMPS
TRAFFIC ENGINEERING SERVICES BY SFMTA**

A. Scope of SFMTA Traffic Engineering and Shop Services

- I. TIPA is constructing elevated bus ramp structures that will span above the public right-of-way in seven streets: Natoma, Howard, Tehama, Clementina, Folsom, Harrison, and Second streets. The SFMTA shall provide traffic engineering and shop services for the Bus Ramps.
- II. The scope of SFMTA's services is limited to the following:
- Provide parameters to be required by SFMTA to permit work and ensure safety during construction of the elevated bus ramp structures over roadways and sidewalks in the public right-of-way.
 - Determine that the schedule and scope of other activity to be permitted by SFMTA Interdepartmental Staff Committee on Construction and Other Projects in affected streets is coordinated with the schedule for Bus Ramps construction.
 - Coordinate comments and approvals with other City agencies.
 - Review traffic control plans proposed by the contractor to ensure conformance with SFMTA parameters.
 - At direction of SFMTA SSD, SFMTA Sign Shop to install regulatory and warning traffic signs and perform work under its jurisdiction.
 - At direction of SFMTA SSD, SFMTA Paint Shop to layout and paint traffic lane markings, and perform other work under its jurisdiction.
 - At direction of SFMTA SSD, SFMTA Signal Shop to test, adjust and interconnect signals; prepare traffic signal timing changes and perform other work under its jurisdiction.

SFMTA Traffic Engineering \$53,000

SFMTA Shop Services \$20,000

Not to Exceed Budget: \$73,000

EXHIBIT A10
**ON-GOING CONSTRUCTION COORDINATION SUPPORT,
PROJECT MANAGEMENT, PLANNING AND COORDINATION, TRAFFIC
ENGINEERING, AND SHOP SERVICES BY THE SFMTA.**

A. Scope of SFMTA Services:

- I. The SFMTA shall provide planning support and project management support services for ongoing construction in the public right-of-way to support the construction and future operations of the Transbay Transit Center.
- II. The scope of SFMTA's services is limited to providing support and coordination for the following:
 - Provide general project management and planning support and coordination.
 - Review contractor requests for special traffic permits for on-street construction that will effect Muni operations.
 - Coordinate with Muni Operations for Muni re-route/OCS de-energizing/stop changes related to on-street utility work requested by TJPA contractors.
 - Advise TJPA contractors and CMO personnel on the acceptable parameters of on-street work that could affect Muni operations.
 - Review contractor proposals for on-street and sidewalk work that impacts pedestrian flow and safety.

Budget: \$300,000

B. Scope of SFMTA Traffic Engineering and Shop Services:

- I. SFMTA shall provide traffic engineering and shop services to support the ongoing construction and future operations of the Transbay Transit Center.
- II. The scope of SFMTA's Traffic Engineering and Shop services is limited to the following:
 - Attend weekly and special coordination meetings with CMO team, Transbay contractors, utility agencies/contractors and neighboring project representatives to assess work planned in the public right-of-way.
 - Provide guidance to contractors on traffic control plans and in advance of issuing Special Traffic Permits. Review submitted traffic control plans.
 - Coordinate SFMTA enforcement coverage for major events.
 - Undertake field investigations to ensure adequacy of detours, signage, etc. in order to provide for pedestrian and vehicular safety.
 - Provide input and guidance on operational issues related to the Temporary Terminal and major events in the area of TTC construction.
 - Direct the SFMTA Sign Shop to install regulatory traffic signs and perform other work under its jurisdiction.
 - Direct the SFMTA Signal Shop to test, adjust, and interconnect traffic signals;

- prepare traffic signal timing cards and perform other work under its jurisdiction.
- Direct the SFMTA Striping Shop to layout and paint traffic lane markings, and perform other work under its jurisdiction.
- Direct the SFMTA Meter Shop to install and remove parking meters and perform other work under its jurisdiction as requested or required.
- As directed by SFMTA SSD traffic engineers, SFMTA shops to perform work.

Not to Exceed Budget: \$ 440,200 .

**EXHIBIT A11
SIGNAL WORK**

Traffic Signals at Preceding Intersections

The TJPA is building a Bus Plaza within the Transit Center between Fremont and Beale Streets. The Transbay Transit Center project will install traffic signals at the entry and exit of the Bus Plaza on Beale and Fremont streets mid-block between Mission and Howard streets. The City recommends that the new traffic signals be interconnected with the existing traffic signals along these corridors in order to synchronize the new traffic signals with the existing traffic signal. Additionally, a signal on Second Street at Minna Street to allow south-bound vehicles to enter Minna Street for deliveries to the Transit Center and for drop-off/pick-up of inter-city bus passengers and others is under consideration and the TJPA may request that the SFMTA assist with this work.

I. Traffic Signals at Transbay Terminal Intersections

The Transbay Transit Center (TTC) project anticipates installing traffic signals at the following intersections:

- 1st Street and Minna Street
- 1st Street and Natoma Street
- 2nd Street and Minna Street
- Beale Street mid-block between Howard and Mission Streets
- Fremont Street and Natoma Street
- Mission Street and Shaw Alley

II. The scope of SFMTA's Traffic Engineering and Shop services is limited to the following:

- Provide City records regarding traffic counts and roadway striping.
- Review of traffic signal plans and specifications to ensure conformity with applicable City, state, and federal standards and constructability concerns.
- Review of traffic signal cost estimates.
- Attend design and field review meetings.
- Coordinate SFMTA Signal Shop support.
- Prepare legislation as needed.
- Prepare signal timing plans and program signal controllers.
- Coordinate and attend signal activation.
- Provide input for punch list activities.
- Support certification and testing of new traffic signals.

Not to Exceed Budget: \$ 300,000

EXHIBIT A12
CONCEPTUAL ENGINEERING REPORT

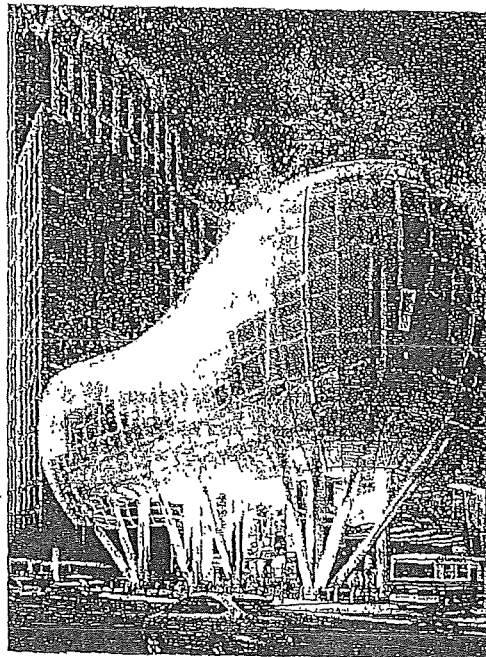
(Attached)

SFMTA

Municipal Transportation Agency

Transbay Transit Center Program

Overhead Contact System At The Bus Plaza and Adjacent Streets



Rendering courtesy of TJPA

Conceptual Engineering Report

August 2012

PREPARED BY:

SFMTA CAPITAL PROGRAMS AND CONSTRUCTION DIVISION

One South Van Ness Ave, 3rd Floor

San Francisco, CA 94103

EXECUTIVE SUMMARY

This Conceptual Engineering Report (CER) documents the scope, cost and schedule for the Overhead Contact System (OCS) and Traction Power System (TPS) within the new Transbay Transit Center and adjacent streets that will be designed by the Capital Programs and Construction Division. It is a result of investigations, studies, evaluations, and collaborative discussions between the San Francisco Municipal Transportation Agency (SFMTA) and Transbay Joint Powers Authority (TJPA).

The goal of Capital Programs and Construction's involvement in this project is to design an OCS and associated Traction Power System to support Muni's trolley coaches serving the new Transbay Transit Center, as well as provide for future Muni's service as projected in the Transit Effective Project (TEP).

The scope of work includes the construction of trolley wires, overhead special work, trolley poles, and other associated OCS hardware at the new Transit Plaza and adjacent streets: Mission Street, Beale Street, First Street, Fremont Street, and Howard Street. The scope also includes the upgrade and re-configuration of the feeder system and traction power substation components.

The construction cost for the OCS and TPS is estimated at \$5 million and is funded by TJPA.

The Design Phase will commence upon the signing off of this report. Construction is estimated to take twelve months and is anticipated to be in parallel with the Transbay Transit Center building construction.

The sign-off of this report signifies the authorization to proceed with detail design for the scope as described herein. Any subsequent modification will be considered a scope change, which requires amendment to the CER and sign-off by Management.

TABLE OF CONTENTS

Executive Summary.....	I
Table of Contents.....	II
Project Map.....	V
I. OBJECTIVE AND BACKGROUND	
A. Objective.....	1
B. Background.....	2
1. The Transbay Transit Center.....	2
2. Temporary Transbay Terminal.....	3
3. Existing (Demolished) Transbay Terminal.....	3
C. SFMTA's Roles.....	4
II. FUNCTIONAL AND OPERATIONAL CRITERIA	
A. Bus Plaza.....	4
B. Above Grade Bus Deck Level.....	5
C. Adjacent Streets.....	5
III. SCOPE OF WORK	
A. Overhead Contact System.....	7
B. Traction Power System.....	9
IV. ISSUES AND CONSTRAINTS	
A. Architectural Considerations.....	10
B. Protections of the New Transbay Transit Center.....	10
Bus Plaza Glass Awning.....	
C. Future Muni Trolley Service Expansion within the Bus Plaza.....	11
D. Maintenance of OCS within the Bus Plaza.....	11
V. CONSTRUCTION BUDGET ESTIMATE.....	12
VI. SCHEDULE.....	11
VII. ENVIRONMENTAL REVIEW.....	11

VIII.	QUALITY ASSURANCE / CONTROL	
A.	Design Phase	12
B.	Construction Phase.....	12
IX.	TESTING AND START-UP	
A.	Testing.....	13
B.	Start-Up.....	13
X.	APPENDICES	
A.	Design Criteria	
I.	Overhead Contact System (OCS)	14
A.	Hardware Criteria.....	14
B.	Trolley Wire Alignment.....	14
II.	Overhead Supports and Foundations	15
A.	Overhead Supports and Foundations	15
1.	Poles.....	15
2.	Pole Foundations.....	15
3.	Pole Replacement	15
4.	Pole Finish Treatment	15
5.	All OCS poles should be grounded	15
6.	Protection Devices	16
III.	Traction Power System	16
IV.	Design Codes and Guidelines	17
B.	Specification Outline.....	19
C.	Budgetary Cost Estimates	22
D.	Conceptual Engineering Drawings	25

LIST OF FIGURES

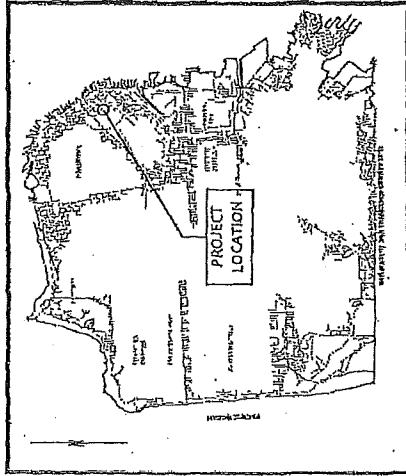
Figure 1: Cross-Section View of Transbay Transit Center1

Figure 2: Temporary Transbay Transit Center2

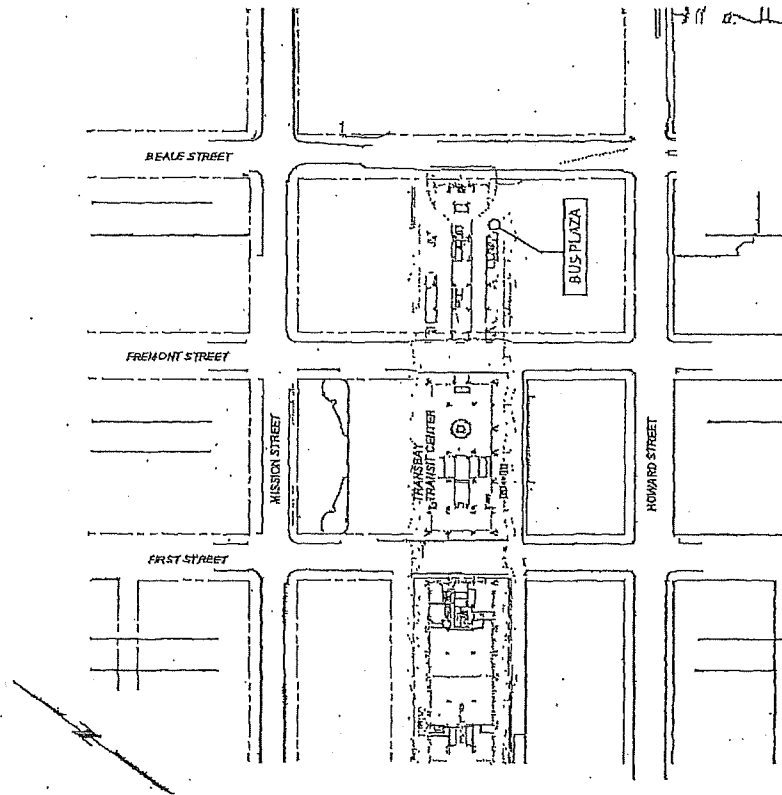
Figure 3: Muni Lane Allocations.....7

Figure 4: New OCS Work..... 10

Figure 5: Typical View of Awning Protection Bars..... 11



LOCATION MAP



VICINITY MAP

Transbay Transit Center Program
Overhead Contact System

I. OBJECTIVE AND BACKGROUND

A. OBJECTIVE

The primary purpose of this project is to design and construct an OCS and associated TPS to support Muni's trolley coaches serving the Transbay Transit Center. The work is performed in four phases:

1. Temporary Terminal
2. Existing Transbay Transit Terminal Demolition
3. Traction Power Study
4. New Transbay Transit Center

For each phase, SFMTA was tasked with the following work:

Task	Facility	Description	Status
1	Temporary Terminal	Provide planning, design and construction support services for the re-configuration of OCS to support Muni trolley bus operation at the Temporary Terminal.	Completed
2	Existing Transbay Transit Terminal Demolition	Provide planning, design and construction support services for the demolition of existing OCS at the existing terminal and provide design of temporary OCS.	Completed
3	Traction Power Study	Perform traction power analysis to evaluate the impact to Muni's traction power system caused by the relocation of the terminal from Mission/First/Fremont streets to Mission/Fremont/Beale streets. Provide recommendations for traction power upgrade. ¹	Completed
4	New Transbay Transit Center	Provide planning and design services for the final OCS configuration and Traction Power System within the bus plaza and the adjacent streets required by current and future Muni trolley coach operation.	Current task and scope for this report

¹ Feeder Circuit Analysis Report, Transbay Terminal Project, June 2008

As shown above, three of the four tasks have been completed. This report will focus on Task 4, the design and construction of OCS and Traction Power System for the new Transbay Transit Center.

B. BACKGROUND

The Transbay Transit Center Project, headed by the Transbay Joint Powers Authority (TJPA), is a transportation and housing project that will transform downtown San Francisco and the San Francisco Bay Area's regional transportation system by creating a "Grand Central Station of the West" in the heart of a new transit-friendly neighborhood. The first phase of the Transbay Transit Center project will create a new five-story Transit Center building and an interim bus terminal facility, the Temporary Transbay Terminal.

1. The Transbay Transit Center

The proposed Transbay Transit Center will replace the recently demolished old Transbay Terminal at First Street and Mission Street with a modern regional transit hub. This transit hub will connect eight Bay Area counties and the State of California through 11 transit systems: AC Transit, BART, Caltrain, Golden Gate Transit, Greyhound, MUNI, SamTrans, WestCAT Lynx, Amtrak, Paratransit and future High Speed Rail from San Francisco to Los Angeles/Anaheim.

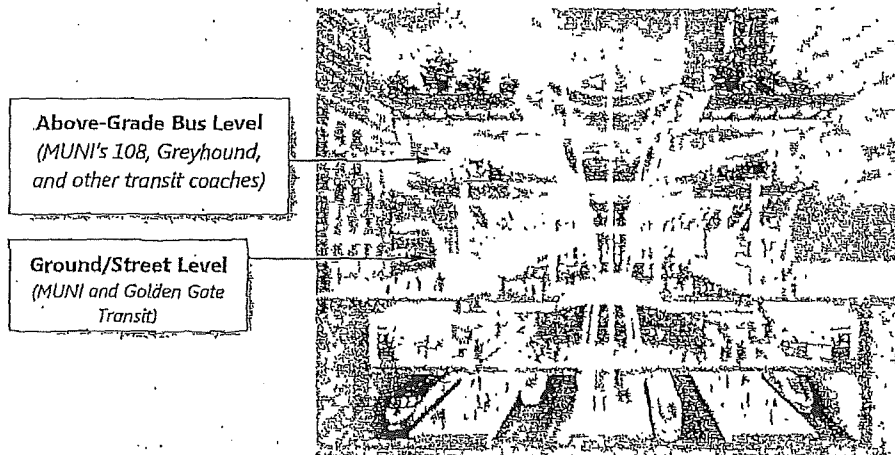


Figure 1: Cross Section View of Transbay Transit Center
Rendering courtesy of TJPA

It will create a new five-story Transit Center with a rooftop park, an above-grade bus level, a ground-floor, a concourse, and a

below-grade rail level which will serve Caltrain and future California High Speed Rail (See Figure 1). The ground floor or street level will serve as the primary circulation hub and includes a covered bus plaza located at the eastern end of the building between Fremont Street and Beale Street, serving MUNI, SamTrans, and Golden Gate Transit buses.

2. Temporary Transbay Terminal

Since the proposed multi-mode Transbay Transit Center will occupy the same location as the recently demolished old Transbay Terminal, an interim bus terminal facility, the Temporary Transbay Terminal was constructed to provide continuous uninterrupted passenger service during this transition period. This terminal is located on the block bounded by Main Street, Folsom Street, Beale Street and Howard Street (See Figure 2). This temporary terminal was opened in late 2010 and is expected to be in use until the completion of the new Transbay Transit Center, scheduled for 2017.

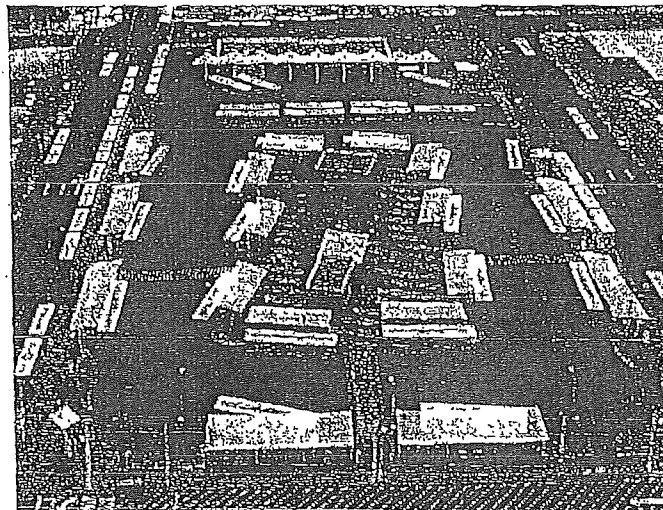


Figure 2: Temporary Transbay Transit Center
Rendering courtesy of TJPA

3. Existing (Demolished) Transbay Terminal

The demolition of this terminal located at Mission Street between First Street and Fremont Street was completed in early 2011. This old terminal used to serve as a terminus for the 5-Fulton and the

discontinued 6-Parnassus trolley lines as well as the 38- Geary and 38L – Geary motor coach lines.

C. SFMTA's ROLES

The overall design and construction of the Transbay Transit Center infrastructure is being managed by the TJPA and performed by its various design consultants and contractors. As part of the TJPA and City Departmental efforts, SFMTA is participating in the collaborative planning and design in the project's infrastructure and street improvements. Per the intergovernmental agreements between the TJPA and SFMTA dated July 21, 2009² and July 19, 2007³, SFMTA will provide planning input, engineering services, and construction support services for the design and construction of MUNI's Overhead Contact System (OCS), Traction Power System, and traffic related work. The Capital Programs and Construction Division is involved in OCS and Traction Power System design and construction support. Whereas the Sustainable Streets Division is involved in planning, traffic routing, and traffic signal design.

II. FUNCTIONAL AND OPERATIONAL CRITERIA

The functional and operational criteria for the new Transbay Transit Center, including the bus plaza and the adjacent streets leading to the Transbay Transit Center, are as follows:

A. BUS PLAZA (See Figure 4)

The new Transbay Transit Center bus plaza will serve as a terminus for the following MUNI trolley coaches:

MUNI Line	Coach Type	Proposed Lane Allocation (See Figure 4)
5-Fulton 5-Fulton L (Express)	Trolley	3 and 4
38-Geary 38L-Geary (future BRT)	Motor	5, 6, and 7
71-Noriega 71L-Noriega (Express)	Motor	8

² Contract CS-159, Agreement between the SFMTA and the Transbay Joint Powers Authority (TJPA)

³ Contract CS-150, Agreement between the SFMTA and the Transbay Joint Powers Authority (TJPA)

Lane 8 will also serve as a by-pass lane for trolley lines 5-Fulton and 5L-Fulton if Lanes 3 and 4 are blocked or unavailable for other reasons.

All coaches will enter the new bus plaza from Beale Street south of Mission Street, and will exit the terminal going north along Fremont Street, back towards Mission Street.

Lanes 1 and 2 are set aside for Golden Gate Transit service to the North Bay via San Francisco surface streets.

B. ABOVE GRADE BUS DECK LEVEL

MUNI Line 108-Treasure Island, serviced by motor coaches, will terminate on the bus deck level of the Transbay Transit Center, allowing it to connect directly to ramps leading to/from the Bay Bridge.

C. ADJACENT STREETS

1. MUNI Lines 38/38L-Geary, and 71/71L-Noriega will travel southbound on First Street from eastbound Market Street and then turn left eastbound onto Mission Street. They will continue eastbound on Mission Street then turn right onto Beale Street. From Beale Street, they will enter the bus plaza using the southern-most driveway.
2. MUNI Lines 5-Fulton and 5L-Fulton will have the same route as the 38/38L-Geary and 71/71L-Noriega; but, will travel eastbound on Mission Street using its own new trolley wires separate from those used by the 14-Mission trolley line. These coaches will enter the bus plaza using the northern-most driveway.
3. MUNI Line 14-Mission will have a new island stop on Mission Street adjacent to the Transbay Transit Center between First Street and Fremont Street.
4. For emergency and other non-revenue by-pass operation function, an OCS loop around the Transbay Transit Center bus plaza is provided to support trolley coach operation. This loop will go southbound on Beale Street from the bus plaza, right to westbound Howard Street, and right to northbound Fremont Street.

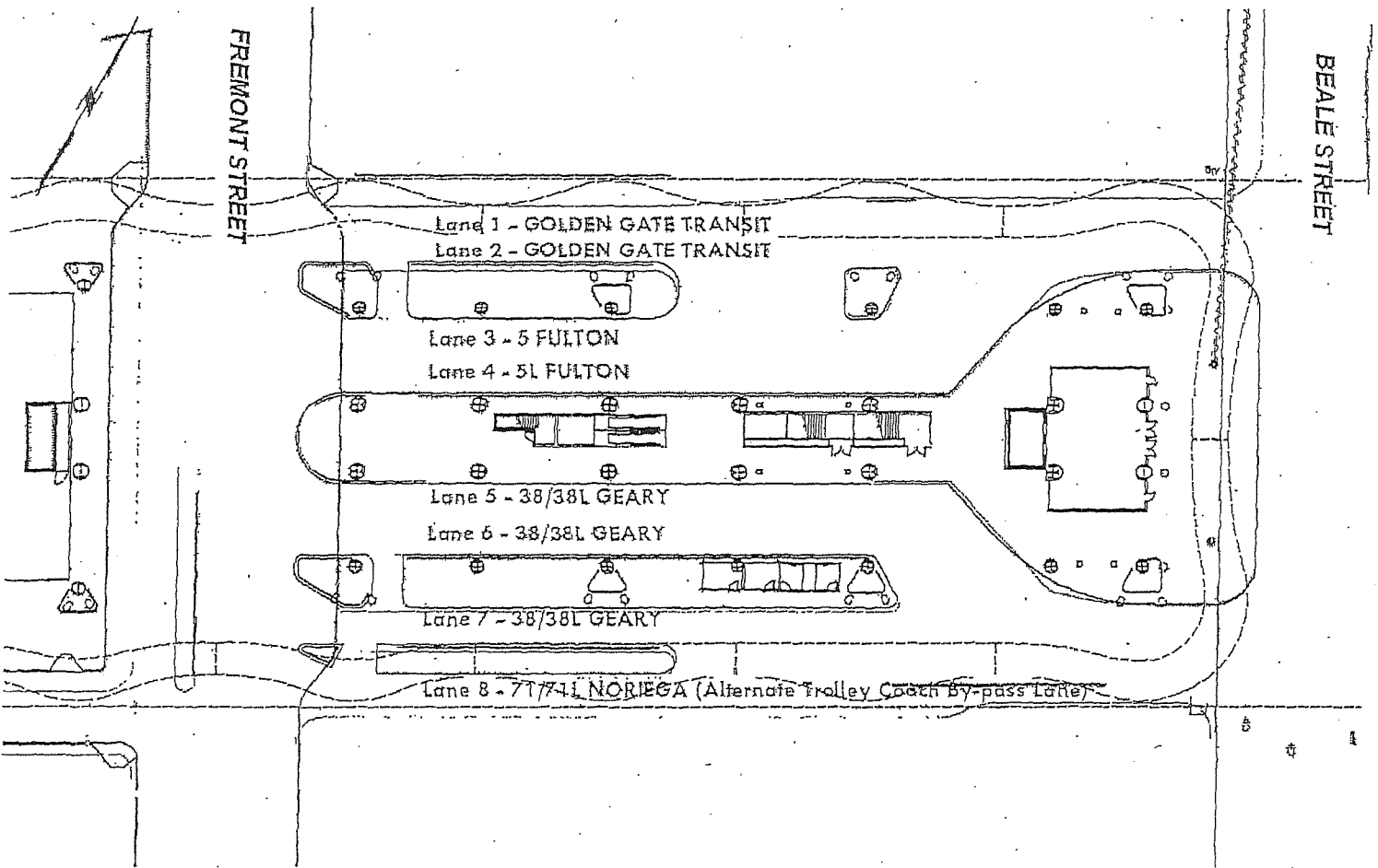


Figure 3: Muni Lane Allocations

III. SCOPE OF WORK

The scope of work is based on SFMTA's current and future functional and operational needs. The work includes (See Figure 4):

A. OVERHEAD CONTACT SYSTEM

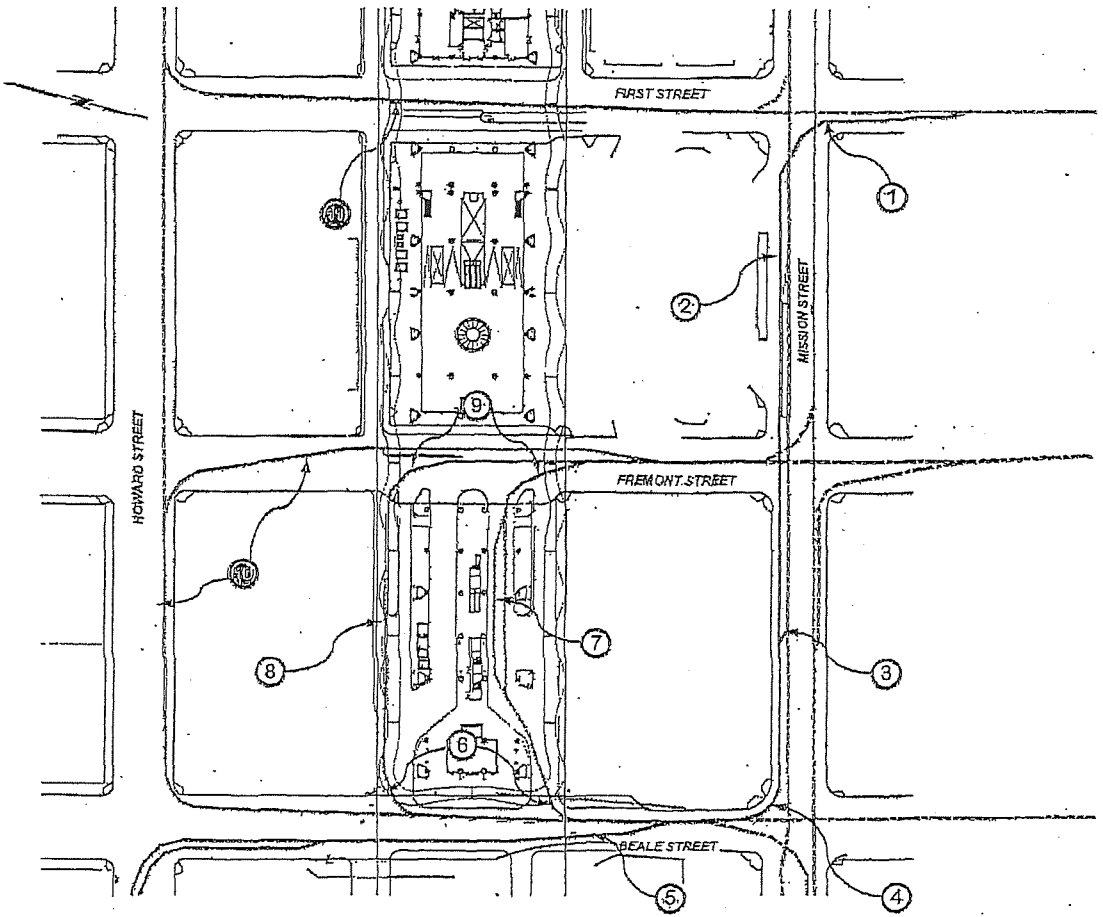
1. Provide a new set of left turn trolley wires from southbound First Street to eastbound Mission Street.
2. Provide a new parallel set of eastbound trolley wires on Mission Street between First Street and Beale Street.
3. Add new OCS crossing from the new eastbound Mission Street trolley wires to the existing parallel eastbound Mission Street trolley wires. The OCS crossing will be located mid-block on Mission Street between Fremont Street and Beale Street.
4. Redesign and reconstruct the existing eastbound left turn OCS special work from Mission Street to Beale Street. The turning trolley wires will start from the new parallel set of eastbound trolley wires instead of from the existing eastbound Mission Street trolley wires use by the 14-Mission coaches.
5. Provide new OCS special work with advance inductive switches from Beale Street into the north and south entries of the bus plaza.
6. Provide new OCS special work within the bus plaza as following:
 - a. Lanes 3 & 4
 - (1) Trolley wires, universal spacer bars, curve segments and inductive switches attached directly to the ceiling under the lower ceiling of the bus plaza for both lanes.
 - (2) Insulated trolley trough or equivalent protection above the OCS to comply with CPUC GO95 requirements⁴. Insulated trolley trough design will be by others.

⁴ State of California, General Order No.95, Rule 74.4E

- b. Lane 8: Trolley wires and supporting bracket arms attached to trolley poles
- 7. Provide new OCS special work with trailing switches from the north and south exits of the bus plaza to northbound Fremont Street.
- 8. Redesign and reconstruction the existing right turn OCS special work from Beale Street to Howard Street.
- 9. Provide a new right turn OCS special work from Howard Street to Fremont Street.
- 10. Provide nine new poles and replace 14 undersized overhead poles to support the new OCS.
- 11. Review and coordinate OCS work with Transbay Transit Center Building System and Finishes.

B. TRACTION POWER SYSTEM

- 1. Provide four new positive and four new negative feeder cables along Mission Street between Anthony Street and Beale Street.
- 2. Provide new positive and negative feeder riser cables & conduits to feed the OCS.
- 3. Upgrade existing DC feeder breakers to increase breaker capacity to handle additional loading.
- 4. Provide new sectionalizing switch to enable de-energizing of the OCS at the Transbay Transit Center bus plaza for maintenance.
- 5. Replace existing feeder risers when poles are replaced.



- LEGEND**
- LOW CEILING AREA – Direct OCS attachment to ceiling
 - EXISTING TROLLEY WIRES
 - NEW TROLLEY WIRES
 - ① NEW RIGHT TURN TROLLEY WIRES (FIRST ST TO MISSION ST)
 - ② NEW PARALLEL TROLLEY WIRES
 - ③ NEW CROSSOVER TROLLEY WIRES
 - ④ RE-CONFIGURE EXISTING RIGHT TURN TROLLEY WIRES
 - ⑤ RE-CONFIGURE EXISTING LEFT TURN TROLLEY WIRES
 - ⑥ NEW ENTRY TROLLEY WIRES
 - ⑦ LAYOVER TROLLEY WIRES (Lanes 3 and 4)
 - ⑧ LAYOVER TROLLEY WIRES (Lane 8)
 - ⑨ NEW EXIT TROLLEY WIRES
 - ⊕ NEW NON-REVENUE OR EMERGENCY BY-PASS LOOP
 - ⊖ NEW TROLLEY WIRE WITH SPANS SUPPORTED BY COLUMNS

Figure 4: New OCS Work

856
3268

IV. ISSUES AND CONSTRAINTS

A. ARCHITECTURE CONSIDERATIONS

In an effort to blend in the OCS support elements within the bus plaza, the architects, in working with its building structural engineers, will provide architecturally designed structural OCS supports at selected building columns to allow OCS span wire attachments. These will be in lieu of typical eyebolts used for building columns.

Within the building's center low ceiling area, vertical fixed supports will be used to support the OCS rather than guy wires.

In addition, trolley poles will be combined with streetlight and traffic signals to reduce the number of poles where possible. Span wires, guy wires, and other hardware will be configured to reduce visual impact where feasible.

B. PROTECTION OF THE NEW TRANSBAY TRANSIT CENTER BUS PLAZA GLASS AWNING

One of the major concerns of running trolley coaches into the bus plaza area is the possibility of bus collector pole hitting the glass awning above if the collector pole de-wire. Muni's trolley coaches (BTI and Flyer) have a trolley collector pole retriever system that is set to automatically lower the collector pole during a de-wirement event.

However, there are still concerns of an unintended contact

between the bus collector pole and the glass awning above during a de-wirement event where the trolley pole retriever system malfunctions. Although the glass panels are designed to withstand substantial impact load, the consensus is to protect the glass panels at strategic locations where they are more vulnerable to be hit by errant de-wired trolley collector poles. TJPA building design team has incorporated into their glass awning design a protection system consisting of protruding insulated stainless steel bars from the glass panels to protect against errant trolley bus pole hitting the glass awning. (See Figure 5)



Figure 5: Typical View of Awning Protection Bars
(Shown in orange color)
Rendering courtesy of TJPA

C. FUTURE MUNI TROLLEY SERVICE EXPANSION WITHIN THE BUS PLAZA

As previously mentioned, lanes 3, 4 and 8 will have a complete OCS for Muni's trolley buses. To accommodate the potential expansion of Muni trolley bus service at Lanes 5 and 6 in the future, a structural support system, similar to those that are supporting the OCS at, will be planned at the ceiling above Lanes 5 and 6 (See Figure 4). This feature will allow installation of an OCS in Lanes 5 and 6 without having to make major modification to the bus plaza ceiling.

D. MAINTENANCE OF OCS WITHIN THE BUS PLAZA

The Transbay Transit Center, including the bus plaza, is under the jurisdiction of TJPA. TJPA intends to negotiate, as part of a Use and Lease Agreement (ULA) with SFMTA, an OCS maintenance agreement to maintain the OCS and TPS. Maintenance of the OCS and TPS requires specialized overhead line crews and equipment that is only available at Muni. The ULA will include the OCS within the bus plaza and at other areas of the Transbay Transit Center, such as the building bridge over First Street and Fremont Street. The ULA will include emergency repair and preventative maintenance. It will also cover requests by TJPA's to de-energization the OCS to accommodate its routine building maintenance activities, such as re-lamping, inspection and testing of fire sprinklers etc. that require the use trucks and lifts that encroach into the OCS energized zone.

V. CONSTRUCTION COST ESTIMATE

The costs of engineering and construction support services provided by the SFMTA are reimbursable by TJPA under the intergovernmental agreements. The construction of the OCS and related work at the New Transbay Transit Center and the adjacent streets will be funded and managed by TJPA. The estimated construction cost for the OCS and TPS, including contingency, is \$5 million. (See appendix C for cost breakdown).

VI. SCHEDULE

The OCS for the bus plaza and adjacent streets is planned for operation in 2017.

VII. ENVIRONMENTAL REVIEW

The Environmental Impact Report (FEIS/EIR) for the new Transbay Transit Center (SCH95063004) was approved by the City and County of San Francisco in April 2004. The report includes references to the modification of the OCS as generally described in this CER on streets or portions of streets that currently have functional

OCS, which include Mission Street from First to Beale streets, Beale Street from Mission to Howard Street, First Street from Mission to Howard streets, as well as Fremont Street from Minna to Mission streets. In other words, modifications to these retained segments have been environmentally approved.

A totally new section of Overhead wires, about 350 feet on Fremont Street from Howard Street to Minna Street (the exit from the bus plaza) will require an amendment to the Transit Center FEIR/EIS for environmental clearance. This amendment will be pursued by TJPA and very likely be granted prior to construction of the new OCS for this section of Fremont Street.

VIII. QUALITY ASSURANCE / CONTROL

The overall program quality control and quality assurance plan is implemented at both the design and construction phase.

A. DESIGN PHASE

During the design phase, the quality control/quality assurance (QA/QC) plan for this project consists of two components, the project team's quality control plan, and SFMTA Capital Programs and Construction Division's quality assurance oversight.

1. Project Team Quality Control Plan – Design Phase

Quality Control for the design phase consists of the process of preparing construction documents, which include the plans, specifications and expected cost estimate that accomplish the following criteria:

- a. Meet the needs of the end user
 - b. Meet applicable code and design requirements
 - c. Plans and specifications are biddable
 - d. Plans and specifications are constructible
2. To meet the aforementioned requirements, the design will proceed in accordance to the guidelines set forth in SFMTA Capital Programs and Construction Division's Project Operations Manual. In addition to the internal project team controls set forth for a project, the contract documents will be distributed to the various stakeholders and governing jurisdictions for review and comments.

B. CONSTRUCTION PHASE

As this project will be part of a TJPA bid and construction package, the QA/QC will be implemented by the TJPA's and its Construction Management/General Contractor's (CM/CG) QA/QC Procedures in accordance with TJPA Quality Management System (QMS).

IX. TESTING AND STARTUP

A. TESTING.

Before accepting the constructed work, the Muni Overhead Line Department, in conjunction with Capital Programs and Construction, and TJPA's CMGC personnel will assist the Resident Engineer in inspecting the completed work and identifying any deficiencies. In addition, test runs through the entire limits of the project will be made by trolley coaches at speeds directed by the Engineer to identify any operational deficiencies. The contractor is required to correct all deficiencies identified to the satisfaction of the Engineer before acceptance of the system.

B. START-UP

A startup plan will be coordinated and developed during the detailed design and construction phases of the project. It will involve coordination with Operations, Safety, Scheduling, and other stakeholders and include public outreach, operator training, bus stop relocations and other activities.

APPENDIX A – DESIGN CRITERIA

I. Overhead Contact System (OCS)

Overhead hardware should be products of manufacturers regularly engaged in the production of such material and equipment, and is of the manufacturer's latest design approved by Muni. This is to ensure compatibility and interchangeability with the current Muni overhead hardware and spare parts. The followings are specific hardware characteristics for the project:

A. Hardware Criteria

1. Overhead Contact System shall be a rigid type system similar to Ohio Brass (OB) / Westinghouse Air Brake Company (WABCO) / Impulse NC, Inc. / Phoenix Mining Company.
2. Trolley wire shall be bronze, grooved, alloy 80 conforming to ASTM B9-90. The following characteristics will be used:

Description	Muni Standards
Trolley Wire Size	#4/O or #2/O
#2/O Wire Tension @ 15.6°C	2000 lbs. per wire
#4/O Wire Tension @ 15.6°C	3000 lbs. per wire
Trolley Wire Height	19 ft. 6 in. ± 3 in. 18 ft. 6 in. ± 3 in. where appropriate
Trolley Wire Spacing	2 ft.
Axis of Trolley Wire pair from curb unless otherwise noted	14 ft. or 16 ft. per Muni Guideline
Maximum Unsupported Wire Span	100 ft

3. Replace overhead components and trolley wires that have a service life of less than 50%.
 4. Leading Switch shall be 15° Induction Controlled unless otherwise noted.
- B. Trolley Wire Alignment shall be in accordance with guidelines and criteria established by Municipal Railway High Performance Trolley Coach Overhead Minimum Standards.

II. Overhead Supports and Foundations

A. Overhead Supports and Foundations

1. Poles

- a. Steel poles will be in accordance with Muni Standard Drawing CL-7971, Rev. 2. For all standard applications, Pole Types 761N, 765N, 767 and 770 shall be used unless otherwise noted.
- b. New poles will be in line with property line between adjacent properties and avoid fronting doors, windows, and access ways wherever possible. Where an existing pole is replaced with a new pole, the new pole will be at approximately 4 feet away from the present location. At intersections, the poles should be as clear of the corner as possible to avoid being hit by right turning trucks. Wherever practical, locate poles away from bus zones.
- c. Wherever possible, poles will be combined with streetlight and traffic signals to reduce the number of poles. Poles with feeder risers inside will not be combined with traffic signals.

2. Pole Foundations

- a. Existing foundations will be removed to a depth of 3 feet below the finished grade. Where a pole has to be replaced in place due to space constraint, the existing foundation will be removed entirely and new foundation installed in place.
- b. New standard pole foundations will be in accordance with MUNI Standard Drawing CL-7971, Rev. 2. Where special foundations are required, they will be designed according to the current codes and regulations.

3. Pole Replacement

Replace City-owned wood poles, concrete poles, and steel poles that are bending, leaning, deeply pitted, or with rust and/or holes along the shaft or base.

4. Pole Finish Treatment

New steel pole shall have a galvanized finish (not painted) unless otherwise required by urban design requirements or streetscape master plan. Existing steel trolley pole shall be painted to match galvanizing or existing coating color.

5. All OCS poles should be grounded.
6. Protection Devices
 - a. Wood troughs, preformed glass / epoxy shields, or approved apparatus of a custom design if necessary, will be used wherever the overhead support structure shall be protected against possible arcing conditions.
 - b. Guy wire span supports shall include tree guard or similar item to protect against trolley shoe snags during de-wirement from a trolley vehicle.

III. Traction Power System

- A. Traction power cable for both feeder and riser cable shall be rated 2000 Volts, 90 degree C dry/wet. Cable shall have single, copper conductor with class B stranding per ASTM B8. Cable shall be unshielded, with EPR insulation and Hypalon jacket. Cable shall meet the requirements of NEMA WC-8 and UL-44.
- B. Multi-tap splice connectors shall be submersible rated for direct burial or below grade boxes, and shall be sized to connect conductors through 1000 kcmil with two-hole NEMA compression lugs. The connectors shall meet the performance requirements of ANSI C119.1, ANSI C119.4, and the Western Underground Committee Guide 2.5. The connectors shall be fabricated of the following material:
 1. Body - Tin plated copper
 2. Hardware - Stainless Steel
 3. Insulation - EPDM Rubber

IV. Design Codes and Guidelines

- A. Design of the overhead system, electrical system, and civil work will be based on the latest applicable provisions of the following codes, standards and regulations. Where more than one code, standard, or criterion is applicable, the most restrictive shall govern, except as indicated in this document.

- B. The codes, standards, and regulations include, but not limited to, the following:
1. California Public Utilities Commission (CPUC)
 - a. General Order No. 95, Rules for Overhead Line Construction.
 - b. General Order No. 128, Rules for Construction of Underground Electric Supply and Communications Systems.
 2. MUNI High Performance Trolley Coach Overhead Wire Minimum Standards.
 - a. Design standards and criteria developed on previous Muni projects.
 - b. City of San Francisco Standard Plans and Specifications.
 - c. Code of Federal Regulations (CFR),
 - (1) Title 29, Part 1910, Occupational Safety and Health Standards.
 - (2) Title 49, Parts 27, 37, and 38, American with Disabilities Act (ADA).
 - d. California Occupational Safety and Health Administration (CAL/OSHA).
 - e. Occupational Safety and Health Act of 1970 (OSHA).
 - f. California Code of Regulation (CGR)
 - (1) Title 8; Industrial Relation, Subchapter 4, Construction Safety Orders.
 - (2) Title 8; Industrial Relation, Subchapter 5, Electrical Safety Orders.
 - g. American National Standards Institute (ANSI) C2, National Electric Safety Code.
 - h. American Public Transit Association (APTA) -- Rapid Transit Standards.

- i. National Electric Code (NEC).
- j. Illuminating Engineering Society (IES) Lighting Ordinances.
- k. Insulated Power Cable Engineer's Association (IPCBA).
- l. Telecommunications Industry Association (TIA).
- m. Underwriters Laboratories (UL).
- n. National Electrical Manufacturers Association (NEMA).
- o. San Francisco County Ordinance Code.
- p. San Francisco Municipal Codes.
- q. Uniform Building Code (UBC).
- r. Uniform Fire Code (UFC).

APPENDIX B – SPECIFICATION OUTLINE

DIVISION 1 - GENERAL REQUIREMENTS

(This section provided by TIPA as part of the overall contract)

01110	SUMMARY OF WORK
01210	ALLOWANCES
01220	PAYMENT
01310	COORDINATION
01312	PROJECT MEETINGS
01315	FIELD SUPERINTENDENT
01317	FIELD ENGINEERING
01320	PROJECT PLANNING, SCHEDULING AND CONTROL
01330	SUBMITTALS
01354	HEALTH AND SAFETY CRITERIA
01410	REGULATORY REQUIREMENTS
01420	REFERENCES
01450	QUALITY CONTROL
01500	CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS
01510	TEMPORARY UTILITIES
01520	TEMPORARY CONSTRUCTION
01570	TRAFFIC REGULATION
01580	IDENTIFICATION SYSTEMS AND SIGNS
01590	CITY FACILITIES
01600	MATERIALS AND EQUIPMENT
01630	PRODUCT OPTIONS AND SUBSTITUTIONS
01720	PROTECTION OF PROPERTY
01750	START-UP AND TESTING
01770	CONTRACT CLOSEOUT
01782	CONTRACT RECORD DOCUMENTS
01784	OPERATION AND MAINTENANCE MANUALS

DIVISION 2 – SITE CONSTRUCTION

02050	DEMOLITION
02200	EARTHWORK

DIVISION 3 – CONCRETE

03300	CAST-IN-PLACE CONCRETE
-------	------------------------

DIVISION 4 – MASONRY - NOT USED

DIVISION 5 - METALS

- 05080 FACTORY-APPLIED METAL COATINGS
- 05510 TAPERED STEEL TROLLEY POLES AND ACCESSORIES

DIVISION 6 THRU 8 - NOT USED

DIVISION 9 - FINISHES

- 09910 PAINTING TROLLEY POLES AND SIGNALS

DIVISION 10 THRU 15 - NOT USED

DIVISION 16 - ELECTRICAL & OVERHEAD WORK

- 16050 BASIC ELECTRICAL MATERIALS AND METHODS
- 16110 RACEWAYS
- 16120 WIRE AND CABLE
- 16125 TRACTION POWER CABLE
- 16130 JUNCTION AND PULL BOXES
- 16450 GROUNDING
- 16610 BASIC OVERHEAD MATERIALS AND METHODS
- 16620 OVERHEAD CONTACT SYSTEM - SPECIAL WORK
- 16630 OVERHEAD CONTACT SYSTEM - TESTING AND ACCEPTANCE

APPENDIX C – BUDEGATARY COST ESTIMATE

Transbay Transit Center Program
 Overhead Contact System

Overhead Contact System Estimate Cost

Description		Unit	Comments	Total	Unit Price	Amount
OV-01	Special Work: First St and Mission St	LS	See Unit Price Sheet	1	\$184,000	\$184,000
OV-02	Special Work: Fremont St and Mission St	LS	See Unit Price Sheet	1	\$221,600	\$221,600
OV-03	Special Work: Beale St and Mission St	LS	See Unit Price Sheet	1	\$91,700	\$91,700
OV-04	Special Work: Beale St btw Mission St and Bus Plaza	LS	See Unit Price Sheet	1	\$229,600	\$229,600
OV-05	Special Work: Beale St btw Bus Plaza and Howard St	LS	See Unit Price Sheet	1	\$193,400	\$193,400
OV-06	Special Work: Howard St btw Fremont St and Beale St	LS	See Unit Price Sheet	1	\$209,000	\$209,000
OV-07	Special Work: Fremont St btw Howard St and Bus Plaza	LS	See Unit Price Sheet	1	\$71,400	\$71,400
OV-08	Special Work: Fremont St btw Bus Plaza and Mission St	LS	See Unit Price Sheet	1	\$163,600	\$163,600
OV-09	Provide 4/0 Trolleywire	LF	See Unit Price Sheet	8700	\$30	\$261,000
OV-10	Provide Universal Spacer Bar	LF	See Unit Price Sheet	650	\$50	\$32,500
OV-11	Provide Single Trolley Tangent Span	EA	See Unit Price Sheet	4	\$5,300	\$21,200
OV-12	Provide Tangent Span	EA	See Unit Price Sheet	0	\$5,600	\$0
OV-13	Provide Inverted Span	EA	See Unit Price Sheet	0	\$8,100	\$0
OV-14	Provide Feed Span	EA	See Unit Price Sheet	0	\$8,700	\$0
OV-15	Provide Equalizer Span	EA	See Unit Price Sheet	0	\$8,300	\$0
OV-16	Provide Auxiliary Equalizer Span	EA	See Unit Price Sheet	0	\$6,400	\$0
OV-17	Provide Bracket Arm and Span	EA	See Unit Price Sheet	0	\$7,800	\$0
OV-18	Provide Steel Pole Type 770	EA	See Unit Price Sheet	36	\$18,100	\$651,600
OV-19	Provide Pole Foundation for 770 (183 kip-ft)	EA	See Unit Price Sheet	24	\$7,500	\$180,000
OV-20	Provide Special Foundation	EA	See Unit Price Sheet	8	\$10,000	\$80,000
OV-21	Prospect Hole for Depth up to 3 ft	EA	Contract 1242 - 5 Fulton Ductbank Construction Project - BI-OV12 average \$1400 (2010)	7	\$1,600	\$11,520
OV-22	Prospect Hole for Depth Greater than 3 ft	EA	Contract 1242 - 5 Fulton Ductbank Construction Project - BI-OV13 average \$2200 (2010)	4	\$2,500	\$10,000

869
3281

Description		Unit	Comments	Total	Unit Price	Amount
OV-23	Remove Existing Trolley/Streetlight Pole and Foundation 3 ft below grade	EA	See Unit Price Sheet	13	\$3,100	\$40,300
OV-24	Remove Existing Trolley/Streetlight Pole and Foundation Entirely	EA	See Unit Price Sheet	1	\$6,100	\$6,100
OV-25	Paint Anti-Graffiti Coating on existing steel trolley pole	EA	Contract 1242 - 5 Fulton Ductbank Construction Project - BI-OV15 average \$1200 (2010)	0	\$1,400	\$0
OV-26	OCS Spare Parts	LS	See Unit Price Sheet	1	\$265,852	\$265,852
					Engineer's Estimate:	\$2,924,372
					30% Contingency	\$877,312
					Say:	\$3,810,000 (2013 Dollar)

Assumptions:

1. Decorative fixture cost not included.
2. Trolley pole grounding cost not included.
3. Traffic Routing cost not included.
4. Special Pole Foundation cost not included.
5. Unit Price escalated to mid-construction (2013).

870
3282

Traction Power System Estimate Cost

Description		Unit	Total	Unit Price	Amount
TP-01	750 kcmil Traction Power Feeder Cable	LF	15400	\$35	\$539,000
TP-02	500 kcmil Traction Power Riser Cable	LF	1850	\$30	\$55,500
TP-03	2" Galvanized Rigid Steel Conduit	LF	1700	\$100	\$170,000
TP-04	4000A DC Feeder Breakers	EA	2	\$60,000	\$120,000
Engineer's Estimate:					\$884,500
30% Contingency					\$265,350
Say:					\$1,150,000 (2013 Dollar)

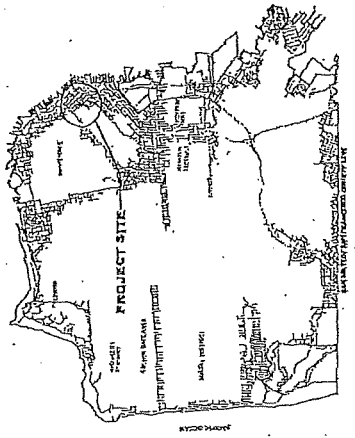
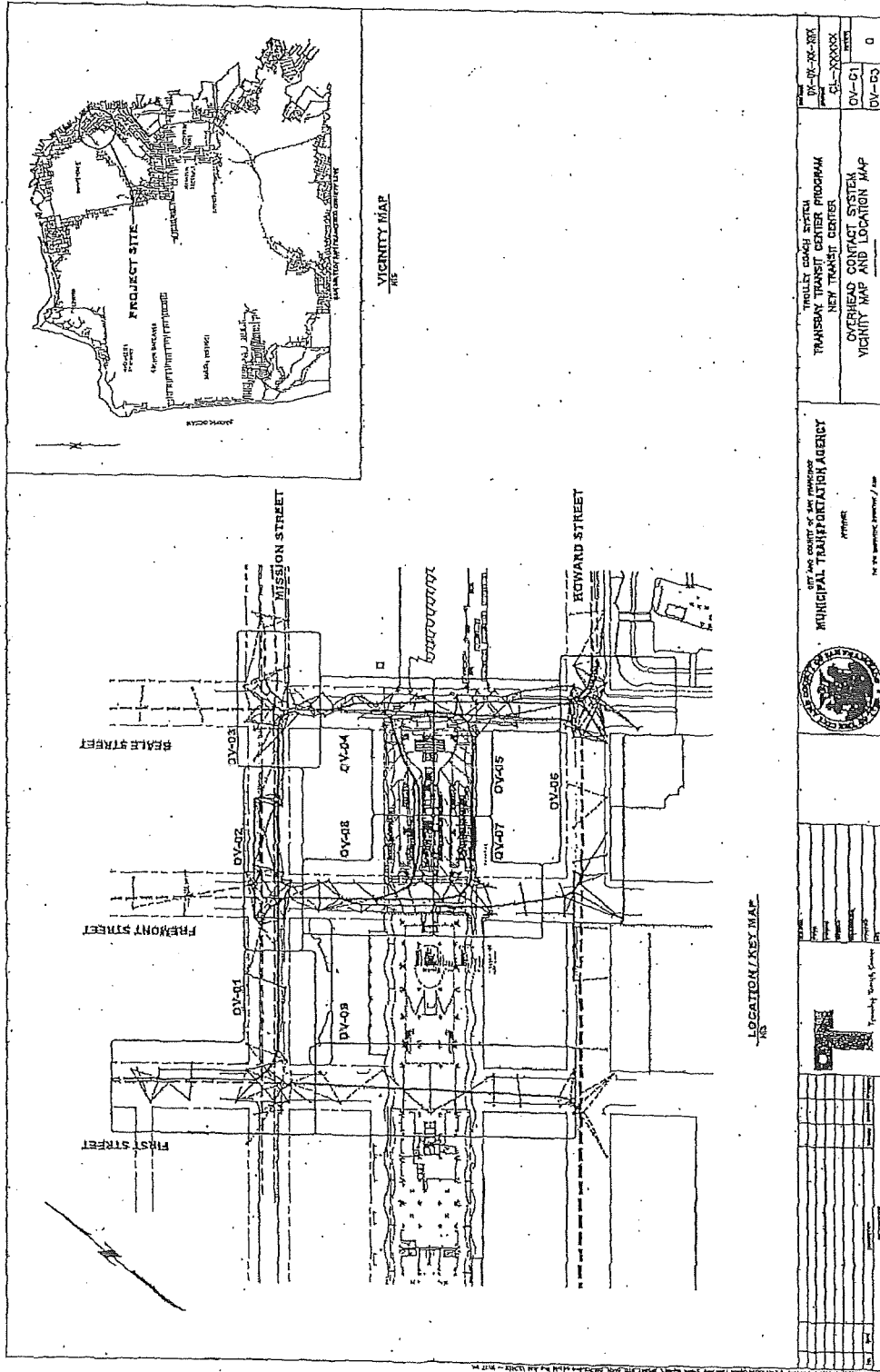
Assumptions:

1. Ductbank by others
2. Traffic Routing cost not included.

83283

Transbay Transit Center Program
Overhead Contact System

APPENDIX D – CONCEPTUAL ENGINEERING DRAWINGS



VICINITY MAP

LOCATION / KEY MAP

		CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY PROJECT		TRUCKEE SECTION TRANSAN TRANSIT CENTER PROGRAM NEW TRANSIT CENTER		DP-01-02-03 01-XXXX 01-01 01-03
		LOCATION / KEY MAP		OVERHEAD CONTACT SYSTEM VICINITY MAP AND LOCATION MAP		01-01 01-03

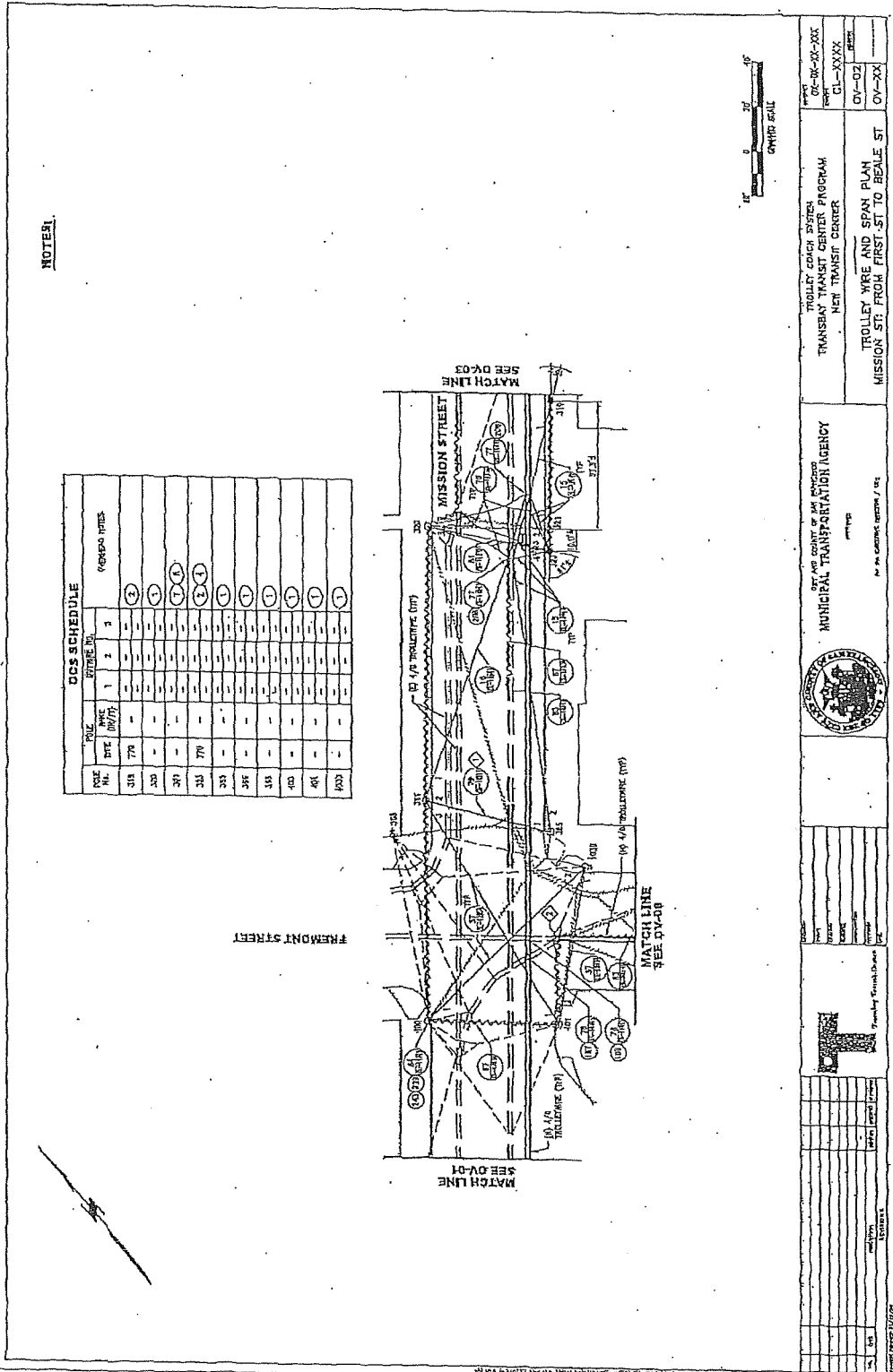
GENERAL NOTES

1. NOT USED.
2. PROVIDE SUFFICIENT TOLERANCES AND DIMENSIONS TO ALLOW FOR MANUFACTURING VARIATIONS.
3. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
4. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
5. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
6. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
7. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
8. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
9. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
10. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
11. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
12. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
13. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
14. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
15. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
16. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
17. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
18. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
19. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
20. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
21. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
22. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
23. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
24. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
25. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.

OVERHEAD NOTES

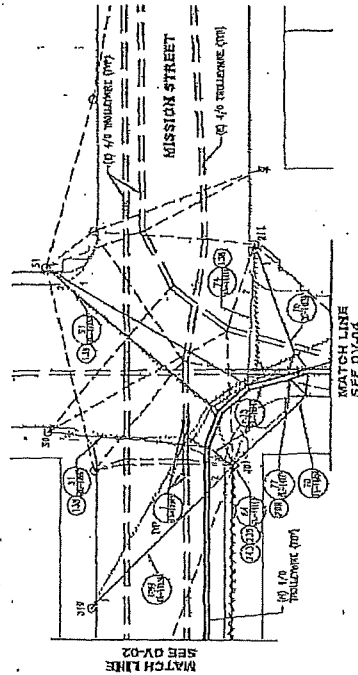
1. CHECK FOR CLEARANCE OF ALL OVERHEADS.
2. PROVIDE SUFFICIENT TOLERANCES AND DIMENSIONS TO ALLOW FOR MANUFACTURING VARIATIONS.
3. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
4. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
5. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
6. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
7. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
8. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
9. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
10. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
11. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
12. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
13. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
14. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
15. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
16. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
17. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
18. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
19. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
20. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
21. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
22. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
23. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
24. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
25. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.

	MUNICIPAL TRANSPORTATION AGENCY TRANSIT CENTER PROGRAM NEW TRANSIT CENTER	GENERAL NOTES AND OVERHEAD NOTES
PROJECT NO. 100-01-001 DRAWING NO. 100-01-001-001	SHEET NO. 100-01-001-001-001	DATE: 01-01-00



NOTES:

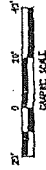
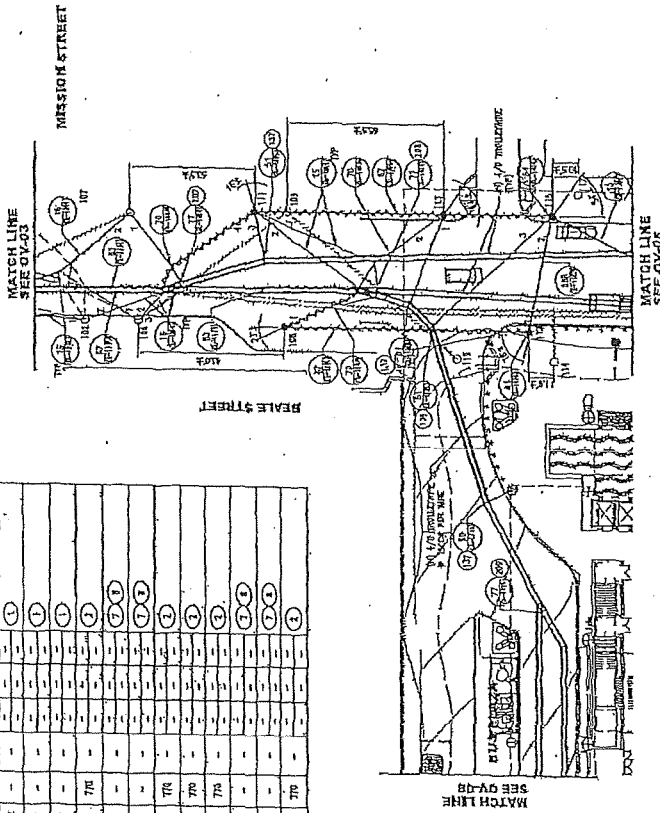
DCS SCHEDULE					
LINE NO.	TYPE	ROUTE NO.			PIKING NOTES
		1	2	3	
50	-	-	-	-	(1)
51	-	-	-	-	(1)
20	-	-	-	-	(1)
21	-	-	-	-	(1)
22	-	-	-	-	(1)
23	-	-	-	-	(1)
24	-	-	-	-	(1)
25	-	-	-	-	(1)



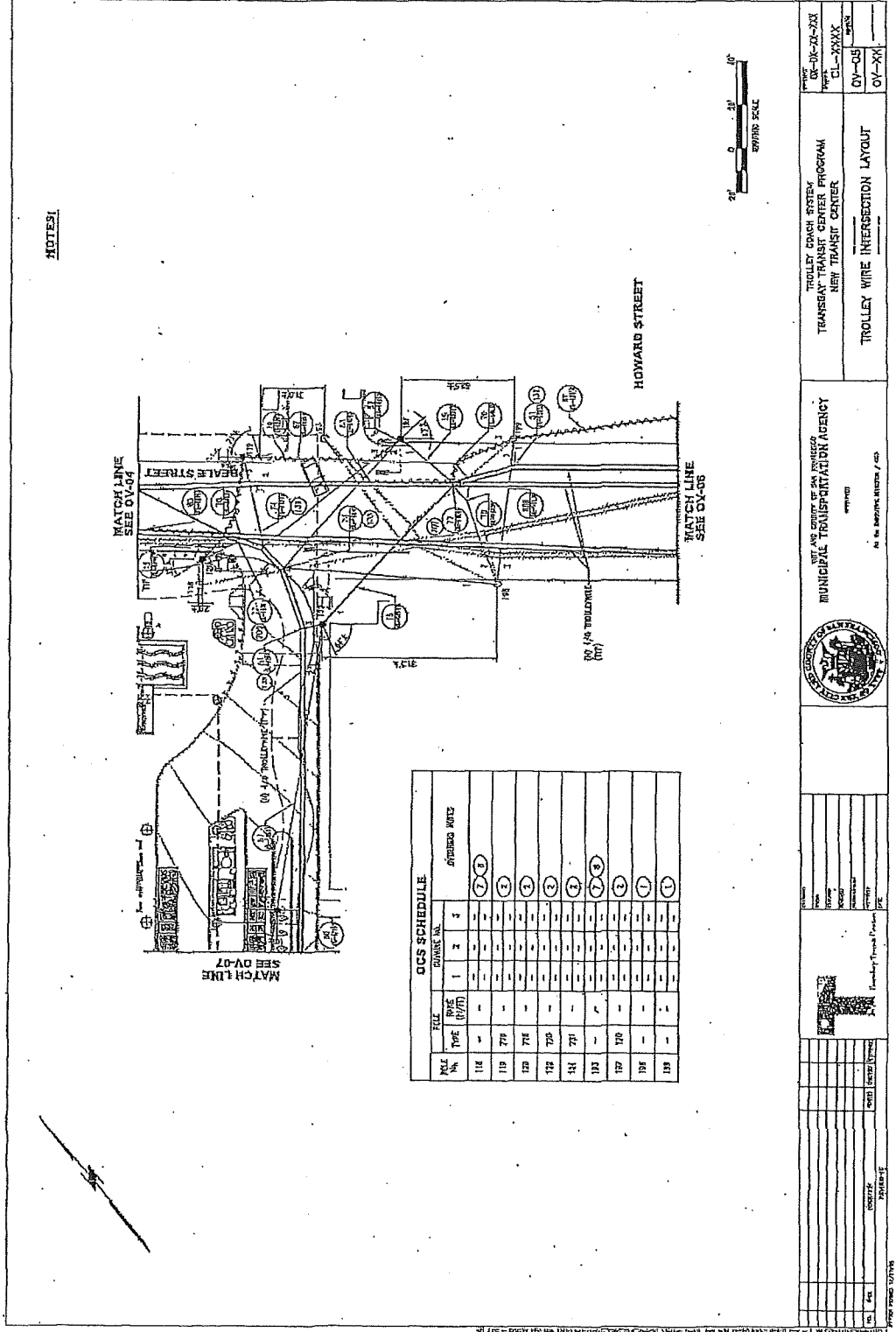
	CITY OF NASHVILLE MUNICIPAL TRANSPORTATION AGENCY 400 N. 3RD ST. NASHVILLE, TN 37203	TROLLEY COACH SYSTEM TRANSBAY TRANSIT CENTER PROGRAM NEW TRANSIT CENTER	DATE: 08-20-2012 DRAWING NO.: CL-XXXXXX SHEET NO.: 01-03 TOTAL SHEETS: 01-XX
	PROJECT: TROLLEY WIRE INTERSECTION LAYOUT BEALE ST AND MISSION ST	DESIGNER: [Name] CHECKER: [Name] APPROVED: [Signature] TITLE: [Title]	PROJECT MANAGER: [Name] DATE: [Date]

NOTES:

BUS SCHEDULE					
BUS LINE	BUS TYPE	CONV. NO.			GENERIC POINTS
		1	2	3	
102	-	-	-	-	(1)
103	-	-	-	-	(1)
107	-	-	-	-	(2)
109	770	-	-	-	(2)
108	-	-	-	-	(2)
110	-	-	-	-	(2)
111	770	-	-	-	(2)
112	770	-	-	-	(2)
113	770	-	-	-	(2)
114	-	-	-	-	(2)
115	-	-	-	-	(2)
117	770	-	-	-	(2)



		CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY 07/19/12	
PROJECT: TROLLEY WIRE INTERSECTION LAYOUT DRAWING NO.: OY-04		PROJECT: TROLLEY WIRE INTERSECTION LAYOUT DRAWING NO.: OY-04	
PREPARED BY: [Name] CHECKED BY: [Name] DATE: [Date]		PROJECT: TROLLEY WIRE INTERSECTION LAYOUT DRAWING NO.: OY-04	
PROJECT: TROLLEY WIRE INTERSECTION LAYOUT DRAWING NO.: OY-04		PROJECT: TROLLEY WIRE INTERSECTION LAYOUT DRAWING NO.: OY-04	

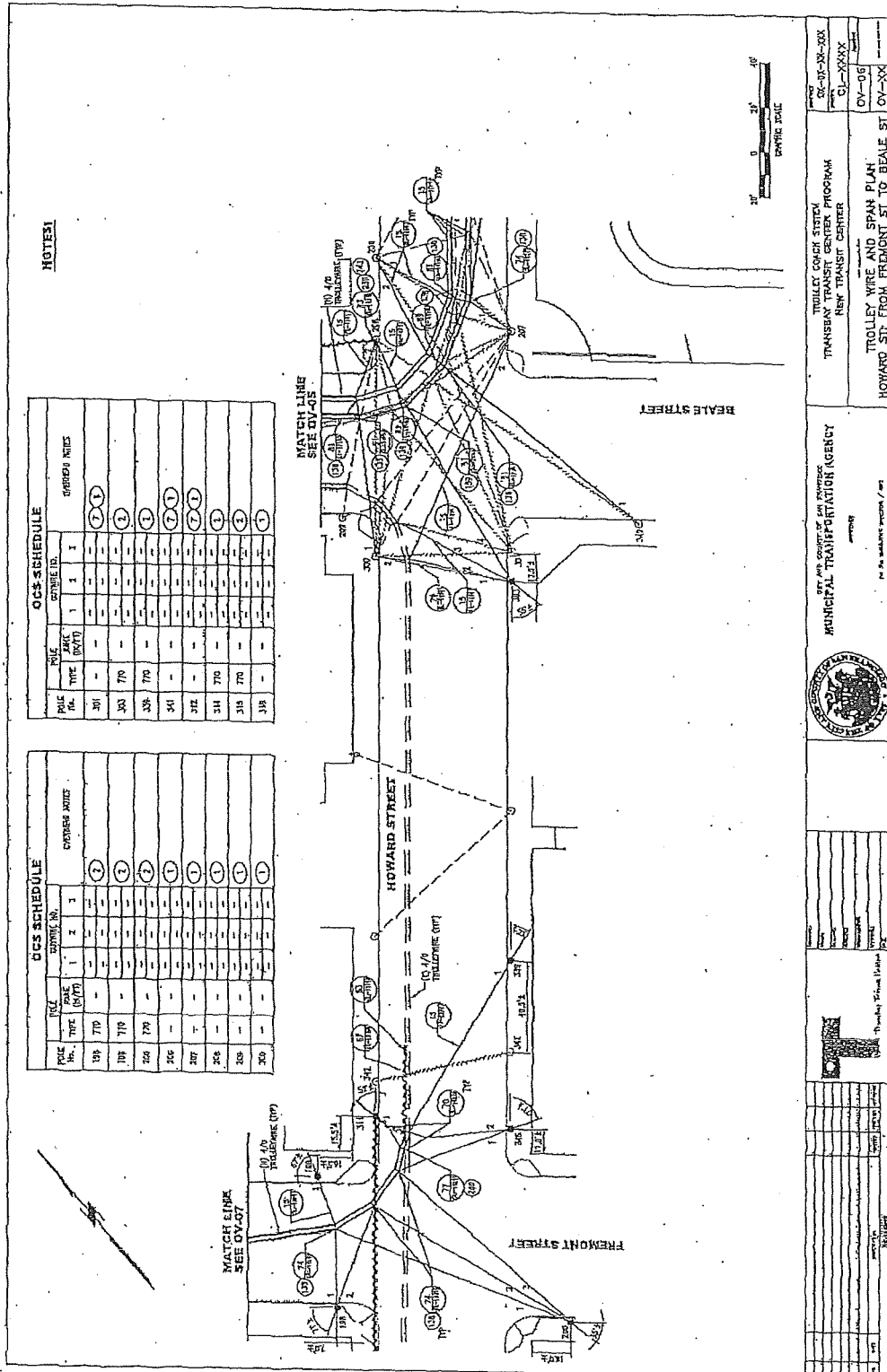


NOTES

OCS SCHEDULE

Pole No.	Pole Type	Pole Size (DIA)	CROSSING NO.			SPANDED NOTES
			1	2	3	
118	-	-	-	-	-	(1) (2)
119	778	-	-	-	-	(1) (2)
120	778	-	-	-	-	(1) (2)
121	778	-	-	-	-	(1) (2)
122	778	-	-	-	-	(1) (2)
123	778	-	-	-	-	(1) (2)
124	778	-	-	-	-	(1) (2)
125	778	-	-	-	-	(1) (2)
126	778	-	-	-	-	(1) (2)
127	778	-	-	-	-	(1) (2)
128	778	-	-	-	-	(1) (2)
129	778	-	-	-	-	(1) (2)
130	778	-	-	-	-	(1) (2)
131	778	-	-	-	-	(1) (2)

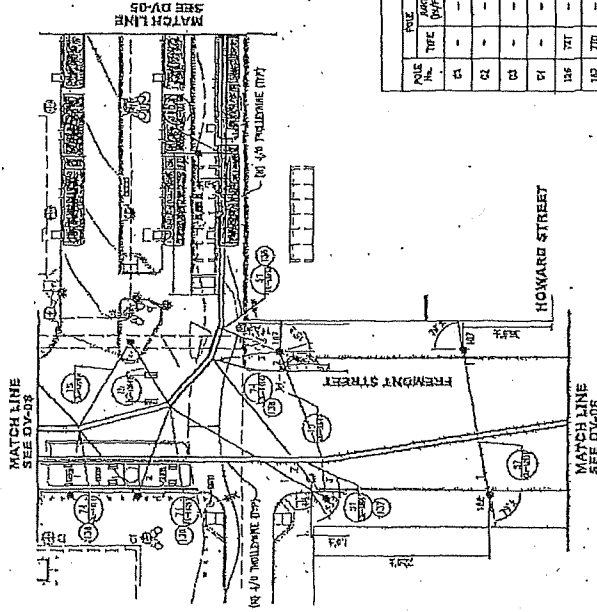
	<p>CITY OF SAINT LOUIS, MISSOURI MUNICIPAL TRANSPORTATION AGENCY</p> <p style="font-size: small;">BY: [Signature] DATE: [Date]</p> <p style="font-size: x-small;">AS THE ASSISTANT DIRECTOR / A.D.</p>	<p>TROLLEY CRASH EXTERIOR TRANSIT CENTER PROGRAM NEW TRANSIT CENTER</p>	<p>PROJECT BR-02-21-XX PLAN CL-XXXX SHEET 01-05 OF 01-XX</p>
<p>TROLLEY WIRE INTERSECTION LAYOUT</p>			



PROJECT NO.	02-03-000
DATE	01-20-00
PROJECT NAME	TROLLEY WIRE AND SPAN PLAN
PROJECT LOCATION	HOWARD ST. FROM FREMONT ST. TO BEALE ST.
DESIGNED BY	01-20-00
CHECKED BY	01-20-00
APPROVED BY	01-20-00
DATE	01-20-00
PROJECT NO.	02-03-000
DATE	01-20-00
PROJECT NAME	TROLLEY WIRE AND SPAN PLAN
PROJECT LOCATION	HOWARD ST. FROM FREMONT ST. TO BEALE ST.
DESIGNED BY	01-20-00
CHECKED BY	01-20-00
APPROVED BY	01-20-00
DATE	01-20-00

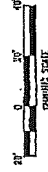
881
3293

NOTES



POCS SCHEDULE

PILE No.	PILE TYPE	CONCRETE ID		PUSHED IRIS
		1	2	
C1	-	-	-	
C2	-	-	-	
C3	-	-	-	
C4	-	-	-	
136	717	-	-	(1)
143	718	-	-	(2)
148	719	-	-	(2)
149	719	-	-	(2)
155	719	-	-	(2)

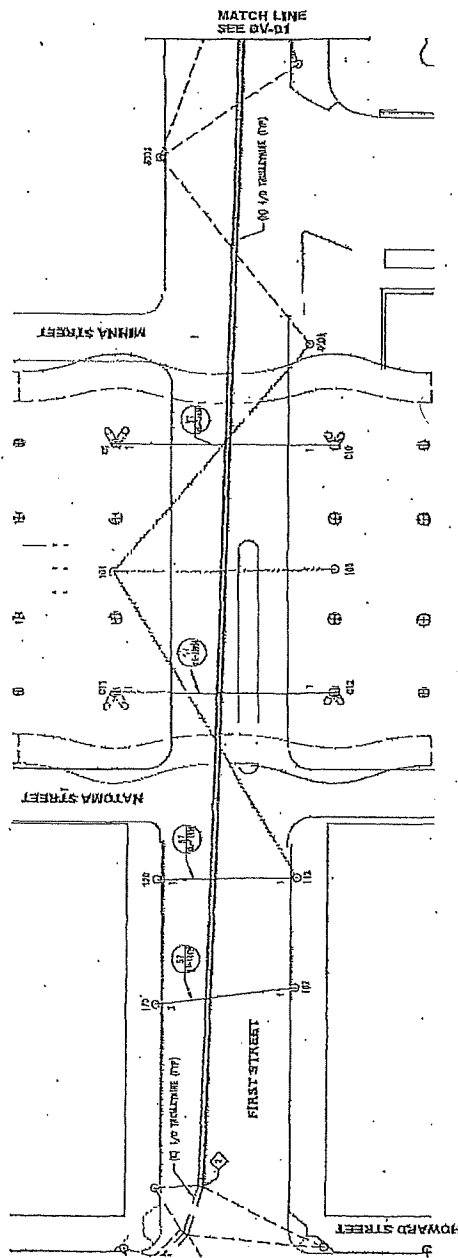


	CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY 4997330 400 MARKET STREET, 2ND FLOOR	TROLLEY COACH SYSTEM TRANSBAY TRANSIT CENTER PROGRAM NEW TRANSIT CENTER	TROLLEY WIRE INTERSECTION LAYOUT
PROJECT NO. 07-06-DV-001 DRAWING NO. CL-XXXX DATE 07-07 SHEET 07-00			
DATE: _____ CHECKED: _____ DESIGNED: _____ DRAWN: _____ IN CHARGE: _____			

NOTES

D&S SCHEDULE		D&S SCHEDULE		D&S SCHEDULE	
FILE NO.	DATE (M/D/Y)	FILE NO.	DATE (M/D/Y)	FILE NO.	DATE (M/D/Y)
10	1	1	1	1	1
11	2	2	2	2	2
12	3	3	3	3	3
13	4	4	4	4	4
14	5	5	5	5	5
15	6	6	6	6	6
16	7	7	7	7	7
17	8	8	8	8	8
18	9	9	9	9	9
19	10	10	10	10	10
20	11	11	11	11	11
21	12	12	12	12	12
22	1	1	1	1	1
23	2	2	2	2	2
24	3	3	3	3	3
25	4	4	4	4	4
26	5	5	5	5	5
27	6	6	6	6	6
28	7	7	7	7	7
29	8	8	8	8	8
30	9	9	9	9	9
31	10	10	10	10	10
32	11	11	11	11	11
33	12	12	12	12	12
34	1	1	1	1	1
35	2	2	2	2	2
36	3	3	3	3	3
37	4	4	4	4	4
38	5	5	5	5	5
39	6	6	6	6	6
40	7	7	7	7	7
41	8	8	8	8	8
42	9	9	9	9	9
43	10	10	10	10	10
44	11	11	11	11	11
45	12	12	12	12	12
46	1	1	1	1	1
47	2	2	2	2	2
48	3	3	3	3	3
49	4	4	4	4	4
50	5	5	5	5	5
51	6	6	6	6	6
52	7	7	7	7	7
53	8	8	8	8	8
54	9	9	9	9	9
55	10	10	10	10	10
56	11	11	11	11	11
57	12	12	12	12	12
58	1	1	1	1	1
59	2	2	2	2	2
60	3	3	3	3	3
61	4	4	4	4	4
62	5	5	5	5	5
63	6	6	6	6	6
64	7	7	7	7	7
65	8	8	8	8	8
66	9	9	9	9	9
67	10	10	10	10	10
68	11	11	11	11	11
69	12	12	12	12	12
70	1	1	1	1	1
71	2	2	2	2	2
72	3	3	3	3	3
73	4	4	4	4	4
74	5	5	5	5	5
75	6	6	6	6	6
76	7	7	7	7	7
77	8	8	8	8	8
78	9	9	9	9	9
79	10	10	10	10	10
80	11	11	11	11	11
81	12	12	12	12	12
82	1	1	1	1	1
83	2	2	2	2	2
84	3	3	3	3	3
85	4	4	4	4	4
86	5	5	5	5	5
87	6	6	6	6	6
88	7	7	7	7	7
89	8	8	8	8	8
90	9	9	9	9	9
91	10	10	10	10	10
92	11	11	11	11	11
93	12	12	12	12	12
94	1	1	1	1	1
95	2	2	2	2	2
96	3	3	3	3	3
97	4	4	4	4	4
98	5	5	5	5	5
99	6	6	6	6	6
100	7	7	7	7	7

D&S SCHEDULE		D&S SCHEDULE		D&S SCHEDULE	
FILE NO.	DATE (M/D/Y)	FILE NO.	DATE (M/D/Y)	FILE NO.	DATE (M/D/Y)
10	1	1	1	1	1
11	2	2	2	2	2
12	3	3	3	3	3
13	4	4	4	4	4
14	5	5	5	5	5
15	6	6	6	6	6
16	7	7	7	7	7
17	8	8	8	8	8
18	9	9	9	9	9
19	10	10	10	10	10
20	11	11	11	11	11
21	12	12	12	12	12
22	1	1	1	1	1
23	2	2	2	2	2
24	3	3	3	3	3
25	4	4	4	4	4
26	5	5	5	5	5
27	6	6	6	6	6
28	7	7	7	7	7
29	8	8	8	8	8
30	9	9	9	9	9
31	10	10	10	10	10
32	11	11	11	11	11
33	12	12	12	12	12
34	1	1	1	1	1
35	2	2	2	2	2
36	3	3	3	3	3
37	4	4	4	4	4
38	5	5	5	5	5
39	6	6	6	6	6
40	7	7	7	7	7
41	8	8	8	8	8
42	9	9	9	9	9
43	10	10	10	10	10
44	11	11	11	11	11
45	12	12	12	12	12
46	1	1	1	1	1
47	2	2	2	2	2
48	3	3	3	3	3
49	4	4	4	4	4
50	5	5	5	5	5
51	6	6	6	6	6
52	7	7	7	7	7
53	8	8	8	8	8
54	9	9	9	9	9
55	10	10	10	10	10
56	11	11	11	11	11
57	12	12	12	12	12
58	1	1	1	1	1
59	2	2	2	2	2
60	3	3	3	3	3
61	4	4	4	4	4
62	5	5	5	5	5
63	6	6	6	6	6
64	7	7	7	7	7
65	8	8	8	8	8
66	9	9	9	9	9
67	10	10	10	10	10
68	11	11	11	11	11
69	12	12	12	12	12
70	1	1	1	1	1
71	2	2	2	2	2
72	3	3	3	3	3
73	4	4	4	4	4
74	5	5	5	5	5
75	6	6	6	6	6
76	7	7	7	7	7
77	8	8	8	8	8
78	9	9	9	9	9
79	10	10	10	10	10
80	11	11	11	11	11
81	12	12	12	12	12
82	1	1	1	1	1
83	2	2	2	2	2
84	3	3	3	3	3
85	4	4	4	4	4
86	5	5	5	5	5
87	6	6	6	6	6
88	7	7	7	7	7
89	8	8	8	8	8
90	9	9	9	9	9
91	10	10	10	10	10
92	11	11	11	11	11
93	12	12	12	12	12
94	1	1	1	1	1
95	2	2	2	2	2
96	3	3	3	3	3
97	4	4	4	4	4
98	5	5	5	5	5
99	6	6	6	6	6
100	7	7	7	7	7



		PROJECT: TROLLEY COACH SYSTEM DRAWING: TRANSIT CENTER PROGRAM SHEET: NEW TRANSIT CENTER DATE: 07-09 SCALE: 07-XX
CITY AND COUNTY OF SAN ANTONIO MUNICIPAL TRANSPORTATION AGENCY APPROVED: _____ AS PER CONTRACT NO. / 100		TROLLEY WIRE AND SPAN PLAN
DATE: _____ DRAWN: _____ CHECKED: _____ IN CHARGE: _____	PROJECT NO.: _____ SHEET NO.: _____ TOTAL SHEETS: _____	TROLLEY WIRE AND SPAN PLAN

EXHIBIT B-1
 SFMTA – Current Sustainable Streets Division Wage Rates
 (subject to change)

Class	Job Class Title	(A) Unburdened Hourly Rate (Note 1)	(B) Hourly Fringe Rate (Note 2)	(C) Total Unburdened Hourly Rate (A) + (B)	(D) Approved Overhead Rate	(E) Hourly Overhead (C) * (D)	(F) Fully Burdened Hourly Rate (C) + (E)	(G) Fully Burdened Daily Rate (F) * 8 Hours
1844	Senior Management Assistant	\$41.5875	\$24.02	\$65.61	0.803	52.68	118.29	946.29
5201	Junior Engineer	\$40.1000	\$23.58	\$63.68	0.803	51.14	114.82	918.58
5203	Assistant Engineer	\$45.3250	\$25.84	\$71.16	0.803	57.14	128.31	1,026.46
5207	Associate Engineer	\$52.7250	\$28.77	\$81.49	0.803	65.44	146.93	1,175.44
5211	Engineer/Architect/Landscape Architect	\$70.6500	\$36.41	\$107.06	0.803	85.97	193.03	1,544.24
5212	Engineer/Architect Principal	\$82.0000	\$41.25	\$123.25	0.803	98.97	222.22	1,777.76
5241	Engineer	\$61.0250	\$32.31	\$93.33	0.803	74.94	168.28	1,346.21
5290	Transit Planner IV	\$56.7375	\$30.48	\$87.22	0.803	70.03	157.25	1,258.00
5301	Supervisor, Traffic Painting Program	\$46.4250	\$26.31	\$72.74	0.803	58.41	131.15	1,049.17
5302	Traffic Survey Technician	\$33.3250	\$20.66	\$53.99	0.803	43.35	97.34	778.70
5303	Supervisor, Traffic and Street Signs	\$43.7875	\$25.18	\$68.96	0.803	55.38	124.34	994.72
5306	Traffic Sign Manager	\$51.8125	\$28.38	\$80.19	0.803	64.39	144.58	1,156.67
5362	Engineering Assistant	\$33.8250	\$20.88	\$54.70	0.803	43.93	98.63	789.02
5364	Engineering Associate I	\$37.4625	\$22.45	\$59.91	0.803	48.11	108.02	864.13
5366	Engineering Associate II	\$43.3750	\$25.00	\$68.37	0.803	54.90	123.27	986.20
5380	Student Design Trainee I, Arch., Engr.,	\$23.6500	\$18.02	\$41.67	0.803	33.46	75.14	601.12
5381	Student Design Trainee II, Arch, Engr. &	\$25.3750	\$17.23	\$42.61	0.803	34.21	76.82	614.56
5382	Student Design Trainee III, Arch, Engr, & Planning	\$26.6000	\$17.76	\$44.36	0.803	35.62	79.98	639.85
7238	Electrician Supervisor I	\$49.5750	\$28.25	\$77.83	0.803	62.50	140.33	1,122.61
7242	Painter Supervisor I	\$43.0750	\$25.46	\$68.54	0.803	55.04	123.57	988.59
7243	Parking Meter Repairer Supervisor I	\$38.5000	\$22.68	\$61.18	0.803	49.13	110.31	882.52
7276	Electrician Supervisor II	\$55.2000	\$30.66	\$85.86	0.803	68.94	154.80	1,238.40
7332	Maintenance Machinist	\$38.0875	\$23.28	\$61.37	0.803	49.28	110.64	885.14
7345	Electrician	\$43.9125	\$26.06	\$69.97	0.803	56.18	126.15	1,009.22
7346	Painter	\$35.9250	\$22.37	\$58.30	0.803	46.81	105.11	840.90
7444	Parking Meter Repairer	\$33.0875	\$21.63	\$54.72	0.803	43.94	98.66	789.30
7457	Sign Worker	\$30.5250	\$19.45	\$49.98	0.803	40.13	90.11	720.89

885297

Class	Job Class Title	(A) Unburdened Hourly Rate (Note 1)	(B) Hourly Fringe Rate (Note 2)	(C) Total Unburdened Hourly Rate (A) + (B)	(D) Approved Overhead Rate	(E) Hourly Overhead (C) * (D)	(F) Fully Burdened Hourly Rate (C) + (E)	(G) Fully Burdened Daily Rate (F) * 8 Hours
8214	Parking Control Officer	\$27.2875	\$17.84	\$45.13	0.803	36.24	81.36	650.90
8216	Senior Parking Control Officer	\$32.5875	\$20.13	\$52.72	0.803	42.33	95.05	760.38
9145	Traffic Signal Electrician	\$47.6875	\$27.69	\$75.37	0.803	60.53	135.90	1,087.20
9177	Manager III, Municipal Transportation Ag	\$57.2625	\$32.51	\$89.77	0.803	72.09	161.86	1,294.90

Notes:

1. The Hourly Rates are the base salary for each job classification from the Compensation Manual for the City and County of San Francisco. The actual rates could vary for different employees in the same job classification due to placement within the pay steps for the job classification. The Hourly Rates could also vary due to premiums, overtime, shift differentials, etc. as determined by the MOU governing each job classification.
2. The Fringe Benefits rates are a projection for each job class. The actual amount is likely to be different.

88598

EXHIBIT B-2
SFMTA – Current Transit Division Wage Rates
(subject to change)

Class	Job Class Title	(A) Unburdened Hourly Rate (Note 1)	(B) Hourly Fringe Rate (Note 2)	(C) Total Unburdened Hourly Rate (A) + (B)	(D) Approved Overhead Rate	(E) Hourly Overhead (C) * (D)	(F) Fully Burdened Hourly Rate (C) + (E)	(G) Fully Burdened Daily Rate (F) * 8 Hours
1446	Secretary II	\$30.6750	\$19.30	\$49.98	1.385	\$69.22	\$119.20	\$953.58
1450	Executive Secretary I	\$33.4000	\$20.48	\$53.88	1.385	\$74.62	\$128.50	\$1,028.03
5201	Junior Engineer	\$40.1000	\$23.58	\$63.68	1.385	\$88.20	\$151.89	\$1,215.10
5203	Assistant Engineer	\$45.3250	\$25.84	\$71.16	1.385	\$98.56	\$169.72	\$1,357.80
5207	Associate Engineer	\$52.7250	\$28.77	\$81.49	1.385	\$112.87	\$194.36	\$1,554.87
5211	Engineer/Architect/Landscape Architect	\$70.6500	\$36.41	\$107.06	1.385	\$148.28	\$255.34	\$2,042.71
5212	Engineer/Architect Principal	\$82.0000	\$41.25	\$123.25	1.385	\$170.70	\$293.95	\$2,351.61
5241	Engineer	\$61.0250	\$32.31	\$93.33	1.385	\$129.26	\$222.59	\$1,780.76
5290	Transit Planner IV	\$56.7375	\$30.48	\$87.22	1.385	\$120.79	\$208.01	\$1,664.07
5362	Engineering Assistant	\$33.8250	\$20.88	\$54.70	1.385	\$75.76	\$130.46	\$1,043.72
5364	Engineering Associate I	\$37.4625	\$22.45	\$59.91	1.385	\$82.97	\$142.88	\$1,143.06
5366	Engineering Associate II	\$43.3750	\$25.00	\$68.37	1.385	\$94.70	\$163.07	\$1,304.54
5502	Project Manager I	\$60.8250	\$32.22	\$93.05	1.385	\$128.87	\$221.91	\$1,775.32
5504	Project Manager II	\$70.3875	\$36.30	\$106.69	1.385	\$147.76	\$254.45	\$2,035.57
6318	Construction Inspector	\$45.7625	\$26.03	\$71.79	1.385	\$99.43	\$171.22	\$1,369.74
6319	Senior Construction Inspector	\$50.4500	\$27.80	\$78.25	1.385	\$108.37	\$186.62	\$1,492.95

Notes:

1. The Hourly Rates are the base salary for each job classification from the Compensation Manual for the City and County of San Francisco. The actual rates could vary for different employees in the same job classification due to placement within the pay steps for the job classification. The Hourly Rates could also vary due to premiums, overtime, shift differentials, etc. as determined by the MOU governing each job classification.
2. The Fringe Benefits rates are a projection for each job class. The actual amount is likely to be different.

887
3299

FIRST AMENDMENT TO
INTERGOVERNMENTAL AGREEMENT BETWEEN THE TRANSBAY JOINT POWERS
AUTHORITY AND THE SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

This Amendment is made this 9th day of August, 2010, in the City and County of San Francisco, State of California; by and between the Transbay Joint Powers Authority (the "TJPA") and the City and County of San Francisco, a municipal corporation (the "City") acting by and through its San Francisco Municipal Transportation Agency ("SFMTA").

RECITALS

WHEREAS, SFMTA and TJPA have entered into the Agreement (as defined below); and

WHEREAS, SFMTA and TJPA desire to amend the Agreement on the terms and conditions set forth herein;

NOW, THEREFORE, TJPA and the SFMTA agree as follows:

1. Definitions. The following definitions shall apply to this Amendment:
 - a. Agreement. The term "Agreement" shall mean the Intergovernmental Agreement Between The Transbay Joint Powers Authority And The San Francisco Municipal Transportation Agency, dated July 21, 2009.
 - b. Other Terms. Terms used and not defined in this Amendment shall have the meanings assigned to such terms in the Agreement.
2. Modifications to the Agreement. The Agreement is hereby modified as follows:
 - a. Section I, "Scope of Services" shall include SFMTA Parking Control Officer services for the operations of the Temporary Transbay Terminal during key commute hours.

Specifically, the required work to be performed by the SFMTA through its Sustainable Streets Division ("SSD") under this Amendment is set forth below:

Exhibit A-7 Temporary Terminal Operations

Exhibit B-1 SFMTA/SSD Wage Rates 2010

Exhibit B-2 SFMTA/MUNI Wage Rates 2009

Exhibits A-7, B-1 and B-2 are attached to this Amendment Agreement and incorporated by reference as though fully set forth herein.
 - b. Section II, "Contract Amount and Terms of Payment"; the "Estimated Contract Amount" shall increase to an amount not to exceed \$3,280,677.
 - c. Section III, "Term; Termination", the "Term" shall extend the Agreement termination to December 15, 2015.
3. Legal Effect. Except as expressly modified by this Amendment, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties execute this Agreement in San Francisco as of the date first mentioned above.

TRANSBAY JOINT POWERS AUTHORITY	CITY AND COUNTY OF SAN FRANCISCO
	MUNICIPAL TRANSPORTATION AGENCY
Maria Ayerdi-Kaplari Executive Director	Debra A. Johnson Acting Executive Director/CEO
APPROVED AS TO FORM:	APPROVED AS TO FORM:
Dennis J. Herrera, City Attorney	Dennis J. Herrera, City Attorney
By _____ Sheryl Bregman Deputy City Attorney	By _____ John I. Kennedy Deputy City Attorney
TJPA Board of Directors	SFMTA Board of Directors
Resolution No.	Resolution No. 10-146
Date:	Dated: November 16, 2010
Attest:	Attest:
_____	_____
Secretary, TJPA Board	Secretary, SFMTA Board

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. 10-146

WHEREAS, On June 2, 2009, the SFMTA Board of Directors adopted Resolution No. 09-086 authorizing execution of Contract No. CS-159, Transbay Transit Center Program Services, with the TJPA in the not to exceed amount of \$2,282,979 and a term until December 31, 2014; and

WHEREAS, Under this Contract No. CS-159, the TJPA agreed to reimburse the SFMTA for engineering services related to re-routing of Muni's trolley coach service to accommodate the new TJPA temporary bus terminal; and

WHEREAS, The San Francisco Municipal Transportation Agency (SFMTA) and the Transbay Joint Powers Authority (TJPA) have negotiated a First Amendment to Contract No. CS-159, SFMTA Transbay Transit Center Program Services, for Parking Control Officer services during operation of the Temporary Transbay Terminal; and,

WHEREAS, The SFMTA agrees to provide Parking Control Officers (PCOs) during key commute hours to provide efficient and unobstructed transit bus access around the Temporary Transbay Terminal as well as to/from the Bay Bridge; and,

WHEREAS, The TJPA has agreed to increase the contract amount from \$2,282,979 to an amount not exceeding \$3,280,677 to reimburse the SFMTA for these additional PCO services until December 15, 2015; and,

WHEREAS, The First Amendment to Contract No. CS-159 also extends the contract termination date from December 31, 2014 to December 15, 2015 to ensure completion of the new Transbay Transit Center construction; now, therefore, be it

RESOLVED, That the SFMTA Board of Directors authorizes the Executive Director/CEO to execute the First Amendment to Contract No. CS-159, Transbay Transit Center Program Services, for Parking Control Officer services during operation of the Temporary Transbay Terminal, to increase the contract amount by \$997,698 to revised contract amount of \$3,280,677, and to extend the contract term to December 15, 2015.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of NOV 16 2010

R. Boomer

Secretary to the Board of Directors
San Francisco Municipal Transportation Agency

ORIGINAL COPY

INTERGOVERNMENTAL AGREEMENT BETWEEN THE TRANSBAY JOINT
POWERS AUTHORITY AND THE SAN FRANCISCO MUNICIPAL
TRANSPORTATION AGENCY

This Agreement is made this 21st day of July, 2009, in the City and County of
~~San Francisco, State of California, by and between the Transbay Joint Powers Authority (the~~
"TJPA") and the City and County of San Francisco, a municipal corporation (the "City") acting
by and through its San Francisco Municipal Transportation Agency ("SFMTA").

RECITALS

A. The TJPA is a public entity authorized to perform construction of the new Transbay Transit Center Project and Related Structures (the "Project"). The Project involves construction of a Temporary Bus Terminal ("Temporary Terminal") on Howard Street between Beale and Main Streets, demolition of the existing Transbay Terminal ("Existing Terminal") on Mission and First streets, construction of Bus Storage Facility beneath the I-80 Freeway between Second and Fourth streets and relocation of underground utilities ("Utility Relocation").

B. SFMTA is a governmental entity which owns and operates the San Francisco public transit system ("MUNI"), including the Municipal Railway and bus service.

C. To accommodate the Project, it is necessary to provide new routes for MUNI trolley lines and to relocate the SFMTA existing overhead contact system ("OCS") and associated underground utilities. It is also necessary to relocate traffic signals, street striping and parking meters.

D. TJPA and SFMTA wish to provide for the smooth rerouting of MUNI line and associated OCS relocation and will do so by integrating the expertise of SFMTA staff into the Project as provided in this Intergovernmental Agreement.

E. The parties intend that this Agreement will govern the nature of the work to be accomplished, the work eligible for reimbursement, the responsibilities for accomplishing the work, and the responsibilities for payment.

F. The TJPA and the SFMTA acknowledge and agree that this Agreement covers Traffic Engineering, OCS Design, and Construction Management services relating to the Temporary Terminal, demolition of the Existing Terminal, Utility Relocation, Bus Storage Facility and Transit Center work. All other SFMTA work is specifically excluded from these provisions unless expressly provided for in this Agreement. Any future SFMTA services will be addressed in a separate agreement.

AGREEMENT

I. Scope of Services.

Generally, SFMTA will provide the following services under this Agreement:

A. For construction of the Temporary Terminal, the SFMTA shall provide to the TJPA construction management, OCS inspection and engineering support services. The SFMTA shall also provide and install traffic signage, street striping and parking meters.

B. For demolition of the Existing Terminal, the SFMTA shall provide to the TJPA OCS design, construction management, OCS inspection and engineering support services. The SFMTA shall also provide traffic engineering services.

C. For Utility Relocation, the SFMTA shall provide to the TIPA project management, engineering support services, and traffic planning.

D. For construction of the Transit Center, the SFMTA shall provide to the TIPA project management, engineering support services and traffic planning.

E. For construction of the Bus Storage Facility, the SFMTA shall provide to the TIPA traffic engineering services.

Specifically, the required work to be performed by the SFMTA through its MUNI Department and its Department of Parking and Traffic ("DPT") under this Agreement is set forth, as project elements of the Transbay Transit Center Program as follows:

- Exhibit A1 Temporary Terminal;
- Exhibit A2 Demolition of Existing Terminal;
- Exhibit A3 Utility Relocation;
- Exhibit A4 New Transit Center;
- Exhibit A5 Bus Storage Facility;
- Exhibit A6 Miscellaneous Project Management.

Exhibits A1 - A6 are attached to this Agreement and incorporated by reference as though fully set forth herein. The SFMTA work shall be referred to as the "SFMTA Transbay Work."

II. Contract Amount and Terms of Payment

A. **Reimbursement for SFMTA Transbay Work Elements.** Compensation under this agreement shall be on a cost reimbursement basis only. The TIPA agrees to reimburse the SFMTA for all actual, allowable, reasonable costs incurred for the SFMTA Transbay Work performed under this Agreement. The salary rates of SFMTA personnel, including overhead rates, are set forth in Exhibit B. These rates reflect actual salaries paid to SFMTA employees who will be carrying out the work. Said rates are subject to change, depending on negotiated cost of living and other increases in applicable City collective bargaining agreements. Such changes shall not be subject to the prior approval of the TIPA, but shall not become a part of this Agreement until such time as the TIPA approves a modification of Exhibit B, which shall be done as soon as practicable upon SFMTA notification of such rate changes.

B. **Estimated Contract Amount.** In no event shall the total compensation under this Agreement exceed \$2,282,979, without a written amendment to this Agreement. The parties agree to amend this Agreement to increase the Contract Amount if the actual approved costs for the work exceed the Estimated Contract Amount.

C. **Terms of SFMTA Work.** All SFMTA work elements on the Transbay Transit Center Program will be provided on an as-needed time and materials basis. TIPA shall provide SFMTA a detailed milestone schedule in order to facilitate staff scheduling. The Notice to Proceed and SFMTA design deliverables shall be negotiated with TIPA based on the schedule and available SFMTA engineering resources. TIPA will provide two (2) weeks advanced notice of proposed SFMTA construction inspection work for staff scheduling. Work not listed as a Project element is outside the scope of SFMTA services and subject to separate agreement between TIPA and SFMTA.

D. **Terms of TIPA's Contractor Work.** In the event that TIPA's contractor work affects SFMTA revenue operations, traffic signal operations, or safety conditions, TIPA authorizes the SFMTA to take any and all immediate and effective steps, including issuing stop work orders, to ensure that SFMTA revenue operations, traffic signal operations, or safety conditions are maintained.

III. Term; Termination

A. Term. This Agreement will commence on the Effective Date and terminate on December 31, 2014, unless extended by the parties or terminated earlier by the parties.

B. Effective Date. This Agreement shall become effective when the TIPA's Chief Financial Officer has certified the availability of funds and notifies the SFMTA in writing via a Notice to Proceed (NTP).

C. Termination. Either party has the option, in its sole discretion, to terminate this Agreement, at any time, for convenience and without cause. The terminating party shall exercise this option by giving the other party written notice. The notice shall specify the date on which termination will become effective. In the event of a termination, the TIPA shall be responsible for payment of all SFMTA costs incurred on work performed up to the date of termination. SFMTA shall promptly submit a final invoice to the TIPA after any such termination.

IV. Construction Contractor Indemnity

The TIPA shall ensure that any construction contractor shall indemnify, defend and hold harmless the City, the SFMTA, and their employees, officers and agents from any liability or claims arising out of the construction contractor's work.

V. Limitation on Liability; Incidental or Consequential Damages.

A. General. Except as otherwise provided in this Agreement, each party to this Agreement shall be responsible for its own damages and other costs, including attorney's fees, as a result of any claims arising out of the acts or omissions of the SFMTA in the performance of the Relocation Work performed in connection with this Agreement.

B. Liability for Cost Estimates. The SFMTA shall not be responsible for any additional construction costs exceeding the estimate it provided as part of the SFMTA work. The SFMTA shall cooperate with the TIPA, to the extent feasible, to perform value engineering or re-design in an effort to reduce construction costs on a cost reimbursable basis.

C. Incidental or Consequential Damages. Notwithstanding any other provision of this Agreement, in no event shall the TIPA, the City, or the SFMTA be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits, arising out of or in connection with the SFMTA Traffic Engineering, OCS Design, and Construction Management work.

VI. Miscellaneous Provisions

A. Notices to the Parties. Unless otherwise indicated elsewhere in this Agreement, all written communications sent by the parties shall be by U.S. mail, e-mail or fax, and shall be addressed as follows:

To SFMTA: Municipal Transportation Agency
One South Van Ness Ave. 3rd Floor
San Francisco, CA 94103
Attn: James Walsh, Project Manager

with a copy to: Municipal Transportation Agency
One South Van Ness Ave. 7th Floor
San Francisco, CA 94103
Attn: Daniel Arellano, DPT Project Manager

E. Terms of Payment. SFMTA will submit invoices to the TIPA's Executive Director on a monthly basis. The TIPA shall make best efforts to submit all payments to SFMTA within forty-five (45) days from receipt of invoice, addressed to Municipal Transportation Agency, Attention: Chief Financial Officer, One South Van Ness, 8th Floor, San Francisco, CA 94103.

F. Records. The SFMTA agrees to maintain and make available to the TIPA, during regular business hours, accurate books and accounting records relating to its work under this Agreement. The SFMTA will permit TIPA to audit, examine and make excerpts and transcripts from such books and records, and to audit all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this Agreement, whether funded in whole or in part under this Agreement. The SFMTA shall maintain such records in an accessible location and in satisfactory condition for a period of not less than five (5) years after final payment under this Agreement or until after a final audit has been concluded, whichever is later. The State of California or any governmental agency having an interest in this Agreement shall have the same rights conferred upon TIPA by this Section.

G. SFMTA Use of TIPA Office Space and Equipment. TIPA agrees to provide appropriate field office space and equipment for use by SFMTA construction management staff, including, but not limited to, desks, chairs, work table, lighting, telephone, computer, printer, copy/fax machine, and restroom facilities.

H. Subcontractors. The TIPA acknowledges that the SFMTA may retain subcontractors to assist the SFMTA in the performance of services under this Agreement.

1. The SFMTA shall select all subcontractors through a competitive procurement process in compliance with Federal Transit Administration Circular 4220.1F as set forth in Section 2 of the FTA Regulations.

2. Subcontractors contracting with the SFMTA shall work at the SFMTA's direction, under an agreement with the SFMTA, and subject to FTA Regulations. In the event of a conflict between the FTA Regulations and any term or condition of the contract between the SFMTA and the subcontractor, the provisions of the FTA Regulations shall control.

3. The TIPA shall assume no liability whatsoever for any SFMTA subcontractor. In any contract, agreement, or task order between the SFMTA and a subcontractor for Services, the SFMTA shall require the following:

- i. The TIPA shall be recognized as a third-party beneficiary of any such agreement or task order;
- ii. The TIPA shall be named as additional insured on any insurance policy provided by a subcontractor covering general and professional liability for the project as set forth in section 6 of this Agreement; and
- iii. The subcontractor shall indemnify the TIPA to the fullest extent available under the law.

4. SFMTA may use the services of the City's Department of Public Works ("DPW") in the performance of Services under this Agreement. In such event, DPW shall not be considered a subcontractor and shall not be subject to the requirements of this subparagraph.

To TJPA: Transbay Joint Powers Authority
201 Mission St, Suite 2100
San Francisco, CA 94105
Attn: Maria Ayerdt-Kaplan, Executive Director

B. Tropical Hardwood and Virgin Redwood Ban. Pursuant to section 804(b) of the San Francisco Environment Code, the City and County of San Francisco urges ~~contractors not to import, purchase, obtain, or use for any purpose, any tropical hardwood, tropical hardwood wood product, virgin redwood or virgin redwood wood product.~~

C. Modification of Agreement. This Agreement may not be modified, nor may compliance with any of its terms be waived, except by written instrument executed and approved in the same manner as this Agreement.

D. Agreement Made in California; Venue. The formation, interpretation and performance of this Agreement shall be governed by the laws of the State of California; Venue for all litigation relative to the formation, interpretation and performance of this Agreement shall be in San Francisco.

E. Construction. All paragraph captions are for reference only and shall not be considered in construing this Agreement.

F. Entire Agreement. This contract sets forth the entire Agreement between the parties, and supersedes all other oral or written provisions. This contract may be modified only as provided in Section VI.C.

G. Severability. Should the application of any provision of this Agreement to any particular facts or circumstances be found by a court of competent jurisdiction to be invalid or unenforceable, then (a) the validity of other provisions of this Agreement shall not be affected or impaired thereby, and (b) such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed without further action by the parties to the extent necessary to make such provision valid and enforceable.

H. Non-Waiver of Rights. The omission by either party at any time to enforce any default or right reserved to it, or to require performance of any of the terms, covenants, or provisions hereof by the other party at the time designated, shall not be a waiver of any such default or right to which the party is entitled, nor shall it in any way affect the right of the party to enforce such provisions thereafter. There shall be no waiver except in writing, signed by the party to be charged.

IN WITNESS WHEREOF, the parties execute this Agreement in San Francisco as of the date first mentioned above.

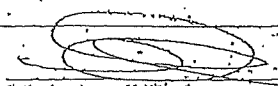
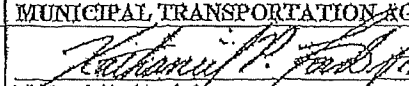
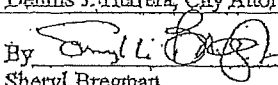
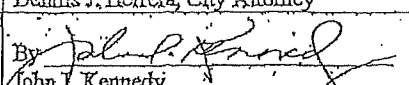
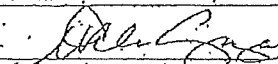
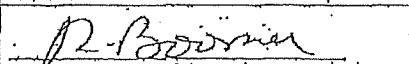
TRANSBAY JOINT POWERS AUTHORITY	CITY AND COUNTY OF SAN FRANCISCO
	MUNICIPAL TRANSPORTATION AGENCY
 Maria Ayerdi-Kaplan Executive Director	 Nathaniel P. Ford, Sr. Executive Director/CEO
APPROVED AS TO FORM:	APPROVED AS TO FORM:
Dennis J. Herrera, City Attorney	Dennis J. Herrera, City Attorney
By  Sheryl Bregman Deputy City Attorney	By  John J. Kennedy Deputy City Attorney
TJPA Board of Directors	SFMTA Board of Directors
Resolution No. 09-018	Resolution No. 09-086
Date: 4/9/09	Dated: 6/2/09
Attest:	Attest:
 Secretary, TJPA Board	 Secretary, SFMTA Board

EXHIBIT A1

TEMPORARY TERMINAL
PROJECT MANAGEMENT, ENGINEERING SUPPORT, CONSTRUCTION MANAGEMENT, AND
SIGNAGE, STRIPING, & METER SERVICES BY SFMTA

A. Scope of SFMTA (MUNI) Construction Management-Inspection and Engineering Services:

- I. TJPA is constructing a Temporary Transbay Terminal at Howard Street between Beale and Main streets. The SFMTA shall provide construction administration, inspection and engineering support services for the installation of the overhead contact system (OCS) to support the Temporary Transbay Terminal. SFMTA construction staff will work with the TJPA Construction Management-Resident Engineer.
- II. The scope of SFMTA's services is limited to the following:
 - * Coordinating and interfacing with project team members including TJPA, TJPA Contractor through TJPA Construction Management, and SFMTA (including SFMTA Resident Engineer, Inspectors, MUNI Maintenance and Operations).
 - * Assisting TJPA Construction Management-Resident Engineer in coordinating with MUNI Street Operations to request vehicles to test the OCS.
 - * Assisting TJPA Construction Management-Resident Engineer in submitting Contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
 - * Calling in and closing out daily OCC clearances.
 - * Providing inspection services (days, nights, and weekends) for the OCS work.
 - * Issuing daily inspector reports for the OCS work.
 - * Providing fulltime monitoring whenever OCS Contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure that Contractor's work does not negatively impact SFMTA's operations or safety.
 - * Attending progress, coordination, and traffic management meetings for the OCS work.
 - * Assisting TJPA Construction Management-Resident Engineer in reviewing OCS submittals and RFIs by providing comments and recommendations.
 - * Assisting TJPA Construction Management-Resident Engineer in reviewing OCS work progress and Contractor's submitted work plan.
 - * Assisting TJPA Construction Management-Resident Engineer in processing progress payments by issuing recommendations for OCS quantity measurement and completion.
 - * Assisting TJPA Construction Management-Resident Engineer in the management of change orders related to OCS work that affects SFMTA's operations.
 - * Assisting TJPA Construction Management-Resident Engineer in reviewing Contract Change Order Requests and changes related to the OCS.
 - * Providing SFMTA passengers with advance and timely information regarding changes to bus stops from the Existing Terminal to the Temporary Terminal.
 - * Providing for SFMTA street supervision during planned overhead shutdowns/reroutes and initial test of trains/rolleys as part of OCS construction.

Not to Exceed Budget: \$276,500

TO

B. Scope of SFMTA (DPT) Construction Administration, Engineering and Inspection Services:

- I. SFMTA shall provide engineering and inspection services for the construction of new traffic signals and parking meters, and for the reconfiguration of roadways to support the Temporary Terminal.
- II. The scope of SFMTA's services is limited to the following:
 - * Attend regular meetings, coordinate with various agencies and departments to minimize vehicular, pedestrian and transit impacts due to construction.
 - * Review the traffic routing to accommodate the demolition of the public right-of-way.
 - * Review the traffic routing needs to accommodate the relocation of utilities adjacent to the Temporary Terminal.
 - * Review and comment on the traffic routing plans as needed.
 - * Provide inspection services and recommend operational adjustments to accommodate the reconfiguration of the roadways and traffic controls.
 - * Provide electrical inspection for traffic signal construction work.

Not to Exceed Budget: \$276,000

TO

C. Scope of SFMTA (DPT) Signage, Striping and Parking Meter Relocation Services:

- I. SFMTA shall relocate and install new traffic control signs, remove and relocate all parking meters and furnish and install all final street striping in accordance with the approved Temporary Terminal plans.
- II. The scope of SFMTA's services is limited to the following:
 - * Provide all labor and materials necessary to remove existing City owned traffic control signs and guide signs and install new signage in the public right-of-way.
 - * Provide all labor and materials necessary to remove existing parking meters and install new City-owned parking meters in the public right-of-way.
 - * Provide all labor and materials necessary to grind existing striping and install final striping for the project.

Not to Exceed Budget: \$612,479

EXHIBIT A2

EXISTING TERMINAL DEMOLITION
OCS PROJECT MANAGEMENT, ENGINEERING SUPPORT & CONSTRUCTION
MANAGEMENT SERVICES BY SFMTA

A. Scope of SFMTA (MUNI) Construction Management, Inspection, and Engineering Services:

- I. The TJPA will demolish the existing Transbay Terminal on Mission Street between Fremont and First streets. The SFMTA shall provide engineering and construction management services for the demolition of the existing Transbay Terminal. SFMTA construction staff will work with TJPA Construction Management-Resident Engineer.
- II. The scope of SFMTA's services is limited to the following:
 - * Assisting TJPA Construction Management-Resident Engineer in coordinating with MUNI Street Operations to request vehicles to test the OCS project.
 - * Assisting TJPA Construction Management-Resident Engineer in submitting Contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
 - * Calling in and closing out daily OCC clearances.
 - * Providing inspection services (days, nights, and weekends) for the OCS work, issuing daily inspector reports for the OCS work.
 - * Providing fulltime monitoring whenever OCS Contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure Contractor's work does not negatively impact SFMTA's operations and safety.
 - * Attending progress, coordination, and traffic management meetings for the OCS project.
 - * Assisting TJPA Construction Management-Resident Engineer in reviewing OCS submittals and RFIs by providing comments and recommendations.
 - * Assisting TJPA Construction Management-Resident Engineer in reviewing OCS work progress and Contractor's submitted work plan.
 - * Assisting TJPA Construction Management-Resident Engineer in processing progress payments by issuing recommendations for OCS quantify measurement and completion.
 - * Assisting TJPA Construction Management-Resident Engineer in the management of change orders related to OCS work that affects SFMTA's operations.
 - * Assisting TJPA Construction Management-Resident Engineer in reviewing Contract Change Order Request and changes related to the OCS.
 - * Providing SFMTA street supervision for vehicle re-routing during planned shutdowns of the OCS system.
 - * Providing SFMTA passengers with timely information regarding changes to bus line routes and stops during the transition to the temporary terminal.

Not to Exceed Budget: \$205,000

B. Scope of SFMTA (DPT) Traffic Engineering Services:

i. SFMTA shall provide engineering and construction management services to support the demolition of the existing Transbay Terminal;

ii. The scope of SFMTA's services is limited to the following:

~~Participate in the collaborative planning and design efforts by TUPA and its consultants for the routing of vehicle, pedestrian and transit traffic during the demolition of the existing Transbay Terminal.~~

- Review final specifications and estimates for traffic routing for demolition.
- Attend regular meetings and review and comment on traffic routing to accommodate the demolition of the existing Transbay Terminal.

Not to Exceed Budget: \$29,000

EXHIBIT A3

UTILITY RELOCATION
TRAFFIC PLANNING AND ENGINEERING SERVICES BY SFMTA

A. Scope of SFMTA (MUNI) Project Management and Engineering Services:

- I. The TJPA is relocating utility lines on Mission, Fremont, Beale and First streets as part of the Transit Center Relocation of Utilities Project. The SFMTA shall provide traction power analysis and engineering services to support the Transit Center Relocation of Utilities Project.
- II. The scope of SFMTA's services is limited to the following:
 - Review the impact of TJPA's relocation of SFMTA facilities and make recommendations to the TJPA design team based on traction power analysis.
 - Perform traction power analyses to determine the need for new traction power infrastructure (conduits, ductbank, cable, manholes) and make recommendations to TJPA design team.

Budget: \$55,000

B. Scope of SFMTA (DPT & MUNI)'s Traffic Planning and Project Management Services:

- I. SFMTA shall provide traffic planning, traffic engineering and project management services to support the Transit Center Utility Relocation.
- II. The scope of work is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic during the relocation of utilities adjacent to the Transit Center.
 - Review final specifications and estimates for traffic routing during the relocation of utilities.
 - Attend regular meetings and work with various agencies to minimize the impacts to the public during the utility relocation.
 - Provide SFMTA street supervision for vehicle re-routes.
 - Provide for any needed relocation of SFMTA overhead contact system (OCS), including support for re-routes/bus substitution during any period of OCS shutdown.

Not to Exceed Budget: \$35,500 (DPT)
15,000 (MUNI)

EXHIBIT A4
TRANSIT CENTER
TRAFFIC PLANNING AND ENGINEERING SERVICES BY SFMTA

5
A. Scope of SFMTA (MUNI)'s Project Management and Engineering Services:

- i. TJPA is constructing a new Transit Center at Mission Street between Fremont and Beale streets. The SFMTA shall provide Engineering design services for the overhead contact system (OCS) project related to the new Transit Center. (See enclosed preliminary sketch, alignments are subject to change.)
- ii. The scope of SFMTA's services is limited to the following:
- * Provide construction plans, sequencing plans, specifications, and construction cost estimates, including new trolley pole foundations, trolley poles, wires, wood troughs support spans and bracket arms.
 - * Reconfigure existing special OCS.
 - * Provide design of existing streetlight transfer to new trolley poles where required; remove existing streetlight poles as needed.
 - * Participate in coordination meetings with City agencies, TJPA and TJPA's design team.
 - * Coordinate and obtain approval from SFMTA Operations and Maintenance on the bus plaza design.
- iii. The scope of SFMTA's services is based upon the following assumptions:
- a. Baseline survey, existing underground utility information and new Transbay Transit Center drawings to be provided to SFMTA.
 - b. The design and relocation of existing utilities not owned by the SFMTA shall be addressed and designed by other parties. OCS installation may require the relocation of such existing utilities.
 - c. Additional work triggered by the relocation of trolley poles (curb ramp reconstruction, traffic signal and mast arm relocation, and the relocation of traffic signs, etc.) shall be addressed and designed by others.
 - d. All associated civil design elements (e.g. passenger boarding islands) shall be designed and addressed by other parties.
 - e. All new poles shall be designed using standard poles with standard cobra type streetlights.
 - f. Sub-sidewalk basement special foundations, and eyebolts to buildings, if any, shall be addressed and designed by other parties.

Not to Exceed Budget: \$490,000

B. Scope of SFMTA (DPT)'s Traffic Engineering Services 105

- I. SFMTA shall provide traffic planning and engineering services for the new Transit Center.
- II. The scope of SFMTA's services is limited to the following:
 - * Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic for the new Transit Center.
 - * Provide review of conceptual traffic signal plans.
 - * Review preliminary specifications and estimates of traffic routing for the new Transit Center.
 - * Attend regular meetings and review traffic routing needs to accommodate the construction of the new Transit Center.

Final designs and services for new or modified signage, striping, and traffic signals are outside the scope of proposed SFMTA (MUNI & DPT) services and subject to a separate agreement between TJPA and SFMTA.

Not to Exceed Budget: \$90,500

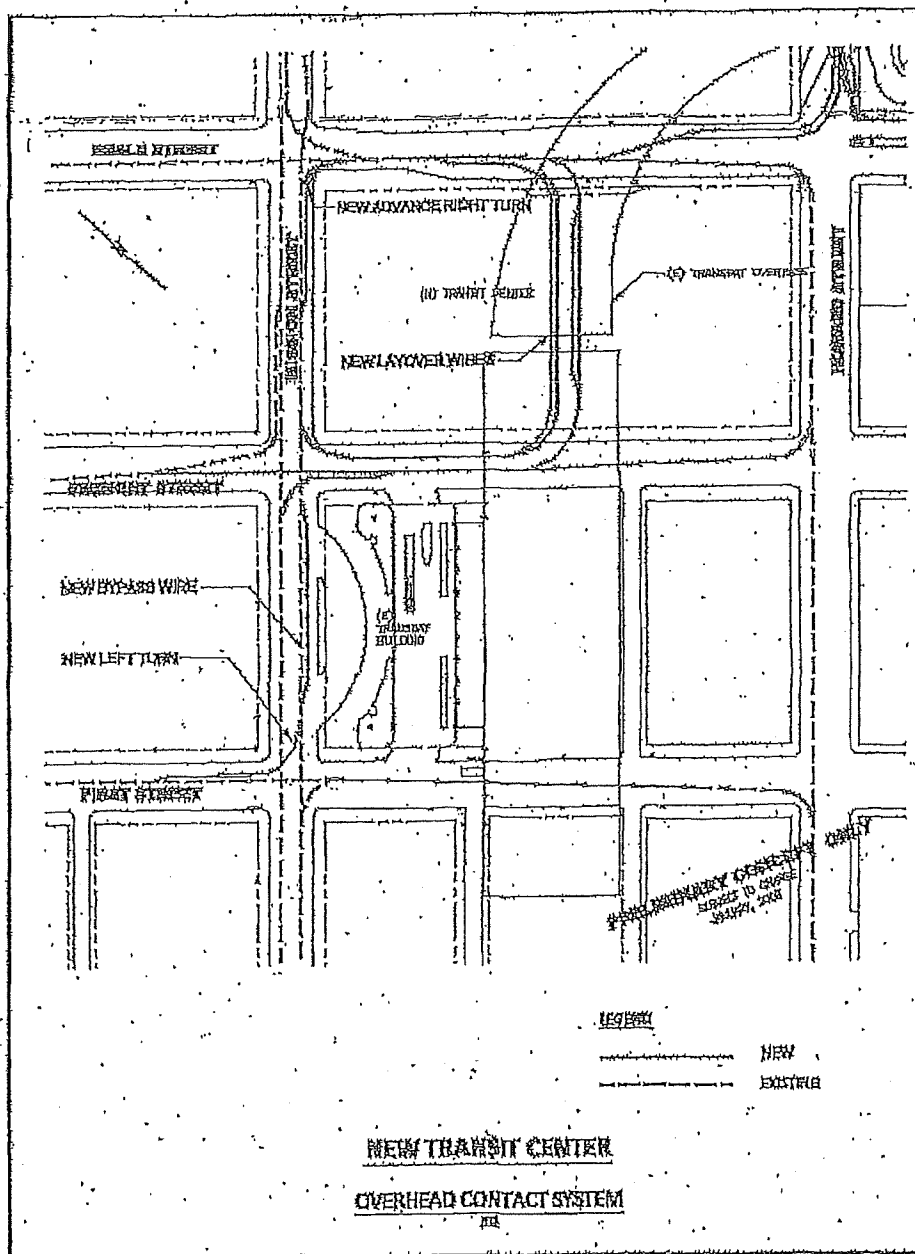


EXHIBIT A5

BUS STORAGE FACILITY
TRAFFIC PLANNING BY SFMTA

A. Scope of SFMTA (DPT) Traffic Engineering Services:

- I. TJPA is constructing a temporary bus storage facility at Howard Street between Main and Beale streets. SFMTA shall provide traffic planning and engineering services for the new Bus Storage Facility.
- II. The scope of SFMTA's services is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA, City departments, and the consultants for the Bus Storage Facility.
 - Attend regular meetings and review the traffic routing and traffic circulation needs to accommodate the Bus Storage Facility.
 - Review final specifications and estimates for traffic engineering services to accommodate the Bus Storage Facility.

Not to Exceed Budget \$29,000

EXHIBIT A6

MISCELLANEOUS PROJECT MANAGEMENT, ENGINEERING SUPPORT & CONSTRUCTION
MANAGEMENT SERVICES BY SFMTA

A. Scope of SFMTA's (DPT & MUNI) Project Management, Engineering, Construction
Management, and Inspection Support and Coordination Services:

- i. SFMTA shall provide general planning, project management, engineering support, and construction management services and coordination to support TIPA for the Transbay Transit Center Program.
- ii. The scope of work is limited to the following:
 - * Providing general project management support and coordination.
 - * Providing general engineering support and coordination.
 - * Providing general construction management and inspection support and coordination.
 - * Providing general traffic planning and engineering support and coordination.

Budget: \$25,000

EXHIBIT B-1

SFMTA/DPT Wage Rates 2009

SFMTA/DPT Wage Rates 2008/2009					
JOB TITLE	JOB CLASS	2008/2009 RATES			
		HOURLY X 2.45	DAILY RATE X 2.45	DAILY ROUNDED RATE	
ENGINEERING DIVISION					
Planner IV	5290	\$ 139.01	\$ 1,112.08	\$ 1,113.00	
Principal Engineer	5212	\$ 216.24	\$ 1,729.95	\$ 1,730.00	
Senior Engineer	5211	\$ 173.09	\$ 1,384.74	\$ 1,390.00	
Engineer	5241	\$ 149.51	\$ 1,196.09	\$ 1,200.00	
Assoc Engineer	5207	\$ 129.18	\$ 1,033.41	\$ 1,040.00	
Asst Engineer	5203	\$ 111.05	\$ 888.37	\$ 890.00	
Jr. Engineer	5201	\$ 98.25	\$ 785.96	\$ 790.00	
Stud Train I	5380	\$ 57.88	\$ 463.05	\$ 470.00	
Stud Train II	5381	\$ 62.11	\$ 496.86	\$ 500.00	
Stud Train III	5382	\$ 65.08	\$ 520.63	\$ 530.00	
Civ. Eng. Asst.	5362	\$ 82.87	\$ 662.97	\$ 670.00	
Civ. Eng. Assoc. I	5364	\$ 91.78	\$ 734.27	\$ 740.00	
Civ. Eng. Assoc. II	5366	\$ 106.27	\$ 850.15	\$ 860.00	
Survey Tech.	5302	\$ 81.65	\$ 653.17	\$ 660.00	
PAINT SHOP					
Manager Paint	5301	\$ 113.74	\$ 909.23	\$ 910.00	
Sup Paint Shop	7242	\$ 105.53	\$ 844.27	\$ 850.00	
Painter	7346	\$ 88.02	\$ 704.13	\$ 710.00	
SIGNAL SHOP					
Elec. Sup II	7276	\$ 135.24	\$ 1,081.92	\$ 1,090.00	
Elec. Sup I	7238	\$ 121.46	\$ 971.67	\$ 980.00	
Elec.	7345	\$ 107.59	\$ 860.69	\$ 870.00	
SIGN SHOP					
Manager Sign	5306	\$ 136.53	\$ 1,092.21	\$ 1,100.00	
Sr. Mgmt. Asst.	1844	\$ 96.10	\$ 768.81	\$ 770.00	
Sup. Traffic Sign	5303	\$ 107.28	\$ 858.24	\$ 860.00	
Sign Installer	7457	\$ 74.79	\$ 598.29	\$ 600.00	
METER SHOP					
Manager Meter Shop					
Mgr. III	9177	\$ 149.02	\$ 1,192.17	\$ 1,200.00	
Parking Meter Repair					
Sup.	5303	\$ 107.28	\$ 858.24	\$ 860.00	
Parking Meter Repairer	1844	\$ 96.10	\$ 768.81	\$ 770.00	
Maintenance Machinist	7457	\$ 74.79	\$ 598.29	\$ 600.00	

EXHIBIT B-2

SFMTA/MUNI Wage Rates 2009

SFMTA/MUNI Wage Rates 2009			
JOB TITLE	JOB CLASS	2009 RATES	
		UNBURDENED DAILY RATE	BURDENED DAILY RATE (UNBURDENED DAILY X 3.06)
Project Manager I	5502	\$ 485	\$ 1484
Project Manager II	5504	\$ 562	\$ 1722
Transit Planner	5290	\$ 453	\$ 1386
Principal Engineer	5212	\$ 664	\$ 2032
Senior Engineer	5211	\$ 568	\$ 1738
Engineer	5241	\$ 488	\$ 1493
Assoc. Engineer	5207	\$ 424	\$ 1297
Asst. Engineer	5203	\$ 368	\$ 1126
Jr. Engineer	5201	\$ 321	\$ 983
Civ. Engineer Asst.	5362	\$ 272	\$ 832
Civ. Engineer Assoc. I	5364	\$ 304	\$ 930
Civ. Engineer Assoc. II	5366	\$ 347	\$ 1062
Executive Secretary I	1450	\$ 252	\$ 772
Secretary II	1446	\$ 232	\$ 710
Construction Inspector	6318	\$ 368	\$ 1126
Sr. Construction Inspector	6319	\$ 404	\$ 1236

Print Form

Introduction Form

By a Member of the Board of Supervisors or the Mayor

Time stamp
or meeting date

I hereby submit the following item for introduction (select only one):

- 1. For reference to Committee.
An ordinance, resolution, motion, or charter amendment.
- 2. Request for next printed agenda without reference to Committee.
- 3. Request for hearing on a subject matter at Committee.
- 4. Request for letter beginning "Supervisor [] inquires"
- 5. City Attorney request.
- 6. Call File No. [] from Committee.
- 7. Budget Analyst request (attach written motion).
- 8. Substitute Legislation File No. []
- 9. Request for Closed Session (attach written motion).
- 10. Board to Sit as A Committee of the Whole.
- 11. Question(s) submitted for Mayoral Appearance before the BOS on []

Please check the appropriate boxes. The proposed legislation should be forwarded to the following:

- Small Business Commission
- Youth Commission
- Ethics Commission
- Planning Commission
- Building Inspection Commission

Note: For the Imperative Agenda (a resolution not on the printed agenda), use a Imperative

Sponsor(s):

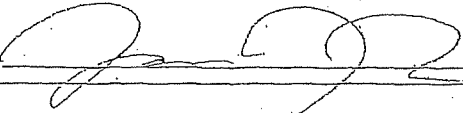
Supervisor Kim

Subject:

Second Amendment to Contract No. CS-159, SFMTA Transbay Transit Center Program Services

The text is listed below or attached:

[Empty box for text listing]

Signature of Sponsoring Supervisor: 

For Clerk's Use Only:

FORM SFEC-126:
NOTIFICATION OF CONTRACT APPROVAL
 (S.F. Campaign and Governmental Conduct Code § 1.126)

City Elective Officer Information <i>(Please print clearly.)</i>	
Name of City elective officer(s): Members, San Francisco Board of Supervisors	City elective office(s) held: Members, San Francisco Board of Supervisors
Contractor Information <i>(Please print clearly.)</i>	
Name of contractor: Transbay Joint Powers Authority (TJPA)	
<i>Please list the names of (1) members of the contractor's board of directors; (2) the contractor's chief executive officer, chief financial officer and chief operating officer; (3) any person who has an ownership of 20 percent or more in the contractor; (4) any subcontractor listed in the bid or contract; and (5) any political committee sponsored or controlled by the contractor. Use additional pages as necessary.</i>	
1. TJPA Board of Directors: Jane Kim, Elsa Ortiz, Art Lloyd, Gabriel Metcalf, Edward Reiskin, Bijan Sartipi 2. Executive Director: Maria Ayerdi-Kaplan; Chief Financial Officer: Sara Gigliotti; Senior Program Manager: Robert Beck 3. none 4. none 5. none	
Contractor address: 201 Mission Street, Suite 2100, San Francisco, CA 94105	
Date that contract was approved:	Amount of contract: \$2,113,000 thru December 31, 2017
Describe the nature of the contract that was approved: TJPA agrees to compensate the SFMTA for services including project management, construction management, inspection, engineering, planning, and coordination support for the TJPA Transit Center development thru December 31, 2017.	
Comments:	

This contract was approved by (check applicable):

the City elective officer(s) identified on this form
 a board on which the City elective officer(s) serves San Francisco Board of Supervisors
Print Name of Board

the board of a state agency (Health Authority, Housing Authority Commission, Industrial Development Authority Board, Parking Authority, Redevelopment Agency Commission, Relocation Appeals Board, Treasure Island Development Authority) on which an appointee of the City elective officer(s) identified on this form sits

Print Name of Board

Filer Information <i>(Please print clearly.)</i>	
Name of filer: Angela Calvillo, Clerk of the Board	Contact telephone number: (415) 554-5184
Address: City Hall, Room 244 1 Dr. Carlton B. Goodlett Pl., San Francisco, CA 94102	E-mail: Board.of.Supervisors@sfgov.org

Signature of City Elective Officer (if submitted by City elective officer)

Date Signed

Signature of Board Secretary or Clerk (if submitted by Board Secretary or Clerk)

Date Signed

**FIRST AMENDMENT TO
INTERGOVERNMENTAL AGREEMENT BETWEEN THE TRANSBAY JOINT POWERS
AUTHORITY AND THE SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY**

This Amendment is made this 9th day of August, 2010, in the City and County of San Francisco, State of California, by and between the Transbay Joint Powers Authority (the "TJPA") and the City and County of San Francisco, a municipal corporation (the "City") acting by and through its San Francisco Municipal Transportation Agency ("SFMTA").

RECITALS

WHEREAS, SFMTA and TJPA have entered into the Agreement (as defined below); and

WHEREAS, SFMTA and TJPA desire to amend the Agreement on the terms and conditions set forth herein;

NOW, THEREFORE, TJPA and the SFMTA agree as follows:

1. Definitions. The following definitions shall apply to this Amendment:
 - a. Agreement. The term "Agreement" shall mean the Intergovernmental Agreement Between The Transbay Joint Powers Authority And The San Francisco Municipal Transportation Agency, dated July 21, 2009.
 - b. Other Terms. Terms used and not defined in this Amendment shall have the meanings assigned to such terms in the Agreement.
2. Modifications to the Agreement. The Agreement is hereby modified as follows:
 - a. Section I, "Scope of Services" shall include SFMTA Parking Control Officer services for the operations of the Temporary Transbay Terminal during key commute hours.

Specifically, the required work to be performed by the SFMTA through its Sustainable Streets Division ("SSD") under this Amendment is set forth below:

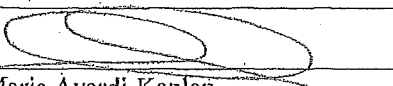
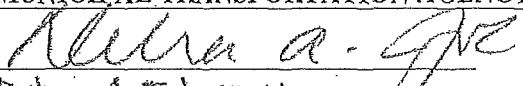
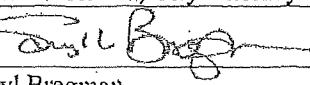
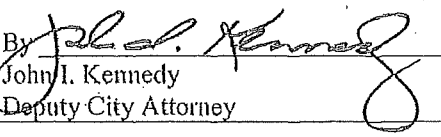
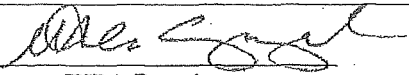
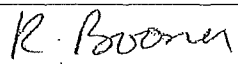
Exhibit A-7 Temporary Terminal Operations

Exhibit B-1 SFMTA/SSD Wage Rates 2010

Exhibit B-2 SFMTA/MUNI Wage Rates 2009

Exhibits A-7, B-1 and B-2 are attached to this Amendment Agreement and incorporated by reference as though fully set forth herein.
 - b. Section II, "Contract Amount and Terms of Payment", the "Estimated Contract Amount" shall increase to an amount not to exceed \$3,280,677.
 - c. Section III, "Term; Termination", the "Term" shall extend the Agreement termination to December 15, 2015.
3. Legal Effect. Except as expressly modified by this Amendment, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties execute this Agreement in San Francisco as of the date first mentioned above.

TRANSBAY JOINT POWERS AUTHORITY	CITY AND COUNTY OF SAN FRANCISCO
	
Maria Ayerdi-Kaplan Executive Director	Debra A. Johnson Executive Director/CBO (Acting)
APPROVED AS TO FORM:	APPROVED AS TO FORM:
Dennis J. Herrera, City Attorney	Dennis J. Herrera, City Attorney
By 	By 
Sheryl Bregman Deputy City Attorney	John I. Kennedy Deputy City Attorney
TJPA Board of Directors	SFMTA Board of Directors
Resolution No. 10-027	Resolution No. 10-146
Date: July 15, 2010	Dated: November 16, 2010
Attest:	Attest:
	
Secretary, TJPA Board	Secretary, SFMTA Board

**INTERGOVERNMENTAL AGREEMENT BETWEEN THE TRANSBAY JOINT
POWERS AUTHORITY AND THE SAN FRANCISCO MUNICIPAL
TRANSPORTATION AGENCY**

This Agreement is made this 21st day of July, 2009, in the City and County of San Francisco, State of California, by and between the Transbay Joint Powers Authority (the "TJPA") and the City and County of San Francisco, a municipal corporation (the "City") acting by and through its San Francisco Municipal Transportation Agency ("SFMTA").

RECITALS

A. The TJPA is a public entity authorized to perform construction of the new Transbay Transit Center Project and Related Structures (the "Project"). The Project involves construction of a Temporary Bus Terminal ("Temporary Terminal") on Howard Street between Beale and Main Streets, demolition of the existing Transbay Terminal ("Existing Terminal") on Mission and First streets, construction of Bus Storage Facility beneath the I-80 Freeway between Second and Fourth streets and relocation of underground utilities ("Utility Relocation").

B. SFMTA is a governmental entity which owns and operates the San Francisco public transit system ("MUNI"), including the Municipal Railway and bus service.

C. To accommodate the Project, it is necessary to provide new routes for MUNI trolley lines and to relocate the SFMTA existing overhead contact system ("OCS") and associated underground utilities. It is also necessary to relocate traffic signals, street striping and parking meters.

D. TJPA and SFMTA wish to provide for the smooth rerouting of MUNI line and associated OCS relocation and will do so by integrating the expertise of SFMTA staff into the Project as provided in this Intergovernmental Agreement.

E. The parties intend that this Agreement will govern the nature of the work to be accomplished, the work eligible for reimbursement, the responsibilities for accomplishing the work, and the responsibilities for payment.

F. The TJPA and the SFMTA acknowledge and agree that this Agreement covers Traffic Engineering, OCS Design, and Construction Management services relating to the Temporary Terminal, demolition of the Existing Terminal, Utility Relocation, Bus Storage Facility and Transit Center work. All other SFMTA work is specifically excluded from these provisions unless expressly provided for in this Agreement. Any future SFMTA services will be addressed in a separate agreement.

AGREEMENT

I. Scope of Services.

Generally, SFMTA will provide the following services under this Agreement:

A. For construction of the Temporary Terminal, the SFMTA shall provide to the TJPA construction management, OCS inspection and engineering support services. The SFMTA shall also provide and install traffic signage, street striping and parking meters.

B. For demolition of the Existing Terminal, the SFMTA shall provide to the TJPA OCS design, construction management, OCS inspection and engineering support services. The SFMTA shall also provide traffic engineering services.

C. For Utility Relocation, the SFMTA shall provide to the TJPA project management, engineering support services, and traffic planning.

D. For construction of the Transit Center, the SFMTA shall provide to the TJPA project management, engineering support services and traffic planning.

E. For construction of the Bus Storage Facility, the SFMTA shall provide to the TJPA traffic engineering services.

Specifically, the required work to be performed by the SFMTA through its MUNI Department and its Department of Parking and Traffic ("DPT") under this Agreement is set forth, as project elements of the Transbay Transit Center Program as follows:

Exhibit A1	Temporary Terminal;
Exhibit A2	Demolition of Existing Terminal;
Exhibit A3	Utility Relocation;
Exhibit A4	New Transit Center;
Exhibit A5	Bus Storage Facility;
Exhibit A6	Miscellaneous Project Management

Exhibits A1 – A6 are attached to this Agreement and incorporated by reference as though fully set forth herein. The SFMTA work shall be referred to as the "SFMTA Transbay Work."

II. Contract Amount and Terms of Payment

A. **Reimbursement for SFMTA Transbay Work Elements.** Compensation under this agreement shall be on a cost reimbursement basis only. The TJPA agrees to reimburse the SFMTA for all actual, allowable, reasonable costs incurred for the SFMTA Transbay Work performed under this Agreement. The salary rates of SFMTA personnel, including overhead rates, are set forth in Exhibit B. These rates reflect actual salaries paid to SFMTA employees who will be carrying out the work. Said rates are subject to change, depending on negotiated cost of living and other increases in applicable City collective bargaining agreements. Such changes shall not be subject to the prior approval of the TJPA, but shall not become a part of this Agreement until such time as the TJPA approves a modification of Exhibit B, which shall be done as soon as practicable upon SFMTA notification of such rate changes.

B. **Estimated Contract Amount.** In no event shall the total compensation under this Agreement exceed \$2,282,979, without a written amendment to this Agreement. The parties agree to amend this Agreement to increase the Contract Amount if the actual approved costs for the work exceed the Estimated Contract Amount.

C. **Terms of SFMTA Work.** All SFMTA work elements on the Transbay Transit Center Program will be provided on an as-needed time and materials basis. TJPA shall provide SFMTA a detailed milestone schedule in order to facilitate staff scheduling. The Notice to Proceed and SFMTA design deliverables shall be negotiated with TJPA based on the schedule and available SFMTA engineering resources. TJPA will provide two (2) weeks advanced notice of proposed SFMTA construction inspection work for staff scheduling. Work not listed as a Project element is outside the scope of SFMTA services and subject to separate agreement between TJPA and SFMTA.

D. **Terms of TJPA's Contractor Work.** In the event that TJPA's contractor work affects SFMTA revenue operations, traffic signal operations, or safety conditions, TJPA authorizes the SFMTA to take any and all immediate and effective steps, including issuing stop work orders, to ensure that SFMTA revenue operations, traffic signal operations, or safety conditions are maintained.

E. Terms of Payment. SFMTA will submit invoices to the TJPA's Executive Director on a monthly basis. The TJPA shall make best efforts to submit all payments to SFMTA within forty-five (45) days from receipt of invoice, addressed to Municipal Transportation Agency, Attention: Chief Financial Officer, One South Van Ness, 8th Floor, San Francisco, CA 94103.

F. Records. The SFMTA agrees to maintain and make available to the TJPA, during regular business hours, accurate books and accounting records relating to its work under this Agreement. The SFMTA will permit TJPA to audit, examine and make excerpts and transcripts from such books and records, and to audit all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this Agreement, whether funded in whole or in part under this Agreement. The SFMTA shall maintain such records in an accessible location and in satisfactory condition for a period of not less than five (5) years after final payment under this Agreement or until after a final audit has been concluded, whichever is later. The State of California or any governmental agency having an interest in this Agreement shall have the same rights conferred upon TJPA by this Section.

G. SFMTA Use of TJPA Office Space and Equipment. TJPA agrees to provide appropriate field office space and equipment for use by SFMTA construction management staff, including, but not limited to, desks, chairs, work table, lighting, telephone, computer, printer, copy/fax machine, and restroom facilities.

H. Subcontractors. The TJPA acknowledges that the SFMTA may retain subcontractors to assist the SFMTA in the performance of services under this Agreement.

1. The SFMTA shall select all subcontractors through a competitive procurement process in compliance with Federal Transit Administration Circular 4220.1F as set forth in Section 2 of the FTA Regulations.

2. Subcontractors contracting with the SFMTA shall work at the SFMTA's direction, under an agreement with the SFMTA, and subject to FTA Regulations. In the event of a conflict between the FTA Regulations and any term or condition of the contract between the SFMTA and the subcontractor, the provisions of the FTA Regulations shall control.

3. The TJPA shall assume no liability whatsoever for any SFMTA subcontractor. In any contract, agreement, or task order between the SFMTA and a subcontractor for Services, the SFMTA shall require the following:

- i. The TJPA shall be recognized as a third-party beneficiary of any such agreement or task order;
- ii. The TJPA shall be named as additional insured on any insurance policy provided by a subcontractor covering general and professional liability for the project as set forth in section 6 of this Agreement; and
- iii. The subcontractor shall indemnify the TJPA to the fullest extent available under the law.

4. SFMTA may use the services of the City's Department of Public Works ("DPW") in the performance of Services under this Agreement. In such event, DPW shall not be considered a subcontractor and shall not be subject to the requirements of this subparagraph.

III. Term; Termination

A. Term. This Agreement will commence on the Effective Date and terminate on December 31, 2014, unless extended by the parties or terminated earlier by the parties.

B. Effective Date. This Agreement shall become effective when the TJPA's Chief Financial Officer has certified the availability of funds and notifies the SFMTA in writing via a Notice to Proceed (NTP).

C. Termination. Either party has the option, in its sole discretion, to terminate this Agreement, at any time, for convenience and without cause. The terminating party shall exercise this option by giving the other party written notice. The notice shall specify the date on which termination will become effective. In the event of a termination, the TJPA shall be responsible for payment of all SFMTA costs incurred on work performed up to the date of termination. SFMTA shall promptly submit a final invoice to the TJPA after any such termination.

IV. Construction Contractor Indemnity

The TJPA shall ensure that any construction contractor shall indemnify, defend and hold harmless the City, the SFMTA, and their employees, officers and agents from any liability or claims arising out of the construction contractor's work.

V. Limitation on Liability; Incidental or Consequential Damages.

A. General. Except as otherwise provided in this Agreement, each party to this Agreement shall be responsible for its own damages and other costs, including attorney's fees, as a result of any claims arising out of the acts or omissions of the SFMTA in the performance of the Relocation Work performed in connection with this Agreement.

B. Liability for Cost Estimates. The SFMTA shall not be responsible for any additional construction costs exceeding the estimate it provided as part of the SFMTA work. The SFMTA shall cooperate with the TJPA, to the extent feasible, to perform value engineering or re-design in an effort to reduce construction costs on a cost reimbursable basis.

C. Incidental or Consequential Damages. Notwithstanding any other provision of this Agreement, in no event shall the TJPA, the City, or the SFMTA be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits, arising out of or in connection with the SFMTA Traffic Engineering, OCS Design, and Construction Management work.

VI. Miscellaneous Provisions

A. Notices to the Parties. Unless otherwise indicated elsewhere in this Agreement, all written communications sent by the parties shall be by U.S. mail, e-mail or fax, and shall be addressed as follows:

To SFMTA: Municipal Transportation Agency
One South Van Ness Ave. 3rd Floor
San Francisco, CA 94103
Attn: James Walsh, Project Manager

with a copy to: Municipal Transportation Agency
One South Van Ness Ave. 7th Floor
San Francisco, CA 94103
Attn: Daniel Arellano, DPT Project Manager

To TIPA: Transbay Joint Powers Authority
201 Mission St. Suite 2100
San Francisco, CA 94105
Attn: Maria Ayerdi-Kaplan, Executive Director

B. Tropical Hardwood and Virgin Redwood Ban. Pursuant to section 804(b) of the San Francisco Environment Code, the City and County of San Francisco urges contractors not to import, purchase, obtain, or use for any purpose, any tropical hardwood, tropical hardwood wood product, virgin redwood or virgin redwood wood product.

C. Modification of Agreement. This Agreement may not be modified, nor may compliance with any of its terms be waived, except by written instrument executed and approved in the same manner as this Agreement.

D. Agreement Made in California; Venue. The formation, interpretation and performance of this Agreement shall be governed by the laws of the State of California. Venue for all litigation relative to the formation, interpretation and performance of this Agreement shall be in San Francisco.

E. Construction. All paragraph captions are for reference only and shall not be considered in construing this Agreement.

F. Entire Agreement. This contract sets forth the entire Agreement between the parties, and supersedes all other oral or written provisions. This contract may be modified only as provided in Section VI.C.

G. Severability. Should the application of any provision of this Agreement to any particular facts or circumstances be found by a court of competent jurisdiction to be invalid or unenforceable, then (a) the validity of other provisions of this Agreement shall not be affected or impaired thereby, and (b) such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed without further action by the parties to the extent necessary to make such provision valid and enforceable.

H. Non-Waiver of Rights. The omission by either party at any time to enforce any default or right reserved to it, or to require performance of any of the terms, covenants, or provisions hereof by the other party at the time designated, shall not be a waiver of any such default or right to which the party is entitled, nor shall it in any way affect the right of the party to enforce such provisions thereafter. There shall be no waiver except in writing, signed by the party to be charged.

IN WITNESS WHEREOF, the parties execute this Agreement in San Francisco as of the date first mentioned above.

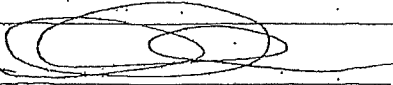
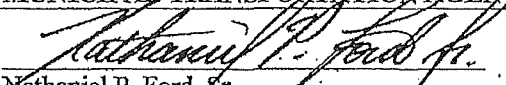
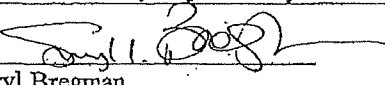
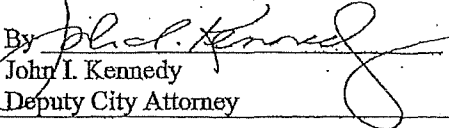

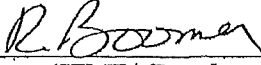
TRANSBAY JOINT POWERS AUTHORITY	CITY AND COUNTY OF SAN FRANCISCO
	MUNICIPAL TRANSPORTATION AGENCY
Maria Ayerdi-Kaplan Executive Director	 Nathaniel P. Ford, Sr. Executive Director/CEO
APPROVED AS TO FORM:	APPROVED AS TO FORM:
Dennis J. Herrera, City Attorney	Dennis J. Herrera, City Attorney
By  Sheryl Bregman Deputy City Attorney	By  John I. Kennedy Deputy City Attorney
TJPA Board of Directors	SFMTA Board of Directors
Resolution No. 09-018	Resolution No. 09-086
Date: 4/9/09	Dated: 6/2/09
Attest:	Attest:
 Secretary, TJPA Board	 Secretary, SFMTA Board

EXHIBIT A1

TEMPORARY TERMINAL
PROJECT MANAGEMENT, ENGINEERING SUPPORT, CONSTRUCTION MANAGEMENT, AND
SIGNAGE, STRIPING & METER SERVICES BY SFMTA

A. Scope of SFMTA (MUNI) Construction Management, Inspection, and Engineering Services:

- I. TJPA is constructing a Temporary Transbay Terminal at Howard Street between Beale and Main streets. The SFMTA shall provide construction administration, inspection and engineering support services for the installation of the overhead contact system (OCS) to support the Temporary Transbay Terminal. SFMTA construction staff will work with the TJPA Construction Management-Resident Engineer.
- II. The scope of SFMTA's services is limited to the following:
 - Coordinating and interfacing with project team members including TJPA, TJPA Contractor through TJPA Construction Management, and SFMTA (including SFMTA Resident Engineer, Inspectors, MUNI Maintenance and Operations).
 - Assisting TJPA Construction Management-Resident Engineer in coordinating with MUNI Street Operations to request vehicles to test the OCS.
 - Assisting TJPA Construction Management-Resident Engineer in submitting Contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
 - Calling in and closing out daily OCC clearances.
 - Providing inspection services (days, nights, and weekends) for the OCS work.
 - Issuing daily inspector reports for the OCS work.
 - Providing fulltime monitoring whenever OCS Contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure that Contractor's work does not negatively impact SFMTA's operations or safety.
 - Attending progress, coordination, and traffic management meetings for the OCS work.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing OCS submittals and RFIs by providing comments and recommendations.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing OCS work progress and Contractor's submitted work plan.
 - Assisting TJPA Construction Management-Resident Engineer in processing progress payments by issuing recommendations for OCS quantity measurement and completion.
 - Assisting TJPA Construction Management-Resident Engineer in the management of change orders related to OCS work that affects SFMTA's operations.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing Contract Change Order Requests and changes related to the OCS.
 - Providing SFMTA passengers with advance and timely information regarding changes to bus stops from the Existing Terminal to the Temporary Terminal
 - Providing for SFMTA street supervision during planned overhead shutdowns/reroutes and initial test of trains/trolleys as part of OCS construction.

Not to Exceed Budget: \$270,500

B. Scope of SFMTA (DPT) Construction Administration, Engineering and Inspection Services:

- I. SFMTA shall provide engineering and inspection services for the construction of new traffic signals and parking meters, and for the reconfiguration of roadways to support the Temporary Terminal.
- II. The scope of SFMTA's services is limited to the following:
 - Attend regular meetings, coordinate with various agencies and departments to minimize vehicular, pedestrian and transit impacts due to construction.
 - Review the traffic routing to accommodate the demolition of the public right-of-way.
 - Review the traffic routing needs to accommodate the relocation of utilities adjacent to the Temporary Terminal.
 - Review and comment on the traffic routing plans as needed.
 - Provide inspection services and recommend operational adjustments to accommodate the reconfiguration of the roadways and traffic controls.
 - Provide electrical inspection for traffic signal construction work.

Not to Exceed Budget: \$376,000

C. Scope of SFMTA (DPT) Signage, Striping and Parking Meter Relocation Services:

- I. SFMTA shall relocate and install new traffic control signs, remove and relocate all parking meters and furnish and install all final street striping in accordance with the approved Temporary Terminal plans.
- II. The scope of SFMTA's services is limited to the following:
 - Provide all labor and materials necessary to remove existing City owned traffic control signs and guide signs and install new signage in the public right-of-way.
 - Provide all labor and materials necessary to remove existing parking meters and install new City-owned parking meters in the public right-of-way.
 - Provide all labor and materials necessary to grind existing striping and install final striping for the project.

Not to Exceed Budget: \$612,479

EXHIBIT A2

EXISTING TERMINAL DEMOLITION
OCS PROJECT MANAGEMENT, ENGINEERING SUPPORT & CONSTRUCTION
MANAGEMENT SERVICES BY SFMTA

A. Scope of SFMTA (MUNI) Construction Management, Inspection, and Engineering Services:

- I. The TJPA will demolish the existing Transbay Terminal on Mission Street between Fremont and First streets. The SFMTA shall provide engineering and construction management services for the demolition of the existing Transbay Terminal. SFMTA construction staff will work with TJPA Construction Management-Resident Engineer.
- II. The scope of SFMTA's services is limited to the following:
 - Assisting TJPA Construction Management-Resident Engineer in coordinating with MUNI Street Operations to request vehicles to test the OCS project.
 - Assisting TJPA Construction Management-Resident Engineer in submitting Contractor's clearance requests to SFMTA's Operation Central Control (OCC) and attending clearance meetings.
 - Calling in and closing out daily OCC clearances.
 - Providing inspection services (days, nights, and weekends) for the OCS work.
 - Issuing daily inspector reports for the OCS work.
 - Providing fulltime monitoring whenever OCS Contractor performs work impacting SFMTA operations. When authorized, issue directives or other required actions (such as stop work orders) to ensure Contractor's work does not negatively impact SFMTA's operations and safety.
 - Attending progress, coordination, and traffic management meetings for the OCS project.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing OCS submittals and RFIs by providing comments and recommendations.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing OCS work progress and Contractor's submitted work plan.
 - Assisting TJPA Construction Management-Resident Engineer in processing progress payments by issuing recommendations for OCS quantity measurement and completion.
 - Assisting TJPA Construction Management-Resident Engineer in the management of change orders related to OCS work that affects SFMTA's operations.
 - Assisting TJPA Construction Management-Resident Engineer in reviewing Contract Change Order Request and changes related to the OCS.
 - Providing SFMTA street supervision for vehicle re-routing during planned shutdowns of the OCS system.
 - Providing SFMTA passengers with timely information regarding changes to bus line routes and stops during the transition to the temporary terminal.

Not to Exceed Budget: \$205,000

B. Scope of SFMTA (DPT) Traffic Engineering Services:

- I. SFMTA shall provide engineering and construction management services to support the demolition of the existing Transbay Terminal:
- II. The scope of SFMTA's services is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic during the demolition of the existing Transbay Terminal.
 - Review final specifications and estimates for traffic routing for demolition.
 - Attend regular meetings and review and comment on traffic routing to accommodate the demolition of the existing Transbay Terminal.

Not to Exceed Budget: \$29,000

EXHIBIT A3

UTILITY RELOCATION
TRAFFIC PLANNING AND ENGINEERING SERVICES BY SFMTA

A. Scope of SFMTA (MUNI) Project Management and Engineering Services:

- I. The TJPA is relocating utility lines on Mission, Fremont, Beale and First streets as part of the Transit Center Relocation of Utilities Project. The SFMTA shall provide traction power analysis and engineering services to support the Transit Center Relocation of Utilities Project.
- II. The scope of SFMTA's services is limited to the following:
 - Review the impact of TJPA's relocation of SFMTA facilities and make recommendations to the TJPA design team based on traction power analysis.
 - Perform traction power analyses to determine the need for new traction power infrastructure (conduits, ductbank, cable, manholes) and make recommendations to TJPA design team.

Budget: \$55,000

B. Scope of SFMTA (DPT & MUNI)'s Traffic Planning and Project Management Services:

- I. SFMTA shall provide traffic planning, traffic engineering and project management services to support the Transit Center Utility Relocation.
- II. The scope of work is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic during the relocation of utilities adjacent to the Transit Center.
 - Review final specifications and estimates for traffic routing during the relocation of utilities.
 - Attend regular meetings and work with various agencies to minimize the impacts to the public during the utility relocation.
 - Provide SFMTA street supervision for vehicle re-routes.
 - Provide for any needed relocation of SFMTA overhead contact system (OCS), including support for re-routes/bus substitution during any period of OCS shutdown.

Not to Exceed Budget: \$95,500 (DPT)
15,000 (MUNI)

**EXHIBIT A4
TRANSIT CENTER
TRAFFIC PLANNING AND ENGINEERING SERVICES BY SFMTA**

A. Scope of SFMTA (MUNI)'s Project Management and Engineering Services:

- I. TJPA is constructing a new Transit Center at Mission Street between Fremont and Beale streets. The SFMTA shall provide Engineering design services for the overhead contact system (OCS) project related to the new Transit Center. (See enclosed preliminary sketch, alignments are subject to change.)

- II. The scope of SFMTA's services is limited to the following:
 - Provide construction plans, sequencing plans, specifications, and construction cost estimates, including new trolley pole foundations, trolley poles, wires, wood troughs support spans and bracket arms.
 - Reconfigure existing special OCS.
 - Provide design of existing streetlight transfer to new trolley poles where required; remove existing streetlight poles as needed.
 - Participate in coordination meetings with City agencies, TJPA and TJPA's design team.
 - Coordinate and obtain approval from SMFTA Operations and Maintenance on the bus plaza design.

- III. The scope of SFMTA's services is based upon the following assumptions:
 - a. Baseline survey, existing underground utility information and new Transbay Transit Center drawings to be provided to SFMTA.
 - b. The design and relocation of existing utilities not owned by the SFMTA shall be addressed and designed by other parties. OCS installation may require the relocation of such existing utilities.
 - c. Additional work triggered by the relocation of trolley poles (curb ramp reconstruction, traffic signal and mast arm relocation, and the relocation of traffic signs, etc.) shall be addressed and designed by others.
 - d. All associated civil design elements (e.g. passenger boarding islands) shall be designed and addressed by other parties.
 - e. All new poles shall be designed using standard poles with standard cobra type streetlights.
 - f. Sub-sidewalk basement special foundations, and eyebolts to buildings, if any, shall be addressed and designed by other parties.

Not to Exceed Budget: \$480,000

B. Scope of SFMTA (DPT)'s Traffic Engineering Services:

- I. SFMTA shall provide traffic planning and engineering services for the new Transit Center.
- II. The scope of SFMTA's services is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA and its consultants for the routing of vehicle, pedestrian and transit traffic for the new Transit Center.
 - Provide review of conceptual traffic signal plans.
 - Review preliminary specifications and estimates of traffic routing for the new Transit Center.
 - Attend regular meetings and review traffic routing needs to accommodate the construction of the new Transit Center.

Final designs and services for new or modified signage, striping, and traffic signals are outside the scope of proposed SFMTA (MUNI & DPT) services and subject to a separate agreement between TJPA and SFMTA.

Not to Exceed Budget: \$90,500

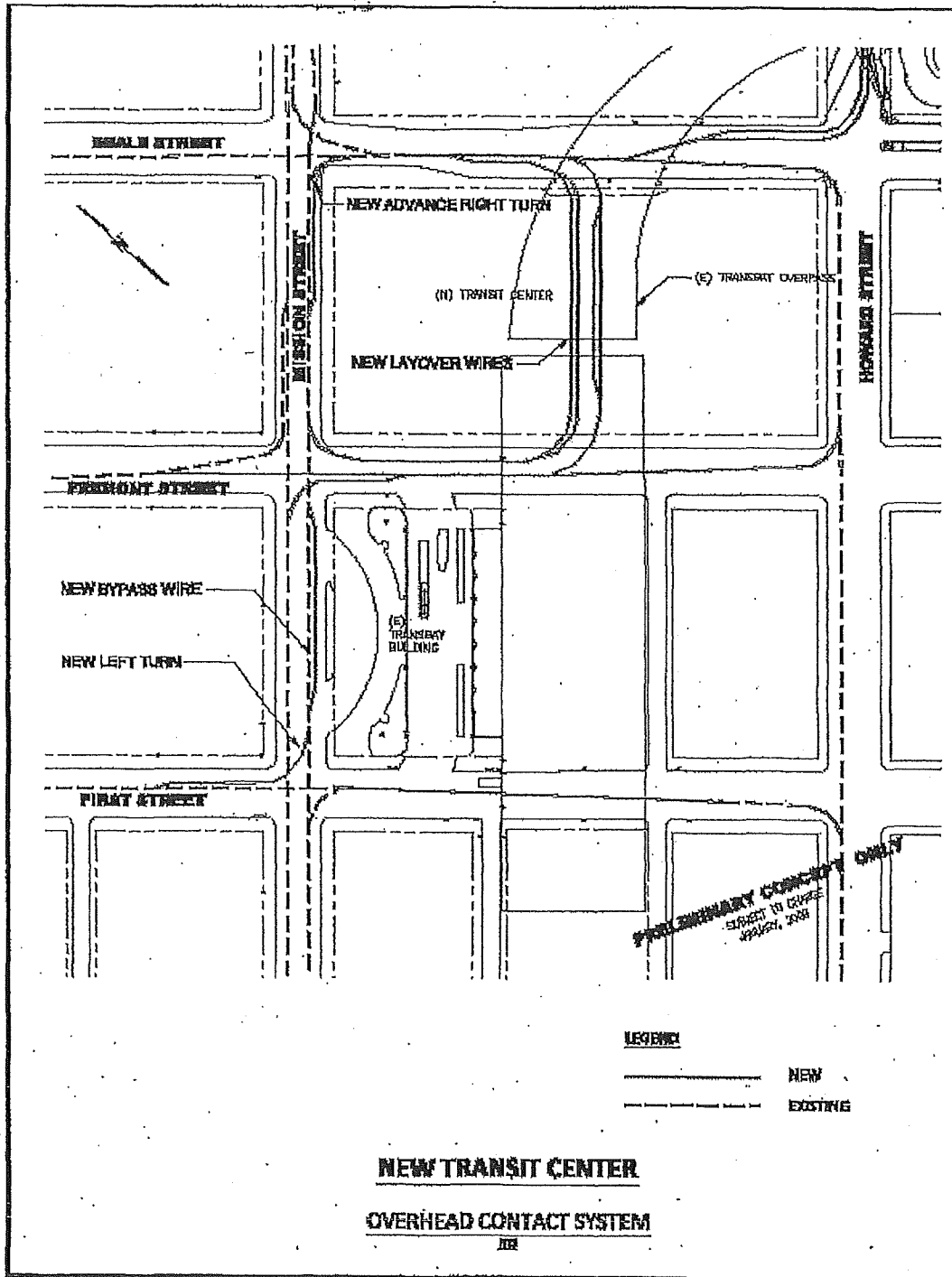


EXHIBIT A5

BUS STORAGE FACILITY
TRAFFIC PLANNING BY SFMTA

A. Scope of SFMTA (DPT) Traffic Engineering Services:

- I. TJPA is constructing a temporary bus storage facility at Howard Street between Main and Beale streets. SFMTA shall provide traffic planning and engineering services for the new Bus Storage Facility.
- II. The scope of SFMTA's services is limited to the following:
 - Participate in the collaborative planning and design efforts by TJPA, City departments, and the consultants for the Bus Storage Facility.
 - Attend regular meetings and review the traffic routing and traffic circulation needs to accommodate the Bus Storage Facility.
 - Review final specifications and estimates for traffic engineering services to accommodate the Bus Storage Facility.

Not to Exceed Budget \$29,000

EXHIBIT A6

MISCELLANEOUS PROJECT MANAGEMENT, ENGINEERING SUPPORT & CONSTRUCTION
MANAGEMENT SERVICES BY SFMTA

A. Scope of SFMTA's (DPT & MUNI) Project Management, Engineering Construction
Management, and Inspection Support and Coordination Services:

- I. SFMTA shall provide general planning, project management, engineering support, and construction management services and coordination to support TJPA for the Transbay Transit Center Program.
- II. The scope of work is limited to the following:
 - Providing general project management support and coordination.
 - Providing general engineering support and coordination.
 - Providing general construction management and inspection support and coordination.
 - Providing general traffic planning and engineering support and coordination.

Budget: \$25,000

EXHIBIT B-1

SFMTA/DPT Wage Rates 2009

SFMTA/DPT. Wage Rates 2008/2009					
JOB TITLE	JOB CLASS	2008-2009 RATES			
			HOURLY X 2.45	DAILY RATE X 2.45	DAILY ROUNDED RATE
ENGINEERING DIVISION					
Planner IV	5290		\$ 139.01	\$ 1,112.08	\$ 1,113.00
Principal Engineer	5212		\$ 216.24	\$ 1,729.95	\$ 1,730.00
Senior Engineer	5211		\$ 173.09	\$ 1,384.74	\$ 1,390.00
Engineer	5241		\$ 149.51	\$ 1,196.09	\$ 1,200.00
Assoc Engineer	5207		\$ 129.18	\$ 1,033.41	\$ 1,040.00
Asst Engineer	5203		\$ 111.05	\$ 888.37	\$ 890.00
Jr. Engineer	5201		\$ 98.25	\$ 785.96	\$ 790.00
Stud Train I	5380		\$ 57.88	\$ 463.05	\$ 470.00
Stud Train II	5381		\$ 62.11	\$ 496.86	\$ 500.00
Stud Train II	5382		\$ 65.08	\$ 520.63	\$ 530.00
Civ. Eng. Asst.	5362		\$ 82.87	\$ 662.97	\$ 670.00
Civ. Eng. Assoc.I	5364		\$ 91.78	\$ 734.27	\$ 740.00
Civ. Eng. Assoc. II	5366		\$ 106.27	\$ 850.15	\$ 860.00
Survey Tech.	5302		\$ 81.65	\$ 653.17	\$ 660.00
PAINT SHOP					
Manager Paint	5301		\$ 113.74	\$ 909.93	\$ 910.00
Sup Paint Shop	7242		\$ 105.53	\$ 844.27	\$ 850.00
Painter	7346		\$ 88.02	\$ 704.13	\$ 710.00
SIGNAL SHOP					
Elec. Sup II	7276		\$ 135.24	\$ 1,081.92	\$ 1,090.00
Elec. Sup I	7238		\$ 121.46	\$ 971.67	\$ 980.00
Elec.	7345		\$ 107.59	\$ 860.69	\$ 870.00
SIGN SHOP					
Manager Sign	5306		\$ 136.53	\$ 1,092.21	\$ 1,100.00
Sr. Mgmt. Asst.	1844		\$ 96.10	\$ 768.81	\$ 770.00
Sup. Traffic Sign	5303		\$ 107.28	\$ 858.24	\$ 860.00
Sign Installer	7457		\$ 74.79	\$ 598.29	\$ 600.00
METER SHOP					
Manager Meter Shop Mgr. III	9177		\$ 149.02	\$ 1,192.17	\$ 1,200.00
Parking Meter Repair Sup.	5303		\$ 107.28	\$ 858.24	\$ 860.00
Parking Meter Repairer	1844		\$ 96.10	\$ 768.81	\$ 770.00
Maintenance Machinist	7457		\$ 74.79	\$ 598.29	\$ 600.00

EXHIBIT B-2

SFMTA/MUNI Wage Rates 2009

SFMTA/MUNI Wage Rates 2009			
JOB TITLE	JOB CLASS	2009 RATES	
		UNBURDENED DAILY RATE	BURDENED DAILY RATE (UNBURDENED DAILY X 3.06)
Project Manager I	5502	\$ 485	\$ 1484
Project Manager II	5504	\$ 562	\$ 1722
Transit Planner	5290	\$ 453	\$ 1386
Principal Engineer	5212	\$ 664	\$ 2032
Senior Engineer	5211	\$ 568	\$ 1738
Engineer	5241	\$ 488	\$ 1493
Assoc. Engineer	5207	\$ 424	\$ 1297
Asst. Engineer	5203	\$ 368	\$ 1126
Jr. Engineer	5201	\$ 321	\$ 983
Civ. Engineer Asst.	5362	\$ 272	\$ 832
Civ. Engineer, Assoc. I	5364	\$ 304	\$ 930
Civ. Engineer Assoc. II	5366	\$ 347	\$ 1062
Executive Secretary I	1450	\$ 252	\$ 772
Secretary II	1446	\$ 232	\$ 710
Construction Inspector	6318	\$ 368	\$ 1126
Sr. Construction Inspector	6319	\$ 404	\$ 1236

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. 09-086

WHEREAS, The construction of the New Transit Center will require Muni's existing overhead contact system (OCS) to be demolished and relocated to provide a new route for affected Muni trolley bus lines; and,

WHEREAS, Affected Muni trolley bus lines will be rerouted to a Temporary Terminal and New Transit Center, and the OCS will be designed to accommodate this new route; and,

WHEREAS, The San Francisco Municipal Transportation Agency (SFMTA) and the Transbay Joint Powers Authority (TJPA) have negotiated Contract No. CS - 159, SFMTA Transbay Transit Center Program Services, for the TJPA to reimburse the SFMTA on a cost reimbursement basis for Traffic Engineering, OCS design, and Construction Management Services related to relocation of the OCS and related traffic engineering design services in an estimated amount not to exceed \$2,282,979; now, therefore, be it

RESOLVED, That the SFMTA Board of Directors authorizes the Executive Director/CEO to execute Contract CS - 159, Transbay Transit Center Program Services for OCS demolition, utility relocation, and design work, with the Transbay Joint Powers Authority for the SFMTA to obtain reimbursement for overhead line design, traffic engineering, construction management services required to demolish, relocate, and design trolley lines to a New Transit Center, for an amount not to exceed \$2,282,979, and for a period to commence on the effective date of the Agreement and terminating on December 31, 2014.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of JUN 02 2009

R. Boomey

Secretary to the Board of Directors
San Francisco Municipal Transportation Agency

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. 190521-054

WHEREAS, On July 21, 2009, the SFMTA Board of Directors approved Agreement No. CS-159, an Intergovernmental Agreement between the Transbay Joint Powers Authority (TJPA) and SFMTA, to provide services to the TJPA in the areas of project management, construction management, overhead contact system inspection and engineering support, and traffic engineering for the Temporary Terminal, Demolition, Utility Relocation, Bus Storage, and Transit Center projects with a maximum compensation of \$2,282,979; and,

WHEREAS, On November 16, 2010, the SFMTA Board of Directors authorized the First Amendment to Agreement No. CS-159 to provide additional SFMTA services, including SFMTA Parking Control Officer services, for the operation of the Temporary Transbay Terminal during key commute hours, increase the contract amount by \$997,698, for a total not to exceed amount of \$3,280,677, and extend the term of the Agreement to December 15, 2015; and,

WHEREAS, On February 5, 2013, the SFMTA Board of Directors authorized the Second Amendment to Agreement No. CS-159 to provide additional services associated with the Bus Storage Facility and Transbay Transit Center, as well as the Beale Street temporary traffic bridge, Muni traction power duct bank, and Bus Ramp, increase the budget by \$2,113,000 resulting in a not-to-exceed Agreement budget of \$5,393,677, and extend the term of the Agreement to December 31, 2017; and,

WHEREAS, On October 17, 2017, the SFMTA Board of Directors authorized the Third Amendment to the Agreement to add additional services related to installation of ticket vending machines in the new Transbay Transit Center, reallocate task budgets, and extend the term Amendment to June 30, 2018 at no additional costs; and,

WHEREAS, All prior amendments to the Agreement were approved by the TJPA Board of Directors and the San Francisco Board of Supervisors; and,

WHEREAS, Since the Third Amendment to the Agreement assumed transit operations would begin at the TJPA transit center in early 2018, but the actual opening did not occur until August 2018, this Fourth Amendment extends the term of the Agreement to continue support for initial transit operations from July 2018 to December 2019, and reallocates funding within existing task budgets with additional time for project close out at no additional cost; and,

WHEREAS, On April 11, 2019, the TJPA Board of Directors approved the Fourth Amendment to the Agreement; and,


WHEREAS, On April 12, 2019, the SFMTA, under authority delegated by the Planning Department, determined that the Third Amendment to Contract No. CS-159 is not defined as a "project" under the California Environmental Quality Act pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b); and,

WHEREAS, A copy of the California Environmental Quality Act determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference and, therefore be it

RESOLVED, That the SFMTA Board of Directors approves the Fourth Amendment to Agreement No. CS-159, an Intergovernmental Agreement between the Transbay Joint Powers Authority and the San Francisco Municipal Transportation Agency, to reallocate funding within existing task budgets and extend the term of the Agreement from June 30, 2018 to December 31, 2019 at no additional cost; and be it further

RESOLVED, That the SFMTA Board of Directors requests that the Board of Supervisors approve the Fourth Amendment to Agreement No. CS-159 pursuant to Charter Section 9.118.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of May 21, 2019.



Secretary to the Board of Directors
San Francisco Municipal Transportation Agency



Fourth Amendment to Contract No. CS-159

The San Francisco Municipal Transportation Agency (SFMTA) proposes to amend Contract No. CS-159, an Intergovernmental Agreement between the Transbay Joint Powers Authority (TJPA) and the SFMTA. This amendment would extend the terms of the Third Amendment made to the agreement in 2017 for the continuation of engineering services related to transit operations. The Fourth Amendment was necessitated because of delays in the opening of the TJPA Transit Center during 2018. In addition to continual support of various engineering services, the Fourth Amendment would reallocate task budgets within the total existing budget and extend the contract term to December 31, 2019.

Not a "project" pursuant to CEQA as defined in CEQA Guidelines Sections 15060(c) and 15378(b) because the action would not result in a direct or a reasonably foreseeable indirect physical change to the environment.

Forrest Chamberlain Apr 12, 2019

Forrest Chamberlain Date
San Francisco Municipal Transportation Agency



Officer services, for the operation of the Temporary Transbay Terminal during key commute hours, increased the contract amount by \$997,698, for a total contract amount of \$3,280,677, and extended the term of the Agreement to December 15, 2015.

On February 5, 2013, the SFMTA Board of Directors authorized the Second Amendment to Agreement No. CS-159 to provide additional services associated with the bus storage facility and the Center, as well as the Beale Street temporary traffic bridge, Muni traction power duct bank, and Bus Ramp, increased the contract amount by \$2,113,000, resulting in a not-to-exceed contract amount of \$5,393,677, and extended the contract term until December 31, 2017.

On October 17, 2017, the SFMTA Board of Directors authorized the Third Amendment to Agreement No. CS-159 to provide ticket vending machines to the Center, reallocate findings within the task budgets with not-to-exceed contract amount of \$5,393,677, and extended the contract term until December 31, 2017.

The original Agreement, as amended, assumed transit operations would move from the Temporary Terminal to the Transit Center by early 2018; however, the actual opening did not occur until August 2018 and, post-temporary closure related to the fissure, transit operations are now anticipated to re-initiate in 2019. Construction of traffic signals occurred in early 2019 and signal activation as well as traffic signage and markings will be completed dependent upon Pacific Gas and Electric (PG&E) energization of the traffic signals at Beale, First and Fremont Streets. Energization work by PG&E has been delayed due to electrical part availability; electrical power for signals will be completed by mid-2019. The term of the Agreement requires extension to allow scope of work associated with transit center operational readiness. Amendment No. 4 thus authorizes the continuation of services related to SFMTA traffic signals, traffic striping, OCS and Traction Power services, and extends the term of the Agreement to December 31, 2019.

Alternatives Considered

The Amendment will allow SFMTA to maintain expected standards with inspectors and provide continued support for the Center. Not approving the Amendment will limit the construction support for the Center from SFMTA and potential delay for lack of inspections can be offered to TJPA.

Funding Impact



None. The Fourth Amendment reallocates task budgets within the existing contract amount of \$5,393,677

Environmental Review

On April 12, 2019, the SFMTA, under authority delegated by the Planning Department, determined that the Third Amendment to Agreement No. CS-159 is not defined as a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b).

A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference.

Recommendation:

The SFMTA requests that the San Francisco Board of Supervisors approve a Fourth Amendment to Agreement No. CS-159, Intergovernmental Agreement between the Transbay Joint Powers Authority and the San Francisco Municipal Transportation Agency, to add additional services related to installation of ticket vending machines in the new Transbay Transit Center, reallocate task budgets, and extend the term of the Agreement to December 31, 2019 for no additional cost.

Thank you for your time and consideration of this proposal. Should you have any questions or require more information, please do not hesitate to contact me at any time.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Reiskin'.

Edward D. Reiskin
Director of Transportation

