
EXHIBIT A - Trade Subcontractor Manual and Forms – Contract # 301000508

F... Request for Proposals Package
TG05.8: Rooftop Cranes **Rev.**

F ...F

March 28, 2014



TABLE OF CONTENTS

1.	INTRODUCTION	3
2.	KEY DATES	3
3.	COMMUNICATION WITH WEBCOR/OBAYASHI JOINT VENTURE	4
4.	SCOPE OF SERVICES	5
5.	SMALL BUSINESS ENTERPRISE (SBE) GOALS	10
6.	PROPOSAL REQUIREMENTS	11
7.	SCHEDULE	15
8.	DOCUMENTS LIST	16
9.	EVALUATION PROCESS	18
10.	SUBMITTAL PROCEDURES	19
11.	STANDARD AGREEMENT PROVISIONS	20
	ATTACHMENT 1 - ESSENTIAL REQUIREMENTS WORK SHEET	20
	ATTACHMENT 2 – REQUEST FOR PROPOSAL CHECKLIST	32
	ATTACHMENT 3 - SIMILAR EXPERIENCE	33
	ATTACHMENT 4 - LARGEST PROJECTS	34
	ATTACHMENT 5 – URBAN AND CITY & COUNTY OF SAN FRANCISCO PROJECT EXPERIENCE	36
	ATTACHMENT 6 - REQUEST FOR APPEAL	37
	ATTACHMENT 7 - MEDIATION, ARBITRATION AND LITIGATION HISTORY	38
	ATTACHMENT 8 - LOGISTICS	39
	ATTACHMENT 9 – FEE PROPOSAL	41

1. INTRODUCTION

Webcor/Obayashi Joint Venture issues this Request for Proposals (RFP) for the Rooftop Cranes Package for the Transbay Transit Center Project from firms or individuals (Trade Subcontractors) with expertise in Rooftop Crane services. The successful Trade Subcontractor must demonstrate experience in its respective field as outlined within this RFP.

Based on its evaluation of the Proposals received in response to this RFP, Webcor/Obayashi Joint Venture may select one or more Trade Subcontractors to enter into negotiations based on proposed fees and scope of services described in Section 4 below. The selection of any Trade Subcontractor to enter into negotiations shall not imply Webcor/Obayashi Joint Venture's acceptance of all terms of the Trade Subcontractor's Proposal; terms may be subject to further negotiations. Webcor/Obayashi Joint Venture shall have no obligation unless and until a final agreement is entered into by the parties following approval by the Transbay Joint Powers Authority (TJPA) Board of Directors (TJPA Board).

Once the agreement is executed, Webcor/Obayashi Joint Venture will require the selected Trade Subcontractor(s) to perform the Services upon Webcor/Obayashi Joint Venture's request. Such Services will be authorized through the issuance of task orders. The agreement will be for a period not to exceed four (4) years, although Webcor/Obayashi Joint Venture will have the option to extend the term for three (3) 1-year options, by mutual agreement of the parties.

There is no guarantee that Webcor/Obayashi Joint Venture will issue any Notice to Proceed (NTP) and Webcor/Obayashi Joint Venture may terminate the Agreement at any time.

2. KEY DATES

Each Trade Subcontractor shall submit their Proposals and other applicable sections and forms as required herein.

Pre-Proposal Conference: A pre-proposal conference for Trade Subcontractors interested in submitting Proposals will be held on **January 15, 2014**, at **2:00 pm** in the **Webcor/Obayashi offices at 175 Beale Street, San Francisco, California 94105**. This meeting will include information for the Small Business Enterprise (SBE) participation requirements.

E

Last Day for Questions: Questions or clarifications regarding the RFP must be submitted in writing no later than **2:00 pm on January 30, 2014** to Webcor/Obayashi Joint Venture, 175 Beale Street, San Francisco, CA, 94105, via email to TransbayBidding_TG05.8@webcor-obayashi.com. **No questions will be accepted after 2:00 p.m. on March 20, 2014.** Answers will be posted on the TJPA website (<http://transbaycenter.org/> > TJPA > Doing Business with the TJPA > Current Contract Opportunities > Rooftop Cranes Package).

D C

Proposal Due Date: Proposals must be received by Webcor/Obayashi Joint Venture no later than **2:00 p.m. on April 3, 2014** at the following address:

Attn: Sihaya Roselle
175 Beale Street
San Francisco, CA 94105

C D

Responses to this RFP that are not received by the time and date specified, do not contain all the required information and completed forms, or do not meet all qualifications shall be deemed non-responsive and rejected without consideration.

Trade Subcontractors may obtain copies of this RFP by downloading the document from the TJPA website: <http://transbaycenter.org/tjpa/doing-business-with-the-tjpa/current-contract-opportunities/rooftop-cranes-rfp>. Information regarding how to obtain the drawings and specifications will be posted on the TJPA website on **January 7, 2014**.

D

Notification of Intention to Award Contract: On or about May 16, 2014

TJPA Board Vote to Approve the Contract Award: June 12, 2014

C

Package Timeline:

Proposal Package Issued:	January 7, 2014
Pre-Proposal Meeting:	January 15, 2014 (2:00 pm)
QPD's Due:	March 20, 2014 (2:00 pm)
Proposal Packages Due:	April 3, 2014 (2:00 pm)
Finalist Trade Subcontractors Notified:	April 11, 2014
Finalist Interviews/Submissions:	April 21 – 25, 2014
Negotiations:	April 28 - May 15, 2014
Notification of Intention to Award Contract:	May 16, 2014
Protest Period:	May 19 – 23, 2014
TJPA Board Vote to Approve the Contract Award:	June 12, 2014 (June Board Meeting)

C D E

3. COMMUNICATION WITH WEBCOR/OBAYASHI JOINT VENTURE

At no time during the proposal process (defined as the time between issuance of this RFP and award of Trade Subcontract) shall prospective Trade Subcontractors contact any person(s) or staff of the TJPA Board of Directors, the TJPA, TJPA Program Management/Program Controls (PMPC) team (URS), Construction Manager/General Contractor (CM/GC) Webcor/Obayashi Joint Venture, CM Oversight (CMO) (Turner Construction), the Architect (Pelli Clarke Pelli Architects (PCPA) or any subconsultant to PCPA), or other TJPA Consultants regarding this RFP. The only contact is for submission of questions using the contact directions below.

Trade Subcontractors shall submit questions using the Questions On Proposal Documents (QPD) form through Webcor/Obayashi Joint Venture. Refer to the Request for Proposals Manual for the QPD form.

E-mail Webcor/Obayashi Joint Venture at TransbayBidding_TG05.8@webcor-obayashi.com.

4. SCOPE OF SERVICES

4.1 Package Scope Summary

Trade Subcontractor will furnish all services (collectively called the “Work”) required to complete Project Work in accordance with the Contract Documents and Field Direction. The Trade Subcontractor is recognized as a licensed professional Trade Subcontractor and is required to provide a complete scope of work, including any items not shown in the Contract Documents which are typically included in this scope of work. The Work to be performed by the Trade Subcontractor includes, but is not limited to, the following:

1. Design, Furnish, Install, Maintain and Remove Rooftop Crane Railway: The Trade Subcontractor shall design, furnish, install, maintain and remove the rooftop crane railway, including but not limited to wet stamped engineered shop drawings, bolt up, welding, and any other necessary labor, material, equipment and supplies.
2. Rooftop Cranes: Trade Subcontractor shall furnish, install, maintain and remove two rooftop cranes (minimum one 30-ton and one 50-ton) which will operate on the rooftop crane railway, including but not limited to providing all necessary power, fuel, railway platforms for movement of materials and any other necessary labor, material, maintenance, equipment, supplies, and removal.
3. Operators and Required Personnel: Provide qualified crane operators, ironworkers and other necessary labor for all shifts as required.
4. Temporary Loading Platforms: Furnish, install, maintain and remove a temporary loading platform with 100,000 lb. capacity at the Bus Deck level with temporary stair tower and all necessary shoring, labor, material, maintenance, equipment and supplies. Furnish, install, maintain and remove two cantilevered loading platforms at the Bus Deck level.

4.2 General Work

The Trade Subcontractor Work Requirements as established in the Request for Proposals Manual are clarified, modified and supplemented by the following information. If any conflict between this document and the Request for Proposals Manual exists, the more stringent will apply as determined by Webcor/Obayashi Joint Venture. All necessary work from mobilization to final completion shall be included in the scope of work.

General Scope:

Furnish, install, maintain and remove the job-site rooftop cranes (consists of the scope described below) per the contract documents. Trade Subcontractor shall include all labor, material, tools, equipment and supplies required in conformance with the contract documents. Trade Subcontractor’s proposal shall include the cost of design, coordination, detailing, engineering, procurement, installation, proper disposal off-site, and removal of the work per the contract documents. Design, implementation and removal shall be as directed by Webcor/Obayashi Joint Venture and the construction documents. The work to be performed by the Trade Subcontractor generally is as noted but is not necessarily limited to the following:

- 4.2.1 Pre-Construction Coordination: Trade Subcontractor will meet with Webcor/Obayashi Joint Venture no more than 10 days after contract award regarding logistical planning and all applicable coordination.
- 4.2.2 Rooftop Cranes, Railway and Temporary Loading Platform

E B

1. Trade Subcontractor shall furnish and install all structural components required for this scope of work. Trade Subcontractor shall include all materials, including but not limited

to, bracing, connection materials and embeds required for the work. Trade Subcontractor to coordinate bracing and embed design with the Structural Engineer and other trade subcontractors. Trade Subcontractor shall furnish and install all required embeds. Braces shall be anchored to embeds placed into the concrete pedestals on the rooftop slab by this Trade Subcontractor prior to concrete placement. Drilling of anchors into the concrete pedestals or rooftop slab post placement will not be allowed. Connections to structure shall be engineered as part of base bid work, and submitted to the project Structural Engineer of Record for review and approval prior to installation. Calculations shall include the verification of the adequacy of all steel floor framing that directly or indirectly supports the crane runway and/or loading platform. The calculation shall be performed assuming that all dead loads and superimposed dead loads are in place. Trade Subcontractor shall cut bracing attachment points and embeds flush with concrete and grind smooth during removal. Rooftop concrete slab and railway pedestals to be provided by TG07.2 Superstructure Concrete trade subcontractor. An access walkway shall be included along the entire length of the railway with stairways, three loading ramps with capacity and dimensions comparable to the rail mounted traveling platforms, hand rails and 6" toe plates as required. Removable Steel/Wire Handrail shall be added around perimeter of access walkway except for exits according to OSHA regulations. The handrail shall be tethered to the platform and be in lengths a person can lift. Provide engineered tie offs for the platform to be used when handrail is removed. Two rail mounted traveling platforms, one for each crane, shall be installed to move materials along the railway. The mounted platforms shall be 20 ft. long and the width of the railway with a minimum capacity of 100,000 lbs. Any and all means necessary to tie off shall be included. Design and engineering shall be in accordance with contract documents and Attachment 8 – Logistics. Final design and dimensions of the railway system shall ensure that conflicts with other building elements do not occur.

B

2. Furnish and install two complete and operational rail mounted mobile rooftop cranes.
 - a. One 30-ton crane with minimum 9,000 lb. capacity at 110 ft. radius.
 - b. One 50-ton crane with minimum 5,000 lb. capacity at 139 ft. radius to reach the far side of the building and corners.
 - c. Rail mounted cranes shall move along the railway under their own power and have the ability to push and/or pull the rail mounted material platforms when fully loaded.
 - d. Summary of heavy picks:

Item	Weight Ranges
W-1 Awning Sections	26,000 – 67,000 lbs. (50,000 lbs. typical)
W-1 Awning Subsections	2,500 – 12,000 lbs.
GFRC Fascia	4,950 – 8,250 lbs. max. (Largest panel is 22'x15')
Trees	2,000 – 25,000 65,000 lbs.

E

C

3. Temporary loading platform at the Bus Deck level shall have a minimum capacity of 100,000 lbs with approximate dimensions of 25 ft. x 40 ft. and be able to accommodate two forklifts (Type Genie GTH-1056 with maximum load) operating on the deck simultaneously. Loading requirements shall conform to the building loading requirements as outlined in the construction documents. Loading platform will be used for materials storage and movement via forklift. Removable Steel/Wire Handrail shall be added around perimeter of access walkway except for exits according to OSHA

regulations. The handrail shall be tethered to the platform and be in lengths a person can lift. Provide engineered tie offs for the platform to be used when handrail is removed. Trade Subcontractor shall furnish and install all required temporary shoring. Trade Subcontractor shall provide free and clear access of at least 15 ft. wide x 15 ft. high through the shoring to the below grade levels. Temporary shoring shall distribute the load evenly and prevent any cracking and damage to the Ground Floor, Lower Concourse and Train Box levels. Should any damage occur, Trade Subcontractor shall make repairs at its own expense per direction by Webcor/Obayashi Joint Venture. Trade Subcontractor to coordinate temporary platform and shoring design with the Structural Engineer of Record and other trade subcontractors. Temporary Platform shall include a temporary stair tower for access from top of platform to ground level. Exact location of temporary loading platform to be determined by Webcor/Obayashi Joint Venture.

4. Two cantilevered loading platforms shall be placed at the bus deck level. Platforms shall be approximately 10 ft. wide x 12 ft. long and have a minimum load capacity of 11,000 lbs. Removable Steel/Wire Handrail shall be added around perimeter of access walkway except for exits according to OSHA regulations. The handrail shall be tethered to the platform and be in lengths a person can lift. Provide engineered tie offs for the platform to be used when handrail is removed. Loading requirements shall conform to the building loading requirements as outlined in the construction documents. Should any damage occur to the building, Trade Subcontractor shall make repairs at its own expense per direction by Webcor/Obayashi Joint Venture. Trade Subcontractor to coordinate cantilevered platform and shoring design with the Structural Engineer and other trade subcontractors. Locations of temporary loading platforms to be determined by Webcor/Obayashi Joint Venture and coordinated with TG07.1R Structural Steel Superstructure, TG07.2 Superstructure Concrete and TG08.2 Exterior Awning trade subcontractors.

C

5. Signage for Maximum Load Capacity of the deck per span and per square foot shall be clearly posted on all material and loading platforms. Cantilevered platforms shall have a "Do Not Drive Forklift on Platform" sign that is highly visible from the bus deck level.
6. Trade Subcontractor shall coordinate with all other trade subcontractors. Trade Subcontractor might be required to implement alert systems to prevent any accidents with other trade subcontractors. All costs associated with the alert system should be carried by the Trade Subcontractor. A spotter shall be required during all crane operations to ensure visual monitoring of blind spots.
7. Erection and dismantling and removal of the railway, cranes and temporary platform during regular and after hours, including service technicians as required.
8. Include all freight to and from the jobsite.
9. Trained technician, test weights and full certification of each crane.
10. All rates are firm throughout the duration of this project.
11. Trade Subcontractor shall supply all labor, materials and equipment to erect, install, load, test, maintain, dismantle and remove all cranes, railway and platforms, including all required mobilizations.
12. Shop drawings and calculations to be provided by Trade Subcontractor as directed by Webcor/Obayashi Joint Venture. Design must be engineered and wet stamped by a Structural Engineer registered in the State of California, must include all installation details and accommodate minimum load requirements. Shop drawings and calculations to be submitted to Webcor/Obayashi Joint Venture and loads placed upon the structure shall not exceed the provided load capacity as outlined in the logistics attachments. Trade Subcontractor shall provide coordination and engineered shop drawings and required

verification of installation of embeds (pour watch). Trade Subcontractor to provide loads of all tie-in struts, including marked up drawings that show the location of each embed on each rooftop railway pedestal where tie-ins are required. Crane support framing should not induce torsional moment to the supporting steel girders below it or cause damage of any kind to the Transbay Transit Center Building. Any damage caused by this Trade Subcontractor shall be repaired at the expense of this Trade Subcontractor.

13. Provide regular documented maintenance of all equipment in accordance with manufacturer's requirements. Provide regular documented maintenance of railway, temporary platforms and shoring on a daily basis.
14. Same-day equipment repair service by a qualified technician recognized by the manufacturer. Maximum response time for each service call is 2 hours. Breakdown time shall be limited to 24 hours per incident. If equipment is down longer than 24 hours, Trade Subcontractor shall provide the rental credit for down time plus an additional day for day credit on equipment rental(s) and impact to other trade subcontractors.
15. Furnish, install, maintain, repair and removal of communication boxes and/or radios as required. Radios shall be programmed exclusively for crane work and compatible with Webcor/Obayashi Joint Venture radios. Crane Operators shall be in radio contact with each other as well as operators of the TG18.1 Bus Ramp tower crane and any other cranes and equipment in the vicinity of the project.
16. Provide an OSHA compliant safety protocol prior to erection for all shared airspace of rooftop rail cranes and TG18.1 Bus Ramp tower crane and any other obstructions in the area.
17. Overtime installation, dismantling and removal of rooftop cranes and railway using cranes and other equipment provided by Trade Subcontractor.
18. Street Closure and Noise permits required by Trade Subcontractor for erection and dismantling of rail/crane system.
19. Certified flagging and traffic control personnel required by Trade Subcontractor for its own operations, including but not limited to, erection, hoisting fuel and dismantling/removal.
20. Trade Subcontractor is responsible for all rigging for its own operations, including but not limited to, erection, hoisting fuel and dismantling/removal.
21. Provide certified/qualified personnel as required to perform the work. Include back-up operators, ironworkers and other necessary labor for vacations, no shows, sickness, breaks, and as necessary. Webcor/Obayashi Joint Venture shall have approval of all crane operators and reserves the right to remove and replace workers at any time.
22. Cut sheets of proposed equipment must be included in the RFP submission.
23. Repair and maintain equipment as required for a functioning unit. Maintenance shall be performed during off hours.
24. Trade Subcontractor is responsible for cleaning off any lubricant, hydraulic fluid, fuel or any other product spilled during Trade Subcontractor's maintenance and operation or as a result of over-lubrication upon occurrence from permanent finishes. Should spillage onto the slab occur that interferes with other trades, such as preventing proper adhesion of the waterproofing membrane, Trade Subcontractor is required to repair damage by etching/sandblasting or other means necessary as required by Webcor/Obayashi Joint Venture, the TJPA, or waterproofing manufacturer.
25. Trade Subcontractor shall hoist its own fuel and store it offsite. No on site fuel storage is available.
26. Guard rails and coverage of all temporary openings.

4.2.3 Rental period begins once the crane is on site and certified fully operational.

- 4.2.4 Trade Subcontractor is responsible for crane, railway and temporary platform inspection including special inspection, maintenance, service, adjustment, repair, and record keeping per governing regulatory agencies, the manufacturer, and Webcor/Obayashi Joint Venture requirements. Trade Subcontractor is responsible for ensuring all crane operators are qualified. Trade Subcontractor shall not remove, alter, disfigure or cover up any signs, numbering, lettering or insignia displayed upon the equipment nor place any sign thereon unless agreed to by Webcor/Obayashi Joint Venture. Trade Subcontractor shall ensure that the equipment is not used beyond its capacity or subjected to careless or needlessly rough usage and that it will be operated in accordance with manufacturer's specifications and State and Federal OSHA regulations.
- 4.2.5 Rooftop cranes and railway locations shall avoid lateral seismic frame elements in the transverse and longitudinal directions. Rooftop cranes and railway shall also avoid the horizontal diaphragm truss members at the Bus Deck Level. These are part of the seismic load resisting system.
- 4.2.6 No work shall be performed without written consent of Webcor/Obayashi Joint Venture. No premium cost for overtime will be paid unless said overtime is specifically authorized in writing by Webcor/Obayashi Joint Venture prior to work commencing. All communication shall be through Webcor/Obayashi Joint Venture unless otherwise directed.
- 4.2.7 Daily activity for selected activities shall be as directed by Webcor/Obayashi Joint Venture. All Daily Reports and Field tickets shall be reviewed and signed daily by an approved Webcor/Obayashi Joint Venture Superintendent. Failure to submit fully compliant daily reports may result in partial payment denial.
- 4.2.8 Submit written verification of all equipment and operator hours daily. Equipment shall have an hour tracking mechanism.
- 4.2.9 Provide on-call emergency service with one hour on site response time.
- 4.2.10 Access to adjacent properties must be maintained at all times for pedestrian entries, vehicle entries and loading docks of all adjacent properties during any stage of this contract scope.
- 4.2.11 Maintain a current on site spare parts inventory for all critical and regular maintenance.
- 4.2.12 Trade Subcontractor to provide third party inspection on all design-build elements provided under this scope of work.
- 4.2.13 Submittal Requirements:
 - 1. Equipment Specifications
 - 2. Certifications of Equipment (years, safety inspections)
 - 3. Shop Drawings and Calculations
 - 4. List of Spare Parts Inventory on Site
 - 5. Operation and Maintenance Schedule
 - 6. Daily Operation and Maintenance Report
 - 7. Emergency Plan
 - 8. Site Logistics Plan
 - 9. SBE Plan
- 4.2.14 Personnel and Equipment rates are per Attachment 9 Fee Schedule.
- 4.2.15 Trade Subcontractor is required to provide a Bid Bond for 5% of the total contract value. For pricing purposes assume a contract value of \$12 million.
- 4.2.16 Trade Subcontractor is not required to provide a Payment and Performance Bond. Subguard will be used in lieu of a Payment and Performance Bond.
- 4.2.17 Finalize Rates – Negotiated rate schedule to be included after award.
- 4.2.18 Mobilization will begin approximately in the second quarter of 2015.

The following items for this package are discussed in detail in section “IV. Trade Subcontractor Requirements” in the Project RFP Manual. Additional requirements and/or clarifications that are specific to the current Trade Package are included below, and align, as indicated, with the corresponding section of the Project RFP Manual.

A. General Information – Supplemental Instructions

B

25. Cranes/Hoisting

This Trade Subcontractor is to provide rooftop rail cranes for the project as outlined above. B

28. Project Supervision and Management

Trade Subcontractor shall provide one on site Representative who will act as a single point of contact with Webcor/Obayashi Joint Venture for all crane operations, including schedules and personnel.

29. Team Resume

A LEED Accredited Professional is not required for this trade package.

39. LEED – NC Version 3.0

A LEED Accredited Professional is not required for this trade package.

44. Quality Control

Trade Subcontractor is not required to provide a dedicated full-time Quality Control (QC) Manager for the duration of the Work. Trade Subcontractor shall provide QC management and supervision for work performed per and determined by Webcor/Obayashi Joint Venture. Trade Subcontractor shall provide QC management and supervision for the installation, dismantling and removal of all rooftop cranes, railway and platforms.

E

B. Safety

Trade Subcontractor is not required to provide a dedicated full-time SSR and DSR(s) for the duration of the Work. Trade Subcontractor shall provide an SSR and DSR(s) for work performed per and determined by Webcor/Obayashi Joint Venture. Trade Subcontractor shall provide Safety management and supervision for the installation, dismantling and removal of all rooftop cranes, railway and platforms.

E

5. SMALL BUSINESS ENTERPRISE (SBE) GOALS

As allowed for under the TJPA Small Business Enterprise (SBE) Program, trade package TG05.8 has an established SBE utilization goal of 10%. The TJPA accepts certifications from the following as SBEs: any state's Unified Certification Program, California Department of General Services, and the Contract Management Division of the Office of the City Administrator (formerly the San Francisco Human Rights Commission). Sub tier Trade Subcontractors must be certified as SBEs in order to count towards the goal of 10% participation. The SBE Program is further defined in Contract Specification Section 00 08 21. Trade Subcontractors will be required to submit a plan for achieving 10% SBE participation on this package.

Webcor/Obayashi Joint Venture recommends that Proposers review the TJPA's SBE Program, available on the TJPA website: <http://www.transbaycenter.org> > TJPA > Doing Business with the TJPA (<http://transbaycenter.org/tjpa/doing-business-with-the-tjpa>).

Written questions concerning SBE and nondiscrimination requirements shall be on QPD forms and submitted in accordance with Section 3.

6. PROPOSAL REQUIREMENTS

Submission of Proposals

Webcor/Obayashi Joint Venture must receive Proposals at the address identified in Section 2 Key Dates by the "Proposal Due Date". **This is a mandatory requirement and will not be waived by Webcor/Obayashi Joint Venture. Any Proposal received after this deadline will be rejected and returned unopened to the Trade Subcontractor.** Trade Subcontractors choosing to mail their Proposals must allow ample mail delivery time to ensure timely receipt of their Proposals. It is the Trade Subcontractor's responsibility to ensure its Proposal is received prior to the deadline. Postmarking by the due date will not substitute for actual receipt of the Proposal. Electronic mail and faxed Proposals will not be accepted. In submitting proposals, the Trade Subcontractor accepts the terms and conditions of the Webcor/Obayashi Joint Venture Long Form Subcontract attached herein. Proposals which are in any way conditional or which make alterations, omissions, or qualifications to the terms of the RFP documents shall be rejected as incomplete, unqualified or non-responsive.

Proposal Opening

Webcor/Obayashi Joint Venture will open Proposals after the submission deadline has passed. Proposals will remain confidential until Webcor/Obayashi Joint Venture has reviewed all properly submitted Proposals and Webcor/Obayashi Joint Venture has issued a Notice of Intent to Award a Contract.

Amendment and Withdrawal of Proposal

The Trade Subcontractor may amend and resubmit its Proposal at any time before Proposals are due. The amendment must be in writing, signed by the Trade Subcontractor and received by the time set for the receipt of Proposals. Electronic mail and faxed amendments will not be accepted. If Trade Subcontractor wishes to withdraw its Proposal it must notify Webcor/Obayashi Joint Venture in writing prior to the Proposal due date.

Proposal Clarification Process

Webcor/Obayashi Joint Venture reserves the right to contact Trade Subcontractors after Proposal submission for the purpose of clarifying a Proposal. This contact may include written questions, interviews, site visits, and/or a review of past performance. Webcor/Obayashi Joint Venture will not consider information received from or through a Trade Subcontractor if the information materially alters the content of the Proposal or the type of goods and/or services the Trade Subcontractor is offering to Webcor/Obayashi Joint Venture. An individual authorized to legally bind the Trade Subcontractor shall sign responses to any request for clarification. Responses shall be submitted to Webcor/Obayashi Joint Venture within the time specified in the Webcor/Obayashi Joint Venture's request. Failure to comply with requests for additional information may result in rejection of the Proposal.

Appeals Process

Where a timely and completed application results in a rating below that necessary to qualify, an appeal can be made. The Trade Subcontractor may file an appeal by delivering a completed Request for Appeal (Attachment 6) to Webcor/Obayashi Joint Venture no later than five days after the notification date. Without a timely appeal, the Trade Subcontractor waives any and all rights to challenge the decision of Webcor/Obayashi Joint Venture, whether by administrative process, judicial process or any other legal process or proceeding.

If the Trade Subcontractor files a complete and timely Request for Appeal, a review of the appeal shall be conducted so that it is concluded soon after receipt of the Request. The review shall be an informal process

conducted by Webcor/Obayashi Joint Venture, PMPC, and the TIPA and will be based upon the information submitted by the Trade Subcontractor in its Request for Appeal. Webcor/Obayashi Joint Venture will notify the Trade Subcontractor in writing of the decision at the conclusion of the review. The decision is final and is not subject to appeal or challenge whether by administrative process, judicial process or any other legal process or proceeding.

Costs of Preparing the Proposal

The costs of preparation and delivery of Proposals are solely the responsibility of Trade Subcontractors.

No Commitment to Contract

Webcor/Obayashi Joint Venture reserves the right to reject any or all Proposals received in response to this RFP. Issuance of this RFP in no way constitutes a commitment by Webcor/Obayashi Joint Venture to award a contract.

6.1 Written Submittal

One original, five copies of the Proposal and one CD or USB drive with the Proposal in Adobe Portable Document Format (PDF) with supporting material must be received by Webcor/Obayashi Joint Venture by the proposal due date and address noted in Section 2.

Proposals shall adhere to the format and page limitations described in Section 6.1 below. Proposals shall be printed on 8½ x 11-inch paper and use both sides of a page (each side counts against the page limit). Typeface shall be no smaller than 11 point; margins shall be no less than 1 inch. Elaborate brochures or other presentation materials are not desired and will not be considered in evaluating Proposals.

Proposals shall be organized in the following sequence:

6.1.1 - Introduction and Executive Summary (2 page limit)

Submit a letter of introduction and an executive summary of the Proposal package. The introductory letter must be signed by a person or persons authorized to obligate the firm (or firms if a joint venture) to honor the commitments set forth in the Proposal package and to verify the accuracy of the information included in the Proposal package. Submission of the introductory letter will constitute a representation by the firm or joint venture that it is willing and able to successfully perform the Services, and that all information contained in the Proposal package is true, correct, and not misleading in any material way.

6.1.2 - Qualifications and Experience (No page limit) [130 points]

1. Provide a complete project profile for three similar completed projects in the past five years. Also provide a profile on the three largest projects completed in the past five years. Names and references provided by Trade Subcontractor must be current and verifiable.

Project Experience Requirements:

- a. Trade Subcontractor shall provide information on at least three completed projects that are similar in nature to the Rooftop Cranes Trade Package and other related construction. Include information of relevant experience for any second tier contractor included within the Qualification Statement. Projects shall have been completed within the last five years.

- b. Use of Attachments 3 and 4 is recommended to submit the project information. Subcontractor may submit standard project profiles, but they must contain all information requested in Attachments 3 and 4.
 - c. Provide supplemental information on Proposer's tracking systems for design, fabrication and delivery of all required components.
2. Using Attachment 5, provide a list of all projects performed in an urban environment. Include City and County of San Francisco (CCSF) projects, if applicable, that Proposer has been involved in within the last five years. This refers to all projects performed for CCSF, irrespective of geographical location.
3. Additionally, complete all items noted in Attachment 1 – Essential Requirements Work Sheet of this RFP. Attachment 1 is scored with Pass/Fail and Point accumulation and constitutes 60 of the 120 points required under this Section.

6.1.3 – Proposed Staffing Plan (5 page limit) [10 points]

Describe the staffing plan to complete Proposed Services. The proposed team needs a minimum of the following full time (key/lead) assigned personnel to this project: One (1) Full Time On-site Representative.

Specifically, provide the name, title, business address, and phone number of key management staff that would be assigned to provide Services along with qualifications and work experience of each such management staff member, including brief résumés if necessary. (Note that the length of résumés may need to be shortened to avoid exceeding the maximum page limit established for this section.) Describe the role each staff member would play in providing Services. Provide an organization chart of key members, showing the contractual and reporting relationship of each member.

6.1.4 - References (3 page limit) [10 points]

Provide current references that may be contacted by Webcor/Obayashi Joint Venture for at least five (5) recent clients (preferably for public agencies) for the Trade Subcontractor firm and assigned key staff. Include the reference name, position, agency, address, telephone number, email, and specific project for each reference. Trade Subcontractors providing references that do not respond to a Webcor/Obayashi Joint Venture request for a reference may be scored lower or zero in this category.

6.1.5 - Fee Proposal (No page limit) [50 points]

Each Trade Subcontractor shall submit within its Proposal its Fee Proposal (Attachment 9) detailing the billing rates for direct labor, labor overhead and other direct costs for any Trade Subcontractor and sub-tier Trade Subcontractors listed in the Proposal and for all other staff included in the Trade Subcontractor's organization that will be performing the services described in Section 4.0. The following information shall be included:

- For each firm, including each sub-tier Trade Subcontractor, provide comprehensive hourly rates for all proposed staff members including, but not limited to, management, technical or professional staff and direct current hourly rates by position for any support personnel where applicable. Hourly rates are to be based on Schedule A rates.
- For each firm, including each sub-tier Trade Subcontractors, a list of estimated expenses (i.e., vehicles, equipment, tools, supplies, etc.).
- Provide a detailed breakdown of inclusions for all hourly and monthly rates.

- Cut sheet of proposed equipment must be included in proposal package.

The Proposal shall include contract pricing applicable for the **entire contract period**, including option years. Clearly define all costs. Schedule A rates may or may not change each year as defined by the Unions. Overhead and Profit percentage rates will remain constant for the duration of the contract and be applied to the Schedule A rates.

Proposal Check List

Trade Subcontractors shall submit their proposals in accordance with RFP submittal requirements. Trade Subcontractors shall refer to the Attachment 2 – Request for Proposals Checklist contained herein for submission requirements.

Rejection of Proposals

Trade Subcontractors must furnish all information necessary to enable Webcor/Obayashi Joint Venture to evaluate Proposals. Oral information provided at time of proposal submission by any Trade Subcontractor shall not be considered part of the Trade Subcontractor's Proposal. Proposals that fail to meet the mandatory requirements of the RFP will be rejected outright and Webcor/Obayashi Joint Venture will not evaluate a Proposal for reasons including and without limitation:

- Failure to deliver Proposal by the specified deadline and per submittal procedures.
- Proposal is incomplete or does not meet minimum qualifications.
- The Trade Subcontractor acknowledges that a mandatory requirement of the RFP cannot be met.
- The Trade Subcontractor's Proposal changes a material requirement of the RFP or the Proposal is not compliant with the mandatory requirements.
- The Trade Subcontractor's Proposal limits the rights of Webcor/Obayashi Joint Venture.
- Failure to include information necessary to substantiate compliance with RFP requirements.
- Failure to timely respond to Webcor/Obayashi Joint Venture's request for information, documents, or references.
- Failure to include any signature, certification, authorization, stipulation, disclosure or guarantee as provided in the RFP Manual and Section 6 and Attachment 1 of this RFP.
- Failure to submit a completed proposal check list from the RFP Manual and Attachment 2 of this RFP.
- The Trade Subcontractor presents the information requested by this RFP in a format inconsistent with the instructions of the RFP or otherwise fails to comply with the requirements of this RFP.
- The Trade Subcontractor initiates unauthorized contact regarding the RFP with Webcor/Obayashi Joint Venture or TJPA employees or other TJPA consultants.
- The Trade Subcontractor provides misleading or inaccurate responses.
- There is insufficient evidence (including evidence submitted by the Trade Subcontractor and evidence obtained by Webcor/Obayashi Joint Venture from other sources) to satisfy Webcor/Obayashi Joint Venture that the Trade Subcontractor is a responsible Trade Subcontractor and/or that the Proposal is responsive.
- The Trade Subcontractor alters the language of forms or attachments within this RFP.

No Conflict of Interest

Webcor/Obayashi Joint Venture and the TJPA shall disqualify any Trade Subcontractor to this RFP that has a conflict of interest under Section C8.105 of the San Francisco Charter, Government Code Section 1090, et. seq., the Political Reform Act (Government Code Section 87100 et. seq.), or any other applicable conflict of interest laws. Any false, incomplete, or otherwise unresponsive statements made in

connection with a proposal may be cause for its disqualification at Webcor/Obayashi Joint Venture and the TJPA's sole discretion.

Nonmaterial Variances

Webcor/Obayashi Joint Venture reserves the right to waive or permit cure of nonmaterial variances in the Proposal if, in the judgment of Webcor/Obayashi Joint Venture, it is in Webcor/Obayashi Joint Venture's best interest to do so. Nonmaterial variances include but are not limited to: minor failures to comply that do not affect overall responsiveness, that are merely a matter of form or format, that do not change the relative standing or otherwise prejudice other Trade Subcontractors, that do not change the meaning or scope of the RFP, or that do not reflect a material change in the requirements of the RFP. In the event Webcor/Obayashi Joint Venture waives or permits cure of nonmaterial variances, such waiver or cure will not modify the RFP requirements or excuse the Trade Subcontractor from full compliance with RFP specifications or other Contract requirements if the Trade Subcontractor is awarded the Contract. The determination of materiality is in the sole discretion of Webcor/Obayashi Joint Venture.

Reference Checks

Webcor/Obayashi Joint Venture reserves the right to contact any reference to assist in the evaluation of the Proposal, to verify information contained in the Proposal and to discuss the Trade Subcontractor's qualifications and the qualifications of any Trade Subcontractor identified in the Proposal.

Information from Other Sources

Webcor/Obayashi Joint Venture reserves the right to obtain and consider information from other sources concerning a Trade Subcontractor, such as the Trade Subcontractor's capability and performance under other contracts, the qualifications of any Trade Subcontractor identified in the Proposal, the Trade Subcontractor's financial stability, past or pending litigation, and other publicly available information.

Verification of Proposal Contents

The content of a Proposal submitted by a Trade Subcontractor is subject to verification. If Webcor/Obayashi Joint Venture determines in its sole discretion that the content is in any way misleading or inaccurate, Webcor/Obayashi Joint Venture may reject the Proposal.

Disposition of Proposals

All Proposals become the property of Webcor/Obayashi Joint Venture and shall not be returned to the Trade Subcontractor. Once Webcor/Obayashi Joint Venture issues a Notice of Intent to Award the Contract, the contents of all Proposals will be in the public domain and be available for inspection by interested parties, except for sealed Fee Proposals and proprietary information for which Trade Subcontractor properly requests confidential treatment or according to exceptions provided in applicable state or local laws.

7. SCHEDULE

A schedule is provided for reference only (see Exhibit I). The schedule is to clarify preceding and succeeding activities to this Trade Package work, as approved by the TJPA, for Proposals. Assume schedule activities to start plus or minus 90 calendar days from date indicated in the Exhibit I. The Schedule in Exhibit I does not show detailed breakdowns for minor work items. Trade Subcontractor shall coordinate with other trade subcontractors for detail work schedules and all cost associated with the schedule coordination shall be included in the Proposal. The schedule activities in Exhibit I between the date of the Notice to Proceed and the Completion Date of each Zone should not be assumed to be complete or a binding work plan.

8. CONTRACT DOCUMENTS LIST

8.1 Contract Document List

The Contract Documents for this Trade Package include the following, as well as Supplemental Documents shown in Section 8.2 below:

F... E D C B A

Document Name	Description	Revision Name	Issue Date
Long Form Subcontract		Rev. B	2014-02-10
Specification Division 00 and Division 01	Division 00 and Division 01 defined in Specification Section 00 01 10		2014-01-02
Specification Division 00 and Division 01	Revisions for Division 00 and Division 01 defined in Specification Section 00 01 10		2014-01-30
QPDs	Questions on Proposal Documents (QPDs)	TG05.8 RFP	2014-03-28
Technical Specifications	Not Applicable		
Drawings	Not Applicable		
Project RFP Manual		Rev. 15 14	2014-03-28 2014-02-28
<u>Exhibit A</u>	Trade Subcontractor Bid Package Manual and Forms – Contract #301000508	Rev. F E	2014-03-28 2014-03-13
Exhibit B	Warranty		2010-09
Exhibit C	Lien Releases	Rev. 07/2012	2012-08-22
Exhibit D	Sample Certificate of Insurance and Additional Insured Endorsement		
Exhibit E	LEED Subcontractor Submission Letter and Data Sheet	Rev. 3	2014-03-13
Exhibit F	Not Applicable		
Exhibit G	Subcontractor Payment Requisition		2012-04-03
Exhibit H	Site Specific Safety Plan	Rev. 8	2013-12-20
Exhibit I	Schedule	TG05.8 RFP	2014-12-26

Document Name	Description	Revision Name	Issue Date
Exhibit J	Contractor Quality Control Plan	Rev. 10	2013-11-04
Exhibit K	Sediment and Erosion Control Plan		2011-02
Exhibit L	Hazardous Materials Management Plan	Rev. 1	2011-03-11
Exhibit M	RFI Q&A Log		2014-01-02
Exhibit N	Noise & Vibration Mitigation Management Plan	Rev. 4	2012-09-07
Exhibit O	Air Quality Management Plan	Rev. 5	2012-01-16
Exhibit P	Construction Waste Management Plan	Rev. 6	2013-11-07
Exhibit Q	Apprenticeship Program	Rev. 0	2012-03-23
Exhibit R	Survey Information	Rev. 0	2012-03-23
Exhibit S	Traffic Control Plan	Rev. 2	2012-08-22
Exhibit U	Submittal Schedule	Rev. 0	2013-11-07
Exhibit W	Waterproofing		2011-05

A B C D E ...F

8.2 Supplementary Documents List for Previously Released Trade Packages (as of January 03, 2014)

Several Trade Packages for the Transbay Transit Center Project have been previously issued, are currently under construction and/or are currently in the bidding process. This Trade Subcontractor shall review all of the supplemental documents listed below, which have been determined to be related to this Trade Package scope of work and be familiar with all conditions affecting this Trade Subcontractor's scope of work. All associated costs due to the conditions and plans of the reference documents including all coordination shall be included in the Fee Proposal.

The documents of the major related Trade Packages listed below are currently available through Webcor/Obayashi Joint Venture's FTP website:

Document Type	Description	FTP Folder
Supplementary Document	Change Orders	1
Supplementary Document	Field Orders	2
Supplementary Document	Submittals	3

Supplementary Document	TG03 Butress, Shoring, Excavation (BSE) Documents	4
Supplementary Document	TG06.0 Below Grade Concrete Documents	5
Supplementary Document	TG07.1R Structural Steel Superstructure Documents	6
Supplementary Document	TG07.2 Structural Concrete Superstructure Documents	Under Bid (The bid documents are available. Refer to the TJPA website to obtain the documents.)
Supplementary Document	TG08.1 Glazing Design-Build Documents	Under Bid (The bid documents are available. Refer to the TJPA website to obtain the documents.)
Supplementary Document	TG08.2 Exterior Awning System Documents	Under Bid (The bid documents are available. Refer to the TJPA website to obtain the documents.)
Supplementary Document	TG18.1 Bus Ramp	Under Bid (The bid documents are available. Refer to the TJPA website to obtain the documents.)
Supplementary Document	Exhibit M Attachments	50

Trade Subcontractor is responsible for reviewing and coordinating its work with all supplementary information provided.

The Supplementary Documents are available for download on the following FTP website:

<https://webcor.box.com/s/x3nbmwlekmq2r911xb7d>

Password: WebcorBid!

9. EVALUATION PROCESS

Webcor/Obayashi Joint Venture intends to select one Trade Subcontractor. A Selection Committee will review and evaluate Proposals and will score Proposals in accordance with the criteria and methodology described in this RFP. Trade Subcontractor that receives the highest score in the selection process will be selected to negotiate an agreement with Webcor/Obayashi Joint Venture. The Agreement will require specific task orders to be authorized prior to issuance of a Notice to Proceed.

9.1 Step One: Proposal

9.1.1 Satisfaction of Requirements

Proposals will be evaluated to ensure that the Trade Subcontractor has demonstrated compliance with Section 6 of this RFP. Any non-compliant Proposal will be automatically rejected, and the project team will not evaluate the remainder of the Proposal.

9.1.2 Proposal Evaluation and Ranking

Proposals that satisfy the minimum requirements will be scored as follows:

Qualifications and Experience of Trade Subcontractor Firm	maximum 130 points
Proposed Staffing Plan	maximum 10 points
References	maximum 10 points
Fee Proposal	maximum 50 points

The maximum total score possible is **200** points. The Trade Subcontractors' Proposals will be ranked according to total score. Webcor/Obayashi Joint Venture will short-list those Proposals that meet a minimum score to be determined by the selection committee (Finalist Trade Subcontractors). Finalist Trade Subcontractors will be invited to participate in the final selection process. The final selection process may include the submission of additional information and/or participation in an oral interview.

9.2 Step Two: Interview

Webcor/Obayashi Joint Venture may invite the Finalist Trade Subcontractors to participate in oral interviews at a specified time, date, and location. Webcor/Obayashi Joint Venture shall impose a time limit for each oral interview. During the oral interview, the Finalist Trade Subcontractors shall be required to deliver a brief presentation (20 minutes maximum), and will be required to respond to questions, including questions concerning the Finalist Trade Subcontractor's Proposal and presentation. The proposed key individuals of the Finalist Trade Subcontractor's team will be expected to actively participate in the interviews and to respond to questions. Webcor/Obayashi Joint Venture will assign points to each Finalist Trade Subcontractor based on the oral interview up to a maximum of **100** points as follows:

Presentation	maximum 50 points
Responses to Questions	maximum 50 points

At the conclusion of the oral interviews, Webcor/Obayashi Joint Venture will combine the scores for the Proposal and oral interview for each Finalist Trade Subcontractor. The highest-ranking Finalist will be selected to negotiate a professional services agreement with Webcor/Obayashi Joint Venture.

In the event of a tie, Webcor/Obayashi Joint Venture may elect, in its absolute and sole discretion, to break the tie by conducting a tiebreaker between the tied Finalist Trade Subcontractors.

There shall be no binding agreement unless and until approved by the TIPA Board, at its sole discretion. In the event that an agreement cannot be reached with the highest-ranking Finalist Trade Subcontractor, as determined by Webcor/Obayashi Joint Venture in its sole discretion, then negotiations may be entered into with other Finalist Trade Subcontractors in the order of their ranking.

10. SUBMITTAL PROCEDURES

One original, five copies of the Proposal and one CD or USB drive with the Proposal and the data requested in Section 6.1.4 in PDF, must be received by Webcor/Obayashi Joint Venture by the proposal due date and address noted in Section 2.

Beginning on the date this RFP is issued and made available to prospective Trade Subcontractors, there will be no communications concerning this RFP between members of Webcor/Obayashi Joint Venture, the TJPA Board, TJPA staff, other consultants already engaged by the TJPA, or members of the Webcor/Obayashi Joint Venture Project Team and prospective Trade Subcontractors and their employees or agents, except as provided herein. Questions about the RFP may be directed in writing to Webcor/Obayashi Joint Venture. Webcor/Obayashi Joint Venture will consider all questions received by the close of business on the date specified in Section 2, Key Dates and, as appropriate, respond in writing. Any violations of the above restriction will result in the immediate disqualification of the Trade Subcontractor making said contact from further participation in the Program. This restriction will end when contract award notification is made.

Trade Subcontractors shall promptly notify Webcor/Obayashi Joint Venture in writing through the QPD process, if the Trade Subcontractor discovers any ambiguity, discrepancy, omission, or other error in this RFP [see Section 3].

11. STANDARD AGREEMENT PROVISIONS

By submitting proposals Trade Subcontractors acknowledge and agree to execute the enclosed and non-negotiable RFP Subcontract 301000508 language and terms. Following fee and scope of services negotiations, the selected Trade Subcontractors will be expected to enter into a subcontract agreement as included within the RFP package. Failure to timely execute the Agreement, or to furnish any and all insurance and other materials required in the Agreement, shall be deemed an abandonment of the Trade Subcontractor's contract offer.

WEBCOR/OBAYASHI JOINT VENTURE WILL NOT NEGOTIATE DIFFERENT SUBCONTRACT TERMS (SEE LONG FORM SUBCONTRACT SECTION)

Attachment 1 - Essential Requirements Work Sheet

Scope of Work: TG05.8 Rooftop Cranes

Firm Name (as it appears on license): _____

Address:	Contact:
	Title:
E-Mail:	Phone:
Website:	Fax:

Section 1 – Essential Requirements for Qualification

PART A:

Trade Subcontractor will be immediately disqualified if the answer to any question in Part “A” is “No”.

NO POINTS ASSESSED, ALL QUESTIONS ARE PASS/FAIL.

Item	Question	SCORE Pass/Fail
A-1.	<p>Contractor possesses a valid and current California Contractor’s license for the project or projects for which it intends to submit a bid with the appropriate classifications required.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No No = Not Qualified, FAIL</p>	Pass/Fail
A-2.	<p>Trade Subcontractor is willing and able to provide a 5% bid bond from a surety licensed in the state of California for work equal to the total contract value. For the purposes of this RFP, assume a contract value of \$12 million.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No No = Not Qualified, FAIL</p>	Pass/Fail
A-3.	<p>Contractor has the following minimum required General Liability + Umbrella or Excess Liability:</p> <p>Non Hazardous - \$1M GL (each occurrence) / \$2M general aggregate / \$2 Million products & completed operations aggregate, Automobile Liability - \$1M combined single limit, Excess Liability - \$10M each occurrence / \$10 Million aggregate, including coverage for Contractual Liability, Independent Contractors, Explosion, Collapse, and Underground (XCU), Personal Injury, Broad form Property Damages, and completed operations. Professional liability - \$2 Million per claim and \$2 Million in the aggregate per policy period. Coverage is required to be maintained from commencement of services until completion of work including removal of cranes, rooftop crane railway and all related components.</p> <p>The required general aggregate limits of insurance for Commercial General Liability and Excess Liability insurance shall apply separately to the subject contract / project or the Excess liability aggregate limit shall be twice the required occurrence limit.</p> <p>Final limits and conditions of insurance will be determined at the time of contract negotiation.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No No = Not Qualified, FAIL</p>	Pass/Fail
A-4.	<p>Contractor provides health and pension benefits for its employees and their families through an ERISA approved program.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No No = Not Qualified, FAIL</p>	Pass/Fail
A-5.	<p>Contractor has an existing agreement with a registered apprenticeship program(s) which has been approved by the California Apprenticeship Council, and the program(s) has graduated apprentices in the preceding five years for the apprenticeable craft(s) which may be employed by your firm.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No No = Not Qualified, FAIL</p>	Pass/Fail

PART B

Contractor will be subject to disqualification if the answer to any question in Part “B” is “Yes”.

NO POINTS ASSESSED, ALL QUESTIONS ARE PASS/FAIL.

B-1.	Has your contractor’s license been revoked at any time in the last five (5) years? <input type="checkbox"/> Yes <input type="checkbox"/> No Yes = Not Qualified, FAIL	Pass/Fail
B-2.	Has your contractor’s license been suspended for any reason within the last five (5) years (other than Contractor State License Board bond related reasons of duration not exceeding 90 days)? <input type="checkbox"/> Yes <input type="checkbox"/> No Yes = Not Qualified, FAIL	Pass/Fail
B-3.	Has a surety completed a contract on your behalf, or paid for completion because your firm was default terminated within the last five (5) years? <input type="checkbox"/> Yes <input type="checkbox"/> No Yes = Not Qualified, FAIL	Pass/Fail
B-4.	At the time of submitting this qualification form, is your firm ineligible to bid on or be awarded a public works contract, or perform as a contractor on a public works contract? <input type="checkbox"/> Yes <input type="checkbox"/> No Yes = Not Qualified, FAIL	Pass/Fail
B-5.	Has your firm or any of its owners, officers or partners ever been convicted of a crime involving any federal, state, or local law related to construction? <input type="checkbox"/> Yes <input type="checkbox"/> No Yes = Not Qualified, FAIL	Pass/Fail
B-6.	Is your firm presently in bankruptcy? <input type="checkbox"/> Yes <input type="checkbox"/> No Yes = Not Qualified, FAIL	Pass/Fail
B-7.	Has your firm or any of its owners, officers or partners ever been found liable in a civil suit or found guilty in a criminal action for making any false claim or material misrepresentation to a public agency or entity? <input type="checkbox"/> Yes <input type="checkbox"/> No Yes = Not Qualified, FAIL	Pass/Fail
B-8.	During the last five (5) years, has there ever been a period of time when your firm had no surety bond in place during a construction project when one was required? <input type="checkbox"/> Yes <input type="checkbox"/> No Yes = Not Qualified, FAIL	Pass/Fail

Section 1 Summary

All answers in Part A have been answered ‘Yes’, and Part B answered ‘No’

Pass _____

If any questions in Part A were answered ‘No’, or Part B answered ‘Yes’

Fail _____

Section 2: Licensing; Surety; Insurance; Environmental Matters; Disputes, and Claims; Business Organization; Financial Information; Safety; Prevailing Wage; Project History

2.1 Licensing:

Licensing Scoring Section:	Total Score Possible	10 Pts																		
<p><u>Provide the following information:</u></p> <p>A. Trade Subcontractor must have a current and valid State of California Contractor's License for the trade they are qualifying. List all license numbers and the name of the qualifying license holder as issued and as on file with the licensing board.</p> <table border="0"> <tr> <td>Issuing Agency</td> <td>Class</td> <td>License Number</td> <td>Date issued</td> <td>Exp. Date</td> <td>Name</td> </tr> <tr> <td></td> <td></td> <td></td> <td>/ /</td> <td>/ /</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>/ /</td> <td>/ /</td> <td></td> </tr> </table> <p>1. Has your Cal-OSHA certificate(s) or registration(s) been revoked at any time in the last 5 years? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>2. Has your firm had a complaint filed with the Contractors State License Board that required a formal hearing or inquiry within the last 5 years? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p>		Issuing Agency	Class	License Number	Date issued	Exp. Date	Name				/ /	/ /					/ /	/ /		
Issuing Agency	Class	License Number	Date issued	Exp. Date	Name															
			/ /	/ /																
			/ /	/ /																
Section 2.1 Actual Points Earned																				

2.2 Surety Information:

Bonding Scoring Section:	Total Score Possible	5 Pts
<p>Surety Company: Bonding Agent Contact: Phone: Fax: e-mail: Single Project Bonding Capacity: Aggregate Bonding Capacity: Available Bonding Capacity: Average Project Size Last Year: Bond Rate: Current Backlog:</p> <p>Bonding Status: Attach a statement from your surety insurer (who must be approved by the California Department of Insurance and authorized to issue bonds in the State of California), which states that your current bonding capacity is sufficient for the project.</p> <p>How long have you been with the present Surety? _____</p> <p>Identify any conditions imposed and/or restrictions by the Surety: _____</p> <p>1. At any time during the past five years, has any surety company <u>made any payments</u> on your firm's behalf as a result of a default, to satisfy any claims made against a performance or payment bond issued on your firm's behalf, in connection with a construction project, either public or private? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>2. In the last five years has any insurance carrier, for any form of insurance, refused to renew the insurance policy for your firm? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>3. During the last five years, has your firm ever been denied bond coverage by a surety company, or has there ever been a period of time when your firm had no surety bond in place during a public construction project when one was required? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p>		
Section 2.2 Actual Points Earned		

2.3 Insurance:

Insurance Scoring Section:	Total Score Possible	5 Pts
<p>1. Does your firm currently carry a workers' compensation insurance policy as required by the Labor Code or are they legally self-insured pursuant to current California labor laws and code in effect. Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if no):</p> <p>2. In the last five years has there ever been a period when your firm had employees but was without workers compensation insurance or state-approved self-insurance? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>3. In the last five years has any insurance carrier, for any form of insurance, refused to renew the insurance policy for your firm? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p>		
Section 2.3 Actual Points Earned		

2.4 Environmental Matters:

Environmental Matters Scoring Section:	Total Score Possible	5 Pts
<p>1. Has your firm been cited by any governing agencies for violations to local ordinances or codes (i.e. BAAQMD, Regional Water Quality Control Boards, etc.)? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>2. Has your firm ever received a citation or violation from the Environmental Protection Agency (EPA)? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>3. Has your firm ever received a citation or violation from the Department of Toxic Substances Control (DTSC)? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p>		
Section 2.4 Actual Points Earned		

2.5 Disputes, Arbitration, and Litigation:

Disputes, Arbitration and Litigation Scoring Section:	Total Score Possible	5 Pts
<p>1. At any time in the last five (5) years has your firm been assessed liquidated damages (regardless of final settlement) after completion of either a public or private project? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes): If "yes," explain on a separate signed page, identifying all such projects by owner, owner's address, the date of completion of the project, amount of liquidated damages assessed and all other information necessary to fully explain the assessment of liquidated damages.</p> <p>2. In the last five (5) years has your firm, or any firm with which any of your company's owners, officers or partners was associated, been debarred, disqualified, removed or otherwise prevented from bidding on, or completing, any government agency or public works project for any reason? Note: "Associated with" refers to another construction firm in which an owner, partner or officer of your firm held a similar position. Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes): If "yes," explain on a separate signed page. State whether the firm involved was the firm applying for qualification here or another firm. Identify the name of the company, the name of the person within your firm who was associated with that company, the year of the event, the owner of the project, the project and basis for the action.</p> <p>3. In the last five (5) years has your firm been denied an award of a public works contract based on a finding by a public agency, or their agent, that your company was not a responsible bidder?</p>		

	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes): If "yes," explain on a separate signed page. Identify the year of the event, the owner, the project and the basis for the finding by the public agency.</p> <p>4. In the past five (5) years has any claim against your firm concerning your firm's work on a construction project been filed in court or arbitration with an owner or general contractor? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, how many times: If "yes," on separate signed sheets of paper identify the claim(s) by providing the project name, date of the claim, name of the claimant, a brief description of the nature of the claim, the court in which the case was filed and a brief description of the status of the claim (pending or, if resolved, a brief description of the resolution).</p> <p>5. In the past five (5) years has your firm made any claim against a project owner or general contractor concerning work on a project or payment for a contract and filed that claim in court or arbitration? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>6. Are there any liens for labor or materials filed against your company, its officers, or any company associated with them? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p>	
	Section 2.5 Actual Points Earned	

2.6 Claims:

	Claims Scoring Section:	Total Deductive Score Possible	-30 to 0 Pts
	<p>A claim is a demand or assertion by your firm seeking adjustment or interpretation of contract terms, payment of money, extension of time or other relief with respect to the terms of the contract, your firm's right to which was disputed by the owner or general contractor, including, but not limited to disputes subject to mediation, arbitration or litigation.</p> <p>Note: The following questions refer only to disputes between your firm and the owner or general contractor of a project. You need not include information about disputes between your firm and a supplier or Trade Subcontractor. Also, you may omit reference to all disputes where the amounts were \$10,000 or less.</p> <p>1. Enter the number of claims that were made through mediation, arbitration or litigation with a value in excess of \$10,000 for additional compensation against owners or general contractors in the past five (5) years. Using the Attachment 7 form, provide detailed information for each current, pending and resolved dispute.</p> <p>No. of Claims: _____</p> <p>2. Summary of Claims: Include ALL claims as defined above that were made through mediation, arbitration or litigation for completing the following items a. thru f. as they will be used in the table below:</p> <p style="margin-left: 40px;">a. Total Dollar Amount of Claims in past 5 yrs.: _____</p> <p style="margin-left: 40px;">b. Total Dollar Amount Recovered: _____</p> <p style="margin-left: 40px;">c. Percentage of Recovery (b ÷ a): _____ %</p> <p style="margin-left: 40px;">d. Total Number of Claims: _____</p> <p style="margin-left: 40px;">e. No. of Projects over \$1million in 5 past yrs.: _____</p> <p style="margin-left: 40px;">f. Percentage of Claims Frequency (d ÷ e): _____ %</p> <p>The following table demonstrates how the information submitted above will be evaluated. The matrix below indicates the points that will be deducted based upon the contractor's claim experience.</p>		

<p>Total Scoring Range for Item 2 is -30 to 0 Points.</p> <p>3. Enter the number of claims submitted and resolved <u>outside</u> of mediation, arbitration and litigation with a value in excess of \$10,000 for additional compensation against owners or general contractors in the past five (5) years. Provide this information in a tabular format with dollar amounts totaling at the bottom. Include one line item for each claim and include the following information for each line item at a minimum; project name, project location, owner, general contractor, nature of claim, dollar amount of initial claim, dollar amount of final settlement, date of initial claim, date of resolution and how the claim was resolved (if resolved).</p> <p>No. of Claims: _____ Total Amount (\$): _____</p>	% of Recovery			
	% of Claims Frequency	0 - 33%	34 - 66%	67 - 100%
	50 - 100%	-30pts	-15pts	-10pts
	25 - 50%	-20pts	-10pts	-5pts
	0 - 25%	-10pts	-5pts	0pts
Section 2.6 Actual Points Deducted				

Disputes, Arbitration, Litigation and Claims Point Summary: **Section 2.5 Actual Points Earned**
Section 2.6 Points Deducted
Section 2.5 and 2.6 Total

+
-

2.7 Business Organization and History

Business Organization Scoring Section:	Total Score Possible	5 Pts																								
<p>A. Is your company an: <input type="checkbox"/> individual <input type="checkbox"/> partnership <input type="checkbox"/> corporation <input type="checkbox"/> joint venture <input type="checkbox"/> Subchapter S Corp <input type="checkbox"/> Proprietorship <input type="checkbox"/> LLC</p> <p>B. If firm is a sole proprietor or partnership, list the owner(s) of the company:</p> <p>C. Under the laws of which state is the company organized? State of _____</p> <p>D. Date Founded: _____</p> <p>E. Parent, Affiliate, and/or Subsidiary Companies:</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Full Legal Name</th> <th>Location</th> <th>Ownership</th> <th>Operations</th> <th>Indemnity Available?</th> <th>Endorsed for Obligation of:</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> <p>F. When did present management assume control? _____</p> <p>G. Name of Predecessor: _____ What happened to Predecessor? _____</p> <p>H. What percentage of your work is public? ____% private? ____%</p> <p>I. SBE Certification - Is your firm currently certified as a one of the following:</p> <ul style="list-style-type: none"> California Certified Small Business (SB) or Disabled Veteran Business Enterprise (DVBE) as certified by the California Department of General Services (DGS) – Procurement Division (PD) – Office of Small Business and Disabled Veteran Business Enterprise Services (DVBE) Yes ____ No ____ Expiration date: _____. City and County of San Francisco Local/Minority/Women-Owned Business Enterprise (L/M/WBE) as certified by the Contract Management Division of the Office of the City Administrator (formerly the San Francisco Human Rights Commission) Yes ____ No ____ Expiration Date: _____ Disadvantaged Business Enterprise (DBE) as certified by any state's Unified Certification Program (UCP) Yes ____ No ____ Expiration date: _____. <p>Please attach a copy of your Certification Letter(s).</p>		Full Legal Name	Location	Ownership	Operations	Indemnity Available?	Endorsed for Obligation of:																			
Full Legal Name	Location	Ownership	Operations	Indemnity Available?	Endorsed for Obligation of:																					

<p>If no, have you submitted your certification forms to one of the above entities? Yes _____ No _____.</p> <p>If yes, expected certification date: _____.</p> <p>J. Number of Employees by Trade:</p> <table> <tr> <td>Trade:</td> <td>2013</td> <td>2012</td> <td>2011</td> </tr> </table> <p>Number of Current Administrative Employees:</p> <p>1. Has your firm or any of its owners, officers or partners ever been convicted of a federal or state crime of fraud, theft, or any other act of dishonesty? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>2. Have there been any changes in the control or management of the company during the last 5 years? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>3. Continuity – Completion of Work?</p> <p>a) Is there a buy-sell agreement in effect? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p> <p>b) Is the agreement funded by life insurance? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, amount of insurance \$</p> <p>c) Who are the parties to the buy-sell agreement? Give details if copy not provided.</p> <p>4. What arrangements have been made to assure that contracts are completed if the owners are not available?</p> <p>5. Has your firm been in bankruptcy or a voluntary or involuntary reorganization in the last three years? Yes <input type="checkbox"/> No <input type="checkbox"/> Explain (if yes):</p>	Trade:	2013	2012	2011	
Trade:	2013	2012	2011		
Section 2.7 Actual Points Earned					

2.8 Financial Information:

Financial Information:	Total Score Possible	10 Pts									
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Federal Tax ID No.: Dun and Bradstreet No.: Name of Bank: Revenue: 2014: (Projected) \$ 2011: (Actual)\$ </div> <div style="width: 45%;"> General Tax Exemption No.: Income/Balance Sheet Preparation Method: Branch: Line of Credit Amount: \$ 2013: (Actual)\$ 2012: (Actual)\$ </div> </div> <p>The apparent low bidder will be required to furnish their audited financial statement prior to the award of contract to confirm the ratios below. Confirm that it will be provided upon request: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Based on your most recent audited or reviewed financial statement(s), provide the following summary financial information: Note: Trade Subcontractor is EXEMPT if it meets the definition below.</p> <p>The apparent low bidder will be required to provide actual financials prior to the award of contract.</p> <p><i>Public Contract Code section 20101(e)</i> (e) For the purposes of subdivision (a), a financial statement shall not be required from a contractor who has qualified as a Small Business Administration entity pursuant to paragraph (1) of subdivision (d) of Section 14837 of the Government Code, when the bid is no more than 25 percent of the qualifying amount provided in paragraph (1) of subdivision (d) of Section 14837 of the Government Code.</p> <p><i>Government Code section 14837 (d) (1)</i> (d) (1) "Small business" means an independently owned and operated business that is not dominant in its field of operation, the principal office of which is located in California, the officers of which are domiciled in California, and that, together with affiliates, has 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or is a manufacturer, as defined in subdivision(c), with 100 or fewer employees</p> <p><i>SF Administrative code Chapter 14B(3)(b) applies for HRC certified contractors</i></p> <p>Enter Financial Ratios Below</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%; text-align: left;">Working Capital</th> <th style="width: 33%; text-align: left;">Current Ratio</th> <th style="width: 33%; text-align: left;">Leverage</th> </tr> </thead> <tbody> <tr> <td style="border: 1px solid black; height: 40px;"></td> <td style="border: 1px solid black; height: 40px;"></td> <td style="border: 1px solid black; height: 40px;"></td> </tr> <tr> <td style="border: 1px solid black; padding: 5px;">Current Assets (minus) Current Liabilities (divided by) 2013 Volume</td> <td style="border: 1px solid black; padding: 5px;">Current Assets (divided by) Current Liabilities</td> <td style="border: 1px solid black; padding: 5px;">Total Liabilities (divided by) Equity</td> </tr> </tbody> </table>	Working Capital	Current Ratio	Leverage				Current Assets (minus) Current Liabilities (divided by) 2013 Volume	Current Assets (divided by) Current Liabilities	Total Liabilities (divided by) Equity		
Working Capital	Current Ratio	Leverage									
Current Assets (minus) Current Liabilities (divided by) 2013 Volume	Current Assets (divided by) Current Liabilities	Total Liabilities (divided by) Equity									
Section 2.8 Actual Points Earned:											

2.9 Safety:

Safety Scoring Section:	Total Score Possible	10 Pts
<p>1. List your firm's Experience Modification Rate (EMR) (California workers' compensation insurance) for each of the past three premium years:</p> <p>NOTE: An EMR is issued to your firm annually by your workers' compensation insurance carrier.</p> <p>Current year EMR: Less than or = 1.00 = Well Qualified 1.01 TO 1.24 = Generally Qualified Equal or Greater than 1.25 = Not Qualified</p> <p>Year 2013: _____ Year 2012: _____ Year 2011: _____</p> <p>Should you and/or your sub tier contractors current EMR exceed 1.0, you must demonstrate and document that you have or will initiate programs, policies and attitudes that will result in a safety conscious performance. Additional documentation and presentation to Webcor/Obayashi Joint Venture will be required.</p>		

<p>2. Rate Category</p> <p>OSHA Recordable/Injury Rate:</p> <p>OSHA Lost Workdays Incidence Rate:</p> <p>OSHA Lost Time Incidence Rate:</p> <p>Total Man-hours/Year (Field Personnel):</p> <p>3. OSHA Citations – Include both California and Federal:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Number</th> <th>Code of State or Federal Regs. Sect. Nos.</th> </tr> </thead> <tbody> <tr><td>2013</td><td></td><td></td></tr> <tr><td>2012</td><td></td><td></td></tr> <tr><td>2011</td><td></td><td></td></tr> <tr><td>2010</td><td></td><td></td></tr> <tr><td>2009</td><td></td><td></td></tr> </tbody> </table> <p>If any citations were noted above, please provide explanation on a separate sheet.</p> <p>4. Fatalities Category</p> <p>Total Number of Employee Fatalities:</p> <p>Total Number of Contractor Employee Fatalities:</p>	Year	Number	Code of State or Federal Regs. Sect. Nos.	2013			2012			2011			2010			2009			<p>2013</p> <p>3 Yr. Avg.</p>
Year	Number	Code of State or Federal Regs. Sect. Nos.																	
2013																			
2012																			
2011																			
2010																			
2009																			
Section 2.9 Actual Points Earned																			

2.10 Prevailing Wage and Apprenticeship Compliance:

Prevailing Wage and Apprenticeship Compliance Scoring:	Total Score Possible	5 pts.
<p>1. Has there been more than one occasion during the last five years in which your firm was required to pay either back wages or penalties for your own firm's failure to comply with the State's prevailing wage requirements?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> Explain and note how often (if yes):</p> <p>2. During the last five years, has there been more than one occasion in which your own firm has been penalized or required to pay back wages for failure to comply with the Federal Davis-Bacon prevailing wage requirements?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> Explain and note how often (if yes):</p> <p>3. At any time during the last five years, has your firm been found to have violated any provision of California apprenticeship laws or regulations, or the laws pertaining to use of apprentices on public works?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> Explain and note how often (if yes):</p> <p>If "yes," also provide the date(s) of such findings, and attach copies of the Department's final decision(s).</p>		
Section 2.10 Actual Points Earned		

Summary and Scoring Totals

	Total Score Possible	Score Received
Licensing	10	_____
Surety Information	05	_____
Insurance	05	_____
Environmental Matters	05	_____
Disputes, Arbitration and Litigation	05	_____
Claims	0	_____
Business Organization	05	_____
Financial Information	10	_____
Safety	10	_____
Prevailing Wage and Apprentice Comp.	<u>05</u>	_____
Total Possible Score:	60	Total Score Received: _____

END OF ATTACHMENT 1

Declaration

The undersigned hereby agrees and declares that receipt of this submittal by the Webcor/Obayashi Joint Venture does not constitute either a direct or implied guarantee that qualification is or will be granted.

I, the undersigned, certify and declare that I have read all the foregoing answers to this qualification questionnaire and know their contents. The matters stated in the questionnaire answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California, that the foregoing is correct.

The undersigned is a legally authorized representative of the Trade Subcontractor for the legal name noted above.

Trade Subcontractor

Printed Name/Title

Signature

Date _____

Subscribed and sworn to before me this _____ day of _____, 20 _____

Notary Public in and for the State of _____

Residing at _____

Expiration Date: _____

End of Declaration

Attachment 2 – Request for Proposal Checklist

1. Each Trade Subcontractor shall **submit with its Proposal** the following forms, properly completed and executed:

If Submitted, Check Box:

D C

- ☐ One original, five copies of the Proposal and one CD or USB drive with the Proposal in Adobe Portable Document Format (PDF) with supporting material submitted no later than **2:00 p.m. on April 3, 2014**. Proposals shall be submitted on 8-1/2" x 11" format double-sided fashion on recycled paper. Proposals shall include the fully completed Trade Subcontractor Qualification Statement (Attachment 1). **C D**
 - ☐ Notarized Declaration.
 - ☐ Introduction and Executive Summary.
 - ☐ Information regarding three similar projects utilizing Attachment 3.
 - ☐ Information about three largest projects utilizing Attachment 4.
 - ☐ All urban and City and County of San Francisco projects from the last five years utilizing Attachment 5.
 - ☐ Proposed Staffing Plan.
 - ☐ References.
 - ☐ Fee Proposal, including Attachment 9.
 - ☐ Equipment cut sheets.
 - ☐ All items to be submitted with the proposal as outlined in the Request for Proposals Manual.
 - ☐ Additional information limited to three pages, for the Trade Subcontractor only, and incorporating information from major sub-tier contractors/consultants, as appropriate.
2. Webcor/Obayashi Joint Venture reserves the right after opening the Proposals to reject any or all Proposals, and to waive any minor irregularity in a Proposal.

END OF REQUEST FOR PROPOSAL CHECKLIST

Attachment 3 - Similar Experience Project Experience

TG05.8 Rooftop Cranes

(Copy and attach form for each of 3 Similar Projects)

Project Name: _____

Location: _____

Owner: _____

Owner Contact: _____ Phone # _____

General Contractor: _____ Phone # _____

General Contractor Contact: _____

Architectural Firm: _____

Architect Contact: _____ Phone# _____

Construction Manager: _____ Phone# _____

Description of Project/ Scope of Work Performed:

Trade Work: _____ Square footage: _____

Description of the Work: _____

Total Value of Contract at Time of Award: _____

Final Value of Contract (including change orders): _____

Duration in Months from Award to Delivery: _____

Original Scheduled Completion Date: _____

Time Extension Granted (number of days): _____

Actual Date of Completion of your work: _____

What work did your firm perform on this project? Identify trades and values.

_____ \$ _____

_____ \$ _____

Did you subcontract portions of your work (i.e. labor, materials, delivery, etc.) to Small Business or Disadvantaged Business enterprise(s)? If yes, please identify trades and values.

_____ \$ _____

_____ \$ _____

How did your company solicit and evaluate Small/Disadvantaged Business Enterprises to assist with the scope identified above? _____

Attachment 3 - Continued

What work did your firm self-perform? _____

Why is this work relevant to the TTC Project? _____

Name of your responsible Project Manager(s): _____

Name of your Superintendent(s) / Foreperson (s): _____

Major Supplier: _____
Contact: _____ Phone# _____

End of Attachment 3

Attachment 4 - Largest Projects Project Experience

TG05.8 Rooftop Cranes

(Copy and attach form for each of 3 Largest Projects)

Project Name: _____

Location: _____

Owner: _____

Owner Contact: _____ Phone # _____

General Contractor: _____ Phone # _____

General Contractor Contact: _____

Architectural Firm: _____

Architect Contact: _____ Phone# _____

Construction Manager: _____ Phone# _____

Description of Project/ Scope of Work Performed:

Trade Work: _____ Square footage: _____

Description of the Work: _____

Total Value of Contract at Time of Award: _____

Final Value of Contract (including change orders): _____

Duration in Months from Award to Delivery: _____

Original Scheduled Completion Date: _____

Time Extension Granted (number of days): _____

Actual Date of Completion of your work: _____

What work did your firm perform on this project? Identify trades and values.

_____ \$
_____ \$

Did you subcontract portions of your work (i.e. labor, materials, delivery, etc.) to Small Business or Disadvantaged Business enterprise(s)? If yes, please identify trades and values.

_____ \$
_____ \$

How did your company solicit and evaluate Small/Disadvantaged Business Enterprises to assist with the scope identified above? _____

Attachment 4 - Continued

What work did your firm self-perform? _____

Why is this work relevant to the TTC Project? _____

Name of your responsible Project Manager(s): _____

Name of your Superintendent(s) / Foreperson (s): _____

Major Supplier: _____

Contact: _____ Phone# _____

End of Attachment 4

Attachment 5 – Urban and City & County of San Francisco Project Experience

TG05.8 Rooftop Cranes

(Copy and attach this form as required for all CCSF projects completed in the last five years. CCSF Projects shall refer to projects performed for the City and County of San Francisco, irrespective of geographical location.)

Project Name: _____

Location: _____

City Contact: _____ Phone # _____

Description of Project/ Scope of Work Performed:

Total Value of Contract at Time of Award: _____

Final Value of Contract (including change orders): _____

Original Scheduled Completion Date: _____

Time Extension Granted (number of days): _____

Actual Date of Completion of your work: _____

Was this project completed to the satisfaction of the City? If no, why?

Name of your responsible Project Manager(s): _____

Name of your Superintendent(s) / Foreperson (s): _____

Major Supplier: _____

Contact: _____ Phone# _____

End of Attachment 5

Attachment 6 - Request for Appeal

The Webcor/Obayashi Joint Venture must receive this document **no later than five (5)** days after Webcor/Obayashi Joint Venture notifies the Trade Subcontractor of their qualification status.

Trade Subcontractor/Company Name: _____

Contact Person: _____

Telephone Number: _____

In the space provided below, describe in detail the basis for filing this Appeal.
(Add additional sheets if necessary.)

Please submit this form to: Webcor/Obayashi Joint Venture
 175 Beale Street
 San Francisco, CA 94105
 Attn: Sihaya Roselle

End of Attachment 6

Attachment 7 - Mediation, Arbitration and Litigation History

(All Owners both Private and Public)
(Copy and attach this form for each claim)

Separately list all CURRENT, PENDING AND/OR RESOLVED disputes,

- Pursued via mediation, arbitration or litigation
- Initiated within the last five (5) years
- In which additional compensation is sought
- And/or breach of contract was alleged
- And/or indemnity is sought
- Between your firm (or any principal of your firm) and any Owner or any General Contractor

If none, indicate "NONE." Do not leave blanks

Project Name: _____

Project Location: _____

Owner: _____

General Contractor: _____

Nature of Claim: _____

Dollar Amount of Initial Claim: _____

Dollar Amount of Final Settlement: _____

Year Claim Filed: _____ Year Claim Resolved: _____

State of California Superior Court Action No. : _____

U.S. District Court Case No. : _____

How claim was resolved (arbitration, mediation, litigation, etc.): _____

Current Status: _____

End of Attachment 7

Attachment 8 - Logistics

The following attached drawings present the conceptual logistical as-built plans. Locations and configurations are for reference and subject to change.

E

SL-001 Site Logistics Plan
SL-002 Site Truck Routing Plan
SL-025 Construction Zones and Areas
SL-027 Rooftop Obstructions – For Reference Only
A101 Personnel and Material Hoist Layout – Bracing
A102 Personnel and Material Hoist Layout – Lower Concourse
A103 Personnel and Material Hoist Layout – Ground Level
A104 Personnel and Material Hoist Layout – Second Level
A105 Personnel and Material Hoist Layout – Bus Deck Level
A106 Personnel and Material Hoist Layout – Roof Level
A107 Personnel and Material Hoist #1 Location
A108 Personnel and Material Hoist #2 Location
A109 Personnel and Material Hoist #3 Location
A110 Personnel and Material Hoist #4 Location
X-01 Logistics Aerial View
X-03 3D Section
X-04 3D Section
X-05 3D Section West Facing
X-06 Crane Section
X-07 Roof Rail-Mounted Cranes
X-08 Temporary Platform
X-15 Rooftop Crane and Tower Crane Logistics
X-16 Natoma-Howard St. Area Logistics
X-17 Rail Crane Logistics
X-18 Rail Crane Logistics 3D Section
S-1001 thru S-1015 Loading Diagram Plans
S1-2602 thru S1-2607 Runway Pedestal Locations
S1 Crane Runway Elevation Details – For Reference Only
S2 Crane Runway Pedestal Details – For Reference Only
Reactions on Structure – For Reference Only

E

End of Attachment 8

WEBCOR/OBAYASHI JOINT VENTURE - Attachment 9
 Subcontract No: 301000508

Attachment 9 - TG05.8 - Rooftop Cranes Fee Schedule

Category	Schedule A - Standard Time			Schedule A - Shift			Schedule A - Over Time			Schedule A - Double Time			Overhead and Profit		Total Hourly Rate			
	Base	Burden	Burdened Rate	Base	Burden	Burdened Rate	Base	Burden	Burdened Rate	Base	Burden	Burdened Rate	Overhead (x%)	Profit (y%)	Standard	Shift	Overtime	Double Time
Personnel Hourly Rates																		
Crane Operator																		
Ironworker																		
Laborer																		
Oiler																		

Other Rates	Units	Rate	Overhead (x%)	Profit (y%)	Total Equipment Rate
Mobilization	LS				\$ -
Rooftop Crane Railway - Design	LS				\$ -
Rooftop Crane Railway - Fabrication	LS				\$ -
Rooftop Crane Railway - Installation	LS				\$ -
30-ton Crane Rental	\$/month				\$ -
50-ton Crane Rental	\$/month				\$ -
Crane Installation & Removal	EA				\$ -
Crane and Railway Maintenance	LS				\$ -
Crane and Railway Inspections	LS				\$ -
Remove Railway & Demobilization	LS				\$ -
Shored Platform Design, Install & Remove	LS				\$ -
Cantilevered Platforms Design, Install & Remove	EA				\$ -
Temporary Platform Maintenance	LS				\$ -
Temporary Platform Inspections	LS				\$ -

- Notes & Clarifications:**
- A.) Total Hourly Labor rates include Schedule A burdened rate, profit and overhead.
 - B.) This Subcontract to include all necessary miscellaneous equipment at no cost to Contractor.
 - C.) This Subcontract to include all travel time and Per Diem cost at no cost to Contractor.
 - D.) Schedule A rates may or may not change each year as defined by the Unions. Overhead and Profit percentage rates will remain constant for the duration of the contract and be applied to the Schedule A rates.
 - E.) The Schedule A Rates listed above are for 2014.
 - F.) All fields to be completed in U. S. Dollars.
 - G.) Backup documentation needs to be provided by Trade Subcontractor to verify Overhead percentage.
 - H.) If any of the equipment and/or personnel rates are combined, provide a complete list of inclusions and costs for the combined rate. For example: If crane rental is part of operator hourly rate, provide a breakout for each component, i.e. operator hour ly rate and crane rental.
 - I.) Overhead shall include, but is not limited to, all operating expenses, office expenses, rent, insurance, utilities, supp lies, taxes, fees, travel expenditures,legal services, safety, scheduling, supervision, correction of non-conforming work and/or damage.

F... E D C B A

ISSUANCE LOG

REV No.	ISSUE	DATE
0	Issued For Request for Proposal TG05.8	01/07/2014
A	Addendum #1	01/21/2014
B	Addendum #2	02/10/2014
C	Addendum #3	02/13/2014
D	Addendum #4	02/28/2014
E	Addendum #5	03/13/2014
F	Addendum #6	03/28/2014

A B C D E ...F

END OF RFP

Copyright 2019 by Transbay Development LLC. All rights reserved.

1751 HARBOR BAY PARKWAY
SUITE 200
ALAMEDA, CA 94502
Phone: (510) 748-1900
Fax: (510) 748-7829

JOB SITE
Address: 175 BEALE ST
SAN FRANCISCO, CA 94105
Phone: (415) 398-2700
Fax: 510-748-7830

TRANSBAY TRANSIT CENTER

SAN FRANCISCO, CA

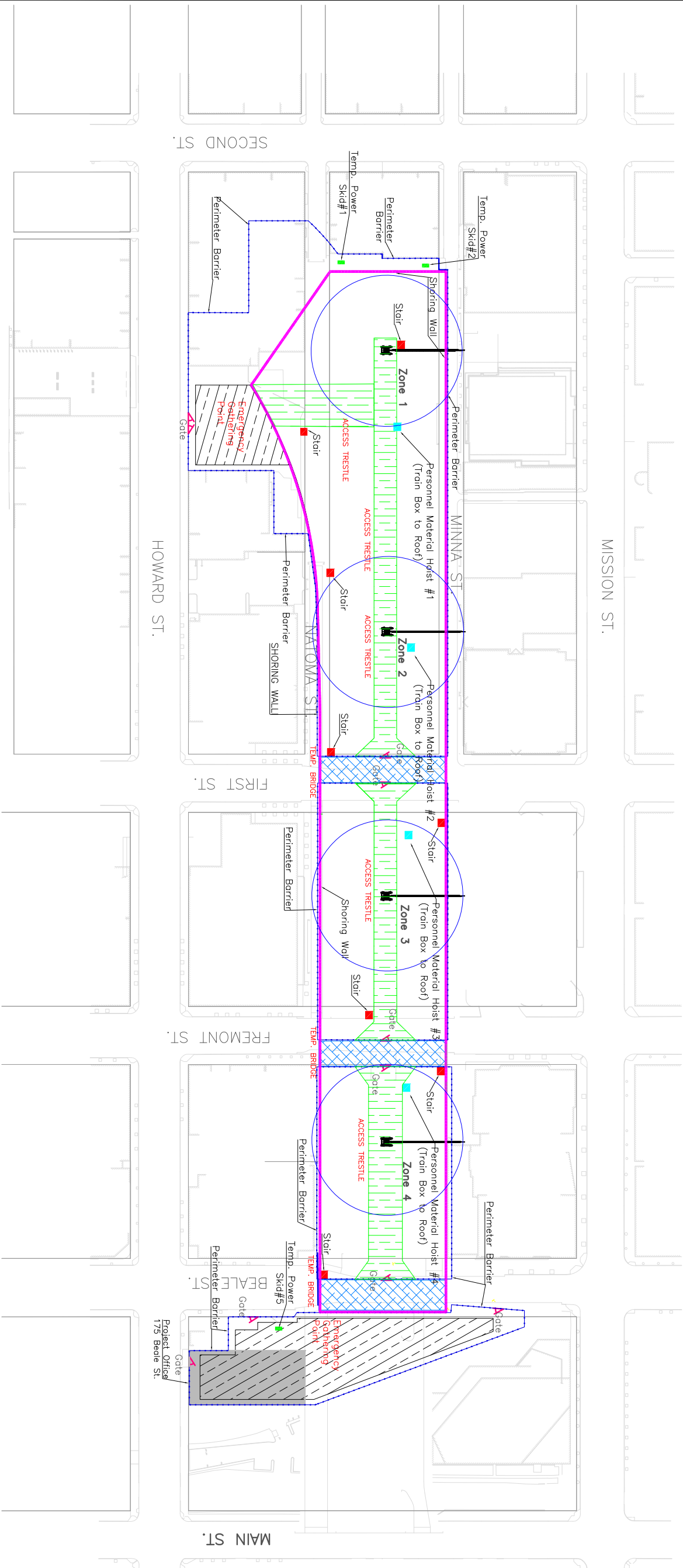
Revision Block

Rev. No.	Description	Date
02	Updated Main & Material Hoists	06-13-10
D	Updated for T02B BSE	06-27-10
E	Updated for T04, T1004 & RNP	10-12-10
F	Updated for T02B BSE	10-26-10
G	Updated for T02B & T02B.2	03-22-12
H	Updated for T02B Below Grade FRB	06-10-12
I	Updated for T02B Below Grade	06-22-12
J	Updated for T02B Below Grade	08-22-12
K	Updated for T02B & Addendum B5	03-26-2014
Drawn By	HC	Date 10-20-10
Checked By	MP	Date 10-20-10

Site Logistics

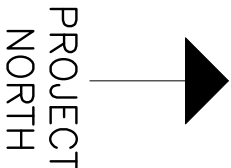
SCALE: N/A

SL-001



GENERAL NOTES

1. No jobsite parking available.
2. No loading or unloading of materials on city streets at any time. Violators will be cited and fined.
3. All deliveries must be coordinated with Webcor/Obayashi.
4. Storage of materials in Staging Areas must be coordinated with Webcor/Obayashi.
5. All visitors must check in at the Webcor/Obayashi project office.
6. Perimeter barrier location is for reference only. Each trade subcontractor shall identify the required perimeter barrier locations in the contract documents.
7. Location, size, and width of access trestles and temporary bridges to be designed per the requirements in the construction documents. Actual Locations are subject to change.
8. Personnel Material Hoists and stair locations are diagrammatic in nature and do not depict placement of hoists and stairs. Location to be coordinated with and approved by Webcor/Obayashi.
9. For staging areas, locations, and availability, see the latest issued revision of spec 01 14 19 – Restriction of Use to Site Areas. Usage of these areas will be at the discretion and assigned by Webcor/Obayashi. Refer to Contract Documents.
10. Location and configuration of gates are for reference only. For location and design refer to contract documents.



NOT FOR CONSTRUCTION

IMPORTANT NOTE:

THESE DRAWINGS ARE NOT INTENDED TO REPLACE THE DESIGN ARCHITECTURAL AND STRUCTURAL DRAWINGS. ALL DIMENSIONS, LOCATIONS, AND BE CHECKED ON-SITE AGAINST THE LATEST DESIGN AND DOCUMENTATIONS.

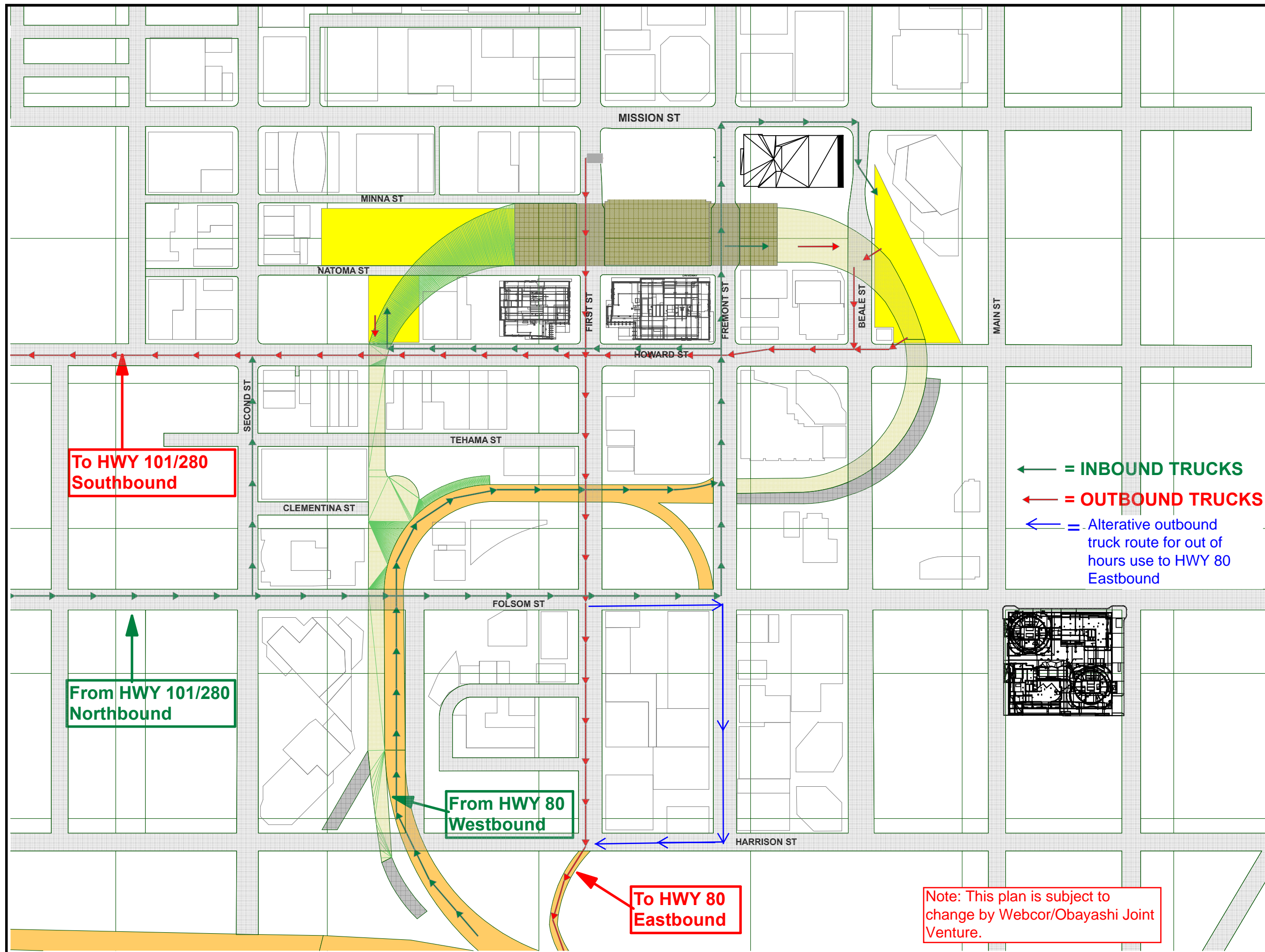
**TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA**

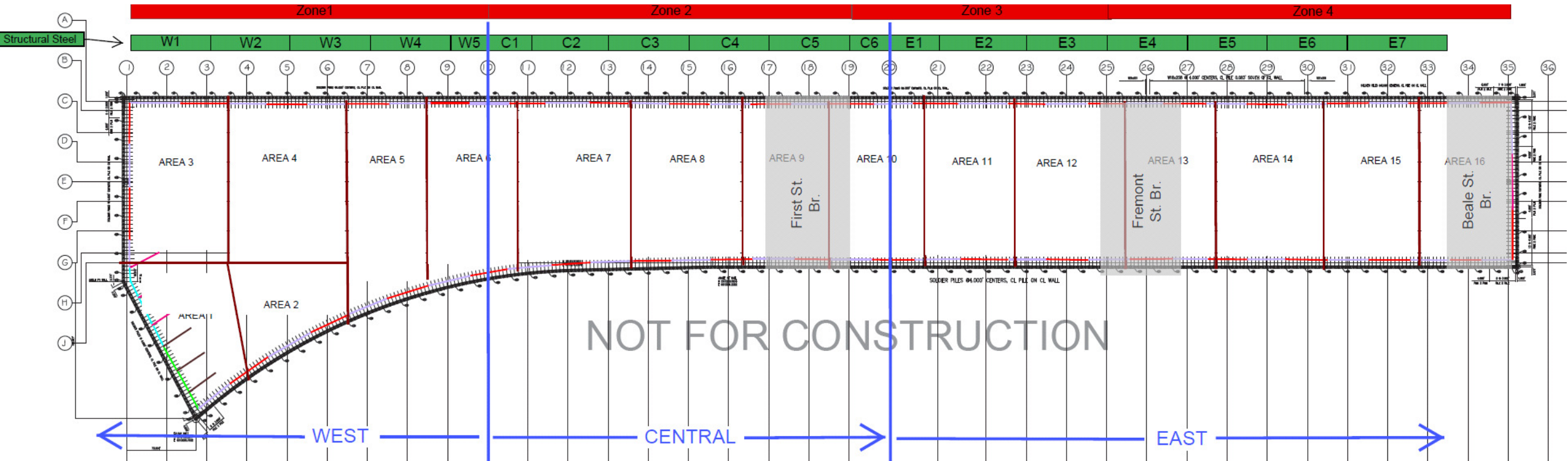
	03/22/12	
	//	
MARK	DATE	DESCRIPTION
PROJECT NO:		
MODEL FILE:		
DRAWN BY: KB		
CHK'D BY:		
COPYRIGHT		

SHEET TITLE

Truck Routing Plan

SL - 002





Structural Steel

NOT FOR CONSTRUCTION

WEST

CENTRAL

EAST

NOT FOR CONSTRUCTION

IMPORTANT NOTE:
THESE DRAWINGS ARE NOT INTENDED TO REPLACE
THE DESIGN ARCHITECTURAL AND STRUCTURAL
DRAWINGS. ALL DIMENSIONS, LOCATIONS, AND
ELEVATIONS SHOWN ON THIS DRAWING ARE TO BE
CHECKED ON-SITE AGAINST THE LATEST DESIGN AND
DOCUMENTATIONS.

1751 HARBOR BAY PARKWAY
SUITE 200
ALAMEDA, CA 94502
Phone: (510) 748-1900
Fax: (510) 748-7829

JOB SITE
Address: 175 BEALE ST
SAN FRANCISCO, CA 94105
Phone: 415-578-5700
Fax: 510-748-7830

TRANSBAY TRANSIT CENTER

SAN FRANCISCO, CA

Revision Block

Rev. No.	Description	Date
01	Updated for TGD6 Below Grade Addendum 02	08-22-12
02	Updated for TGD7.1 #B	10-31-12
03	Updated for TGD7.1W, TGD7.1C & TGD7.1E	04-05-13

Drawn By	DH	Date	08-22-12
Checked By	SR	Date	08-22-12

Job No.: 30100

Construction Zones and Areas

SCALE: N/A

SL-025

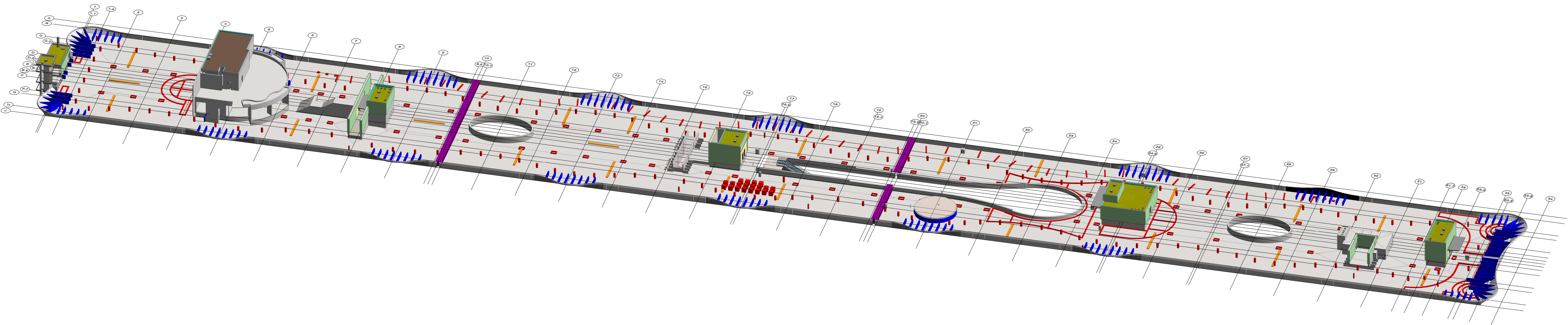
Transbay Transit Center
San Francisco, California

REV	DATE	DESCRIPTION
1	12/5/2013	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		

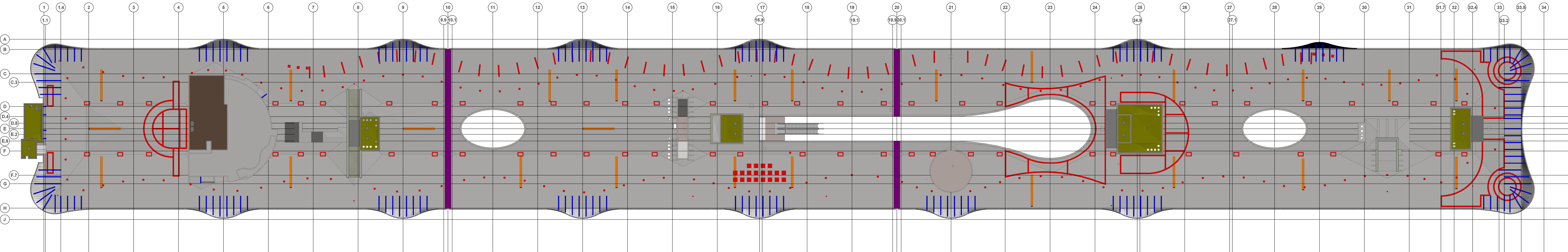
Rooftop
Obstructions
For Reference
Only

SL-027

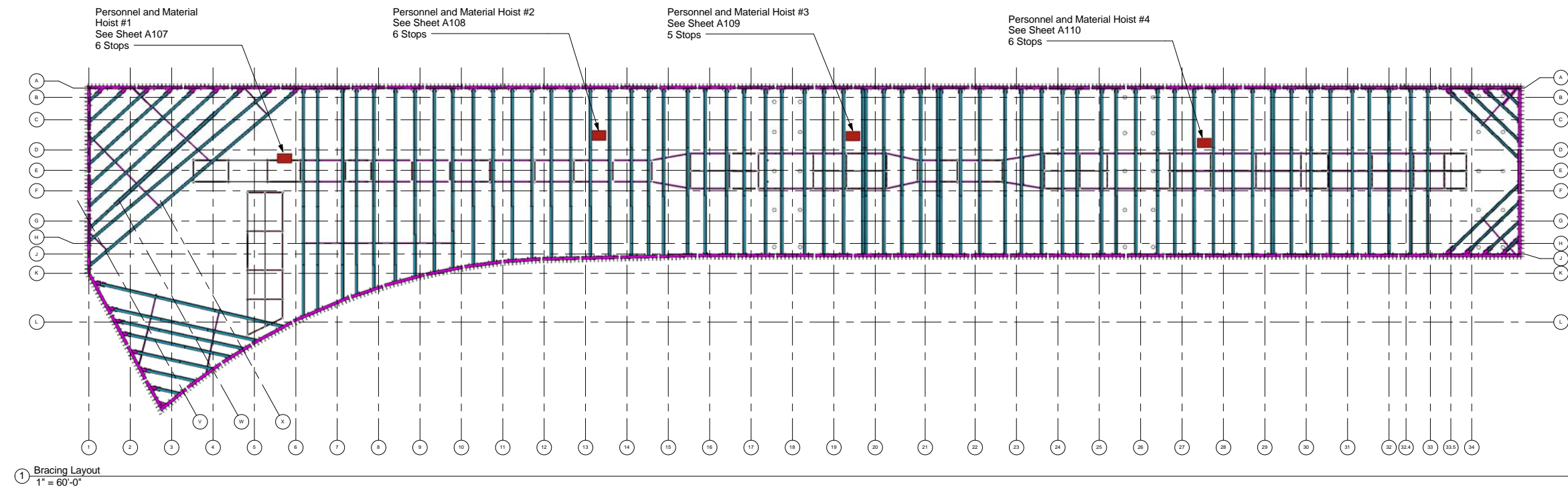
Scale AS SHOWN



2 3D
SCALE: NTS



1 Plan
SCALE: 1" = 20'-0"



NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



JOINT VENTURE

175 Beale Street
San Francisco, CA

Transbay Transit Center

San Francisco, CA

R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION
PROJECT NO:		X
MODEL FILE:		X
DRAWN BY:		X
CHKD BY:		X
COPYRIGHT		
SHEET TITLE		
Personnel and Material Hoist Layout - Bracing		
A101		
Scale		AS SHOWN



175 Beale Street
San Francisco, CA

Transbay Transit Center
San Francisco, CA

R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION

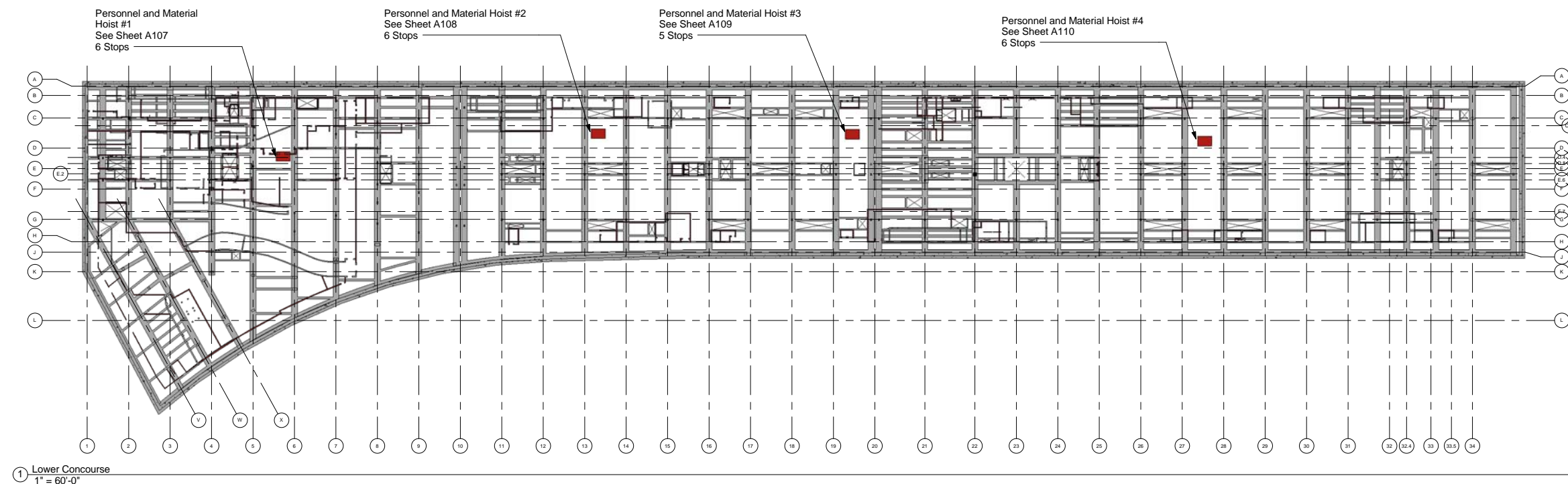
PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	X
CHKD BY:	X
COPYRIGHT	

SHEET TITLE

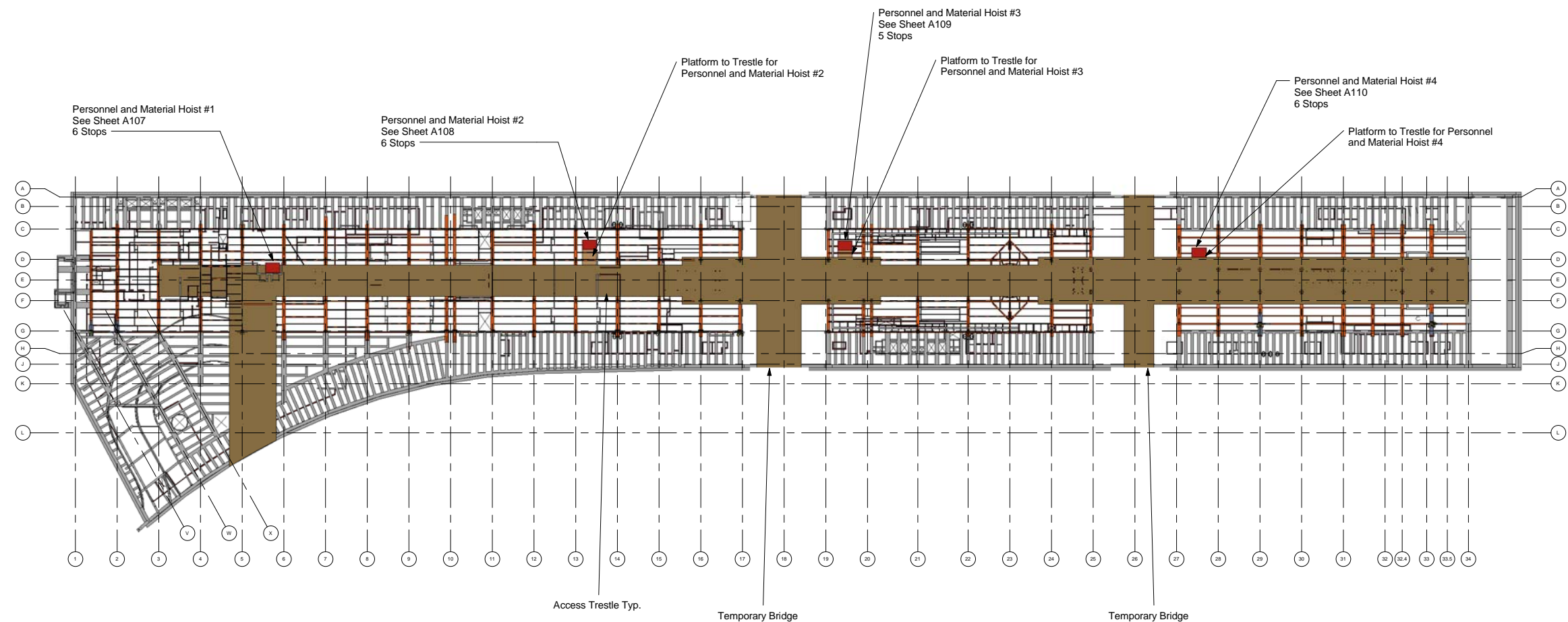
Personnel
and Material
Hoist Layout
- Lower
Concourse

A102

Scale AS SHOWN



NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



① Ground Level
1" = 60'-0"

- NOTES:**
- Personnel and Material Hoists #2, #3, and #4 platforms to be removed when trestle is removed in surrounding area.
 - Personnel and Material Hoist #1 to be installed after trestle and temporary bracing has been removed.

NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



175 Beale Street
San Francisco, CA

Transbay Transit Center

San Francisco, CA

R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	X
CHKD BY:	X
COPYRIGHT	

SHEET TITLE

Personnel
and Material
Hoist Layout
- Ground
Level

A103

Scale AS SHOWN



175 Beale Street
San Francisco, CA

Transbay Transit Center
San Francisco, CA

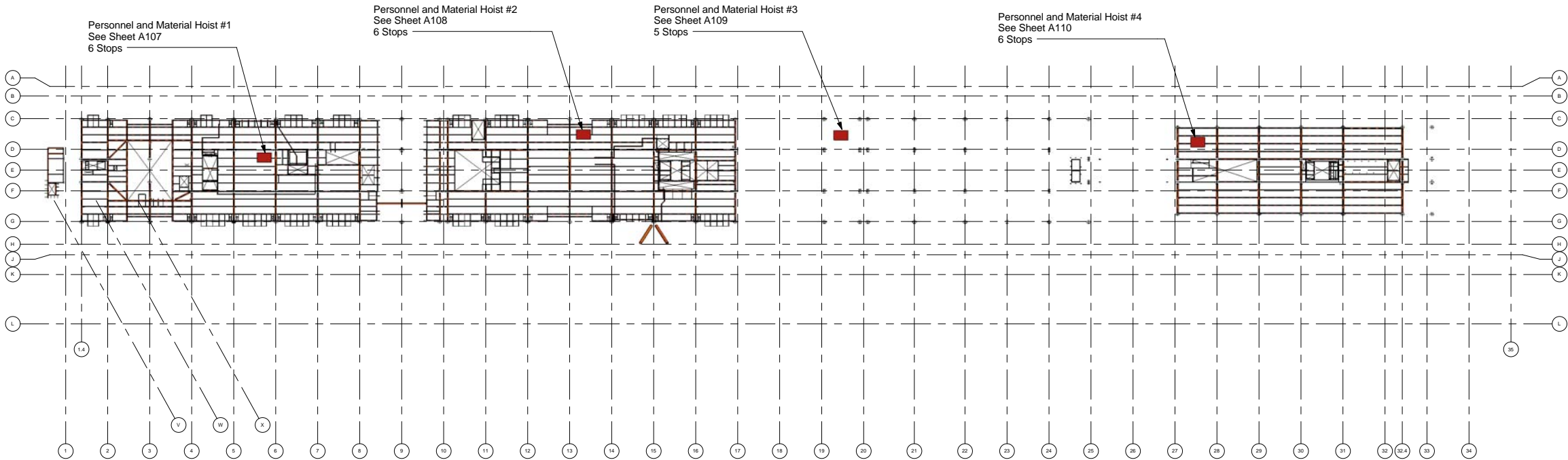
R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	X
CHKD BY:	X
COPYRIGHT	

SHEET TITLE
Personnel and Material Hoist Layout - Second Level

A104

Scale AS SHOWN



① Second Level
1" = 60'-0"

NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



175 Beale Street
San Francisco, CA

Transbay Transit Center
San Francisco, CA

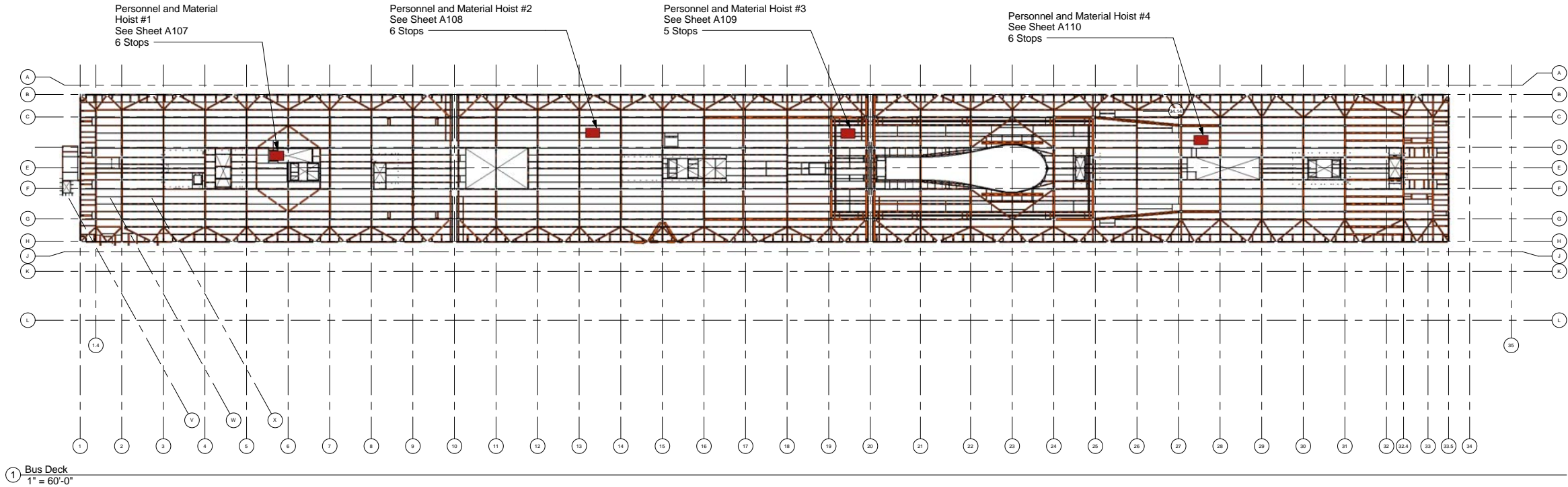
R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	X
CHKD BY:	X
COPYRIGHT	

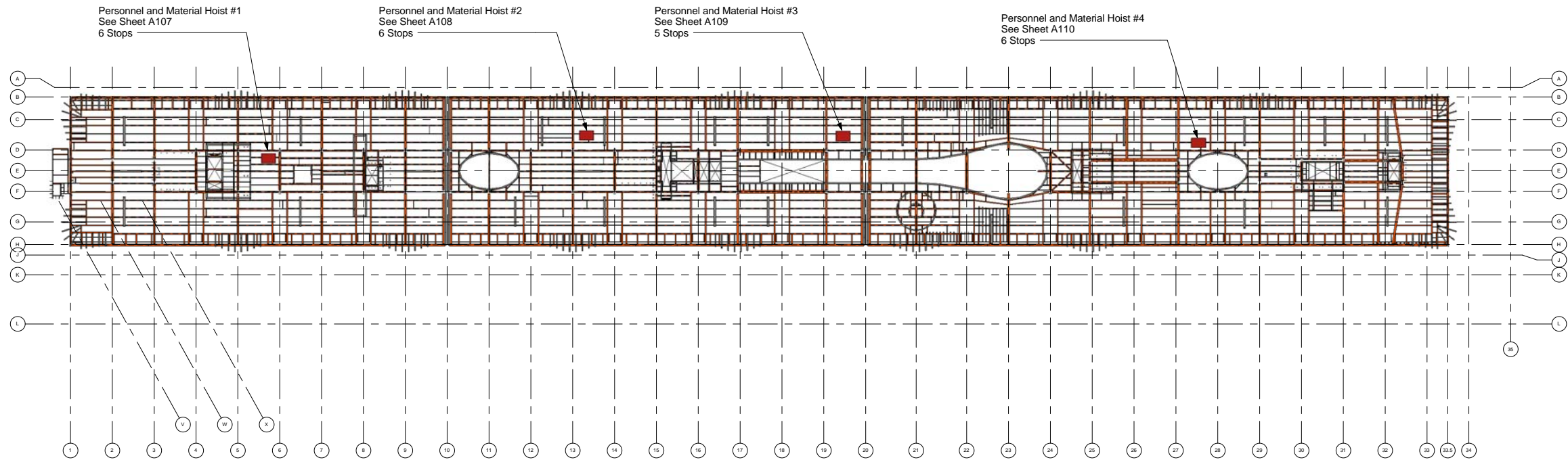
PERSONNEL AND MATERIAL HOIST LAYOUT - BUS DECK LEVEL

A105

Scale AS SHOWN



NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



1 Roof Level
1" = 60'-0"

NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



175 Beale Street
San Francisco, CA

Transbay Transit Center
San Francisco, CA

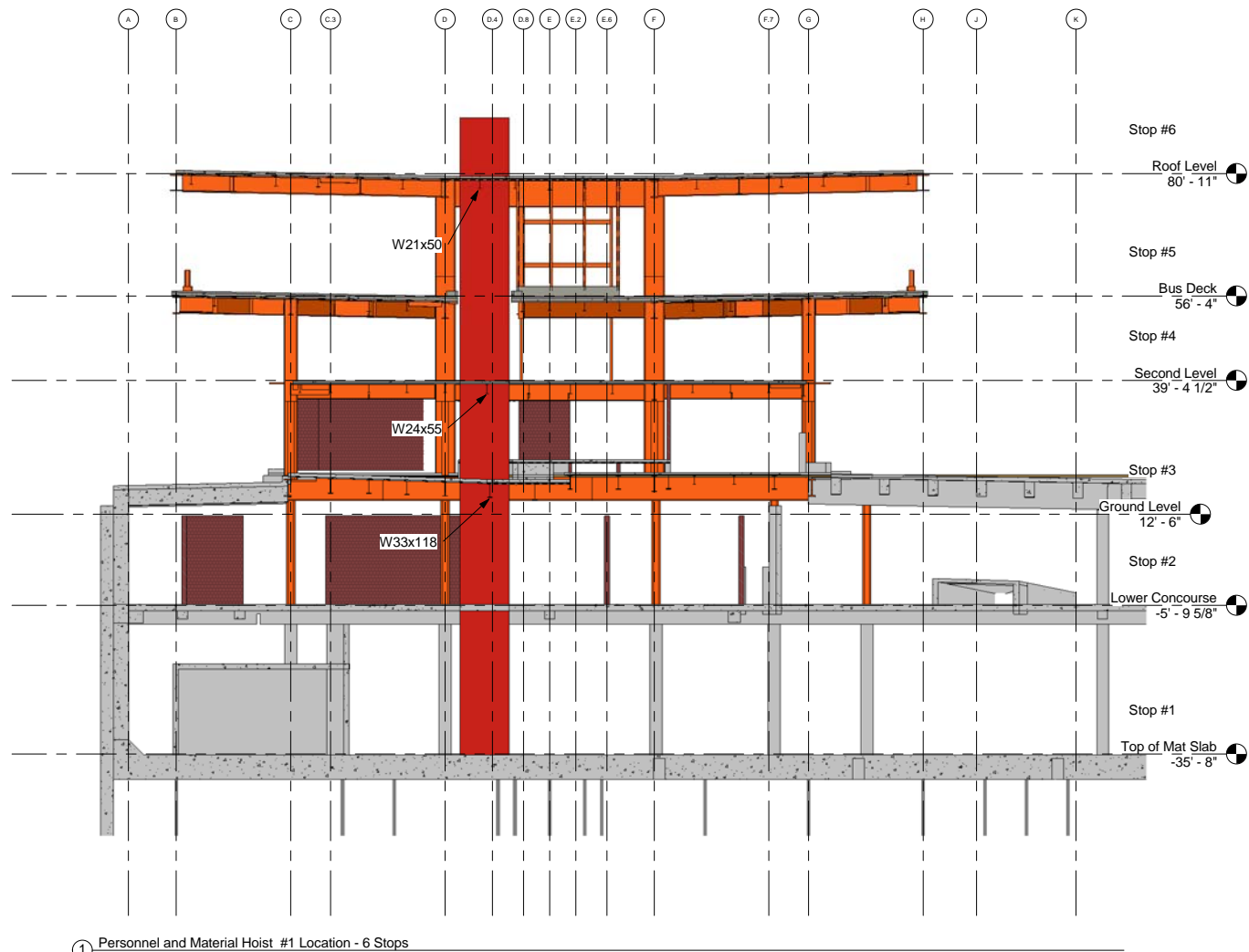
R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	X
CHKD BY:	X
COPYRIGHT	

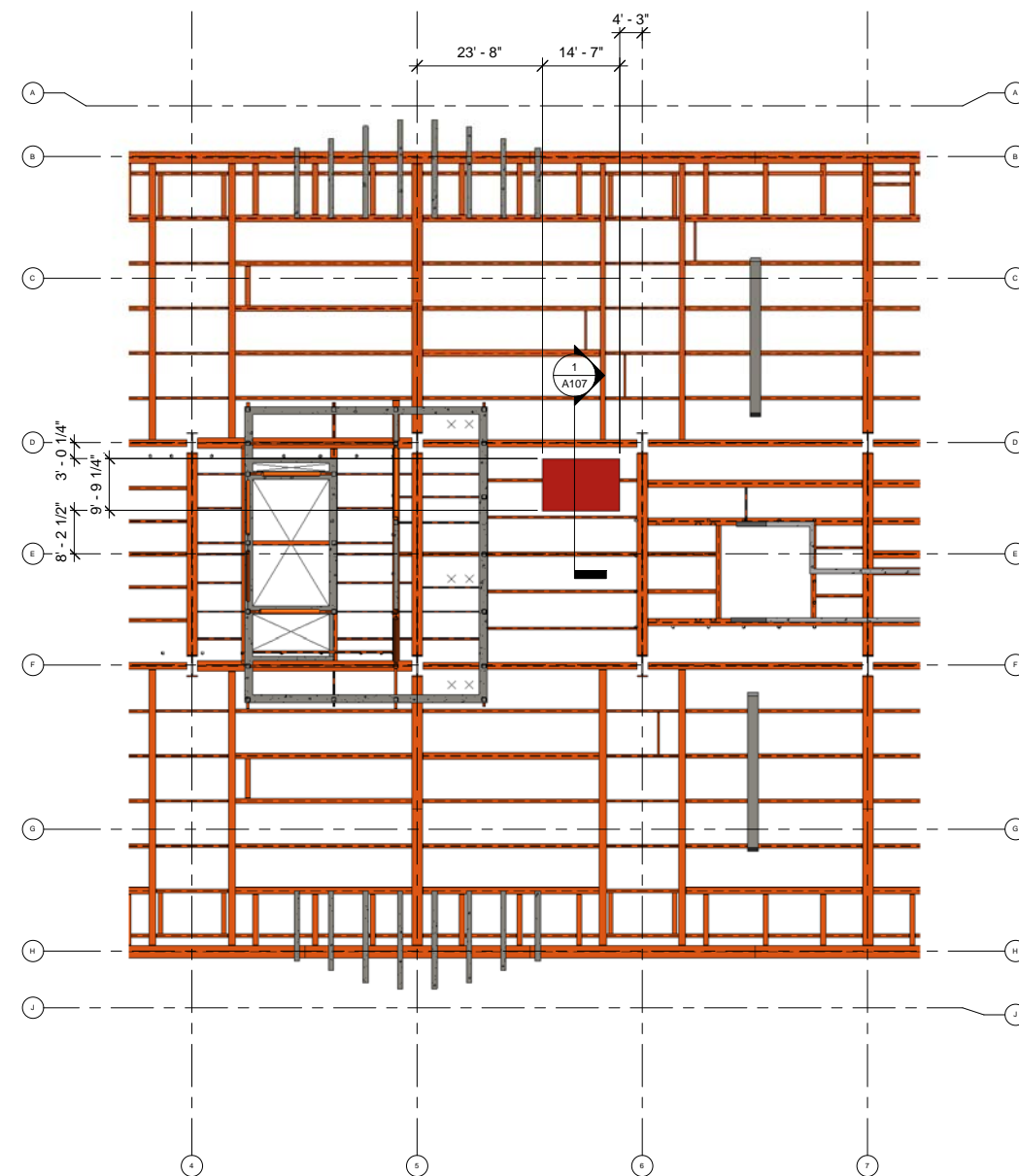
SHEET TITLE
Personnel
and Material
Hoist Layout
- Roof Level

A106

Scale AS SHOWN



① Personnel and Material Hoist #1 Location - 6 Stops
1/16" = 1'-0"



② Personnel and Material Hoist #1 Detail - Roof Level
1/16" = 1'-0"

NOTE:

The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.

The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



175 Beale Street
San Francisco, CA

Transbay Transit Center

San Francisco, CA

R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	X
CHKD BY:	X
COPYRIGHT	

SHEET TITLE

Personnel
and Material
Hoist #1
Location

A107

Scale AS SHOWN



175 Beale Street
San Francisco, CA

Transbay Transit Center
San Francisco, CA

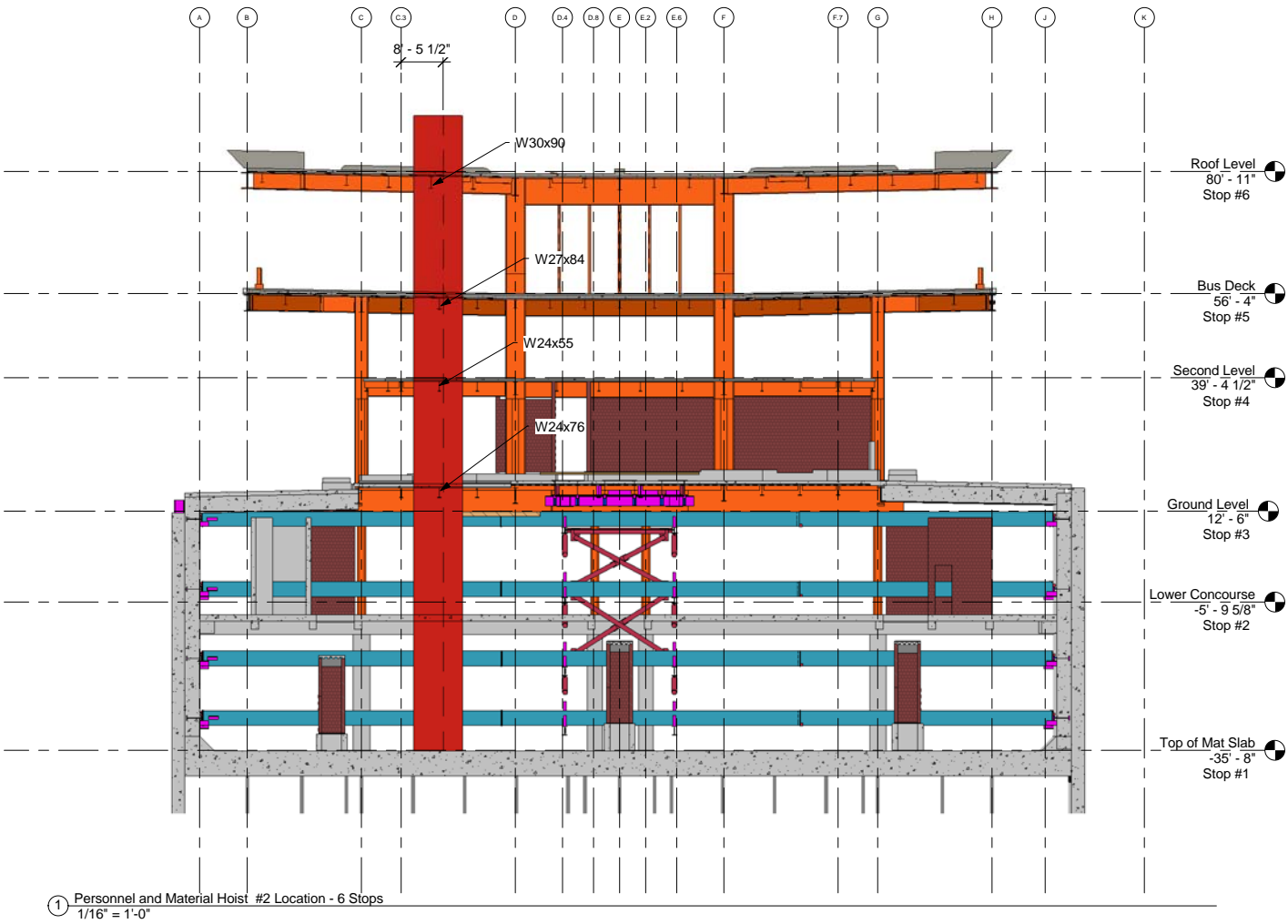
R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	X
CHKD BY:	X
COPYRIGHT	

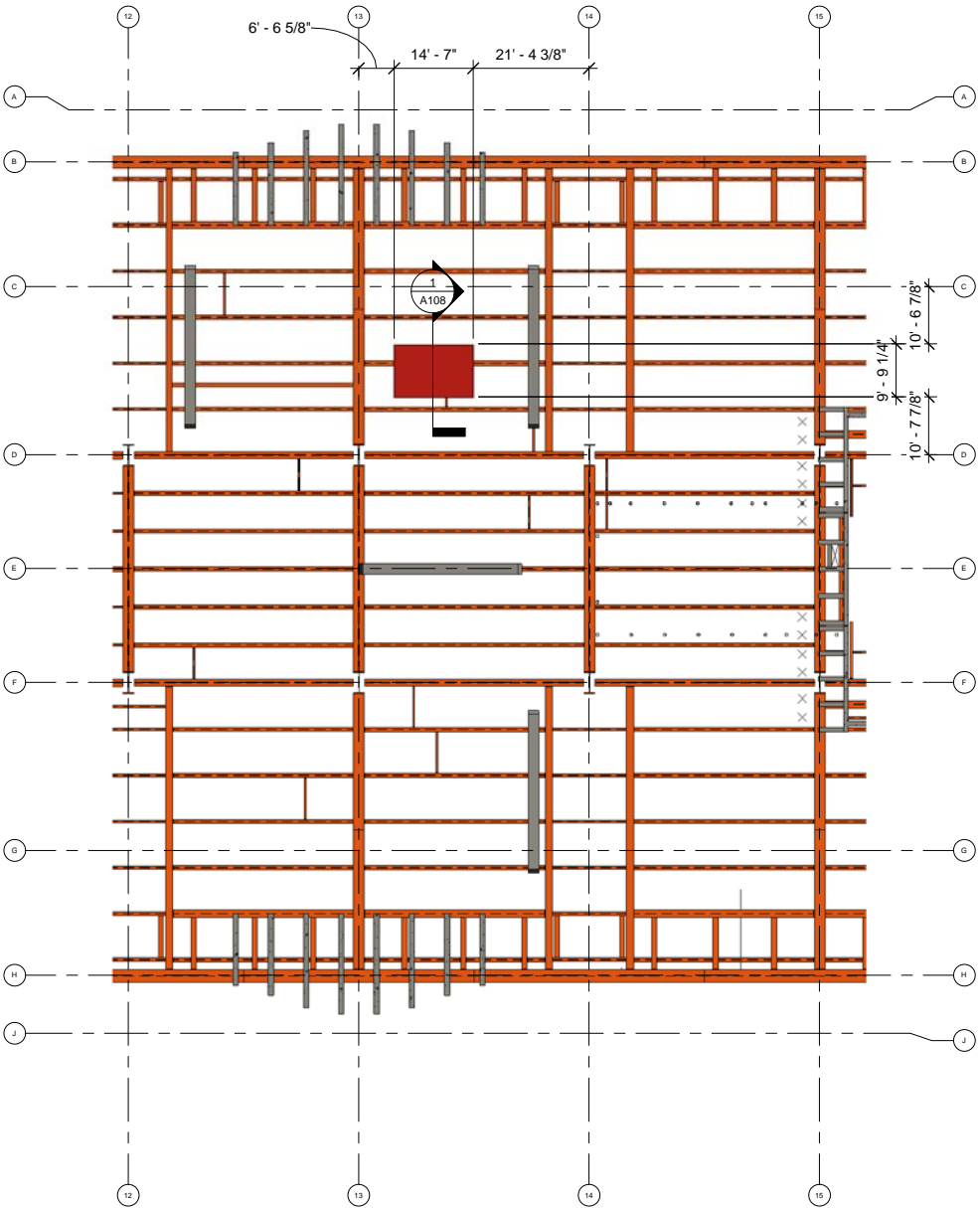
SHEET TITLE
Personnel and Material Hoist #2 Location

A108

Scale AS SHOWN

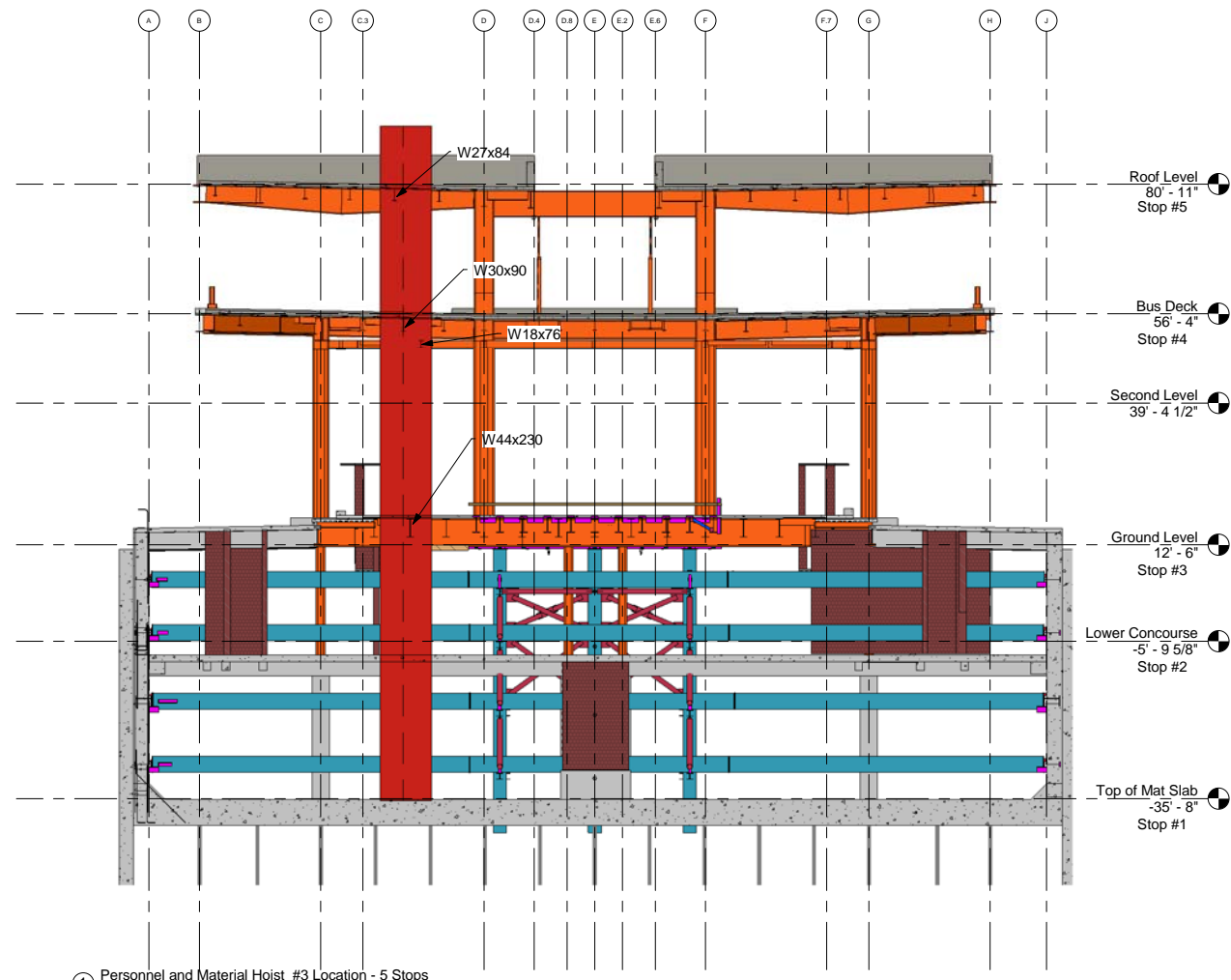


1 Personnel and Material Hoist #2 Location - 6 Stops
1/16" = 1'-0"

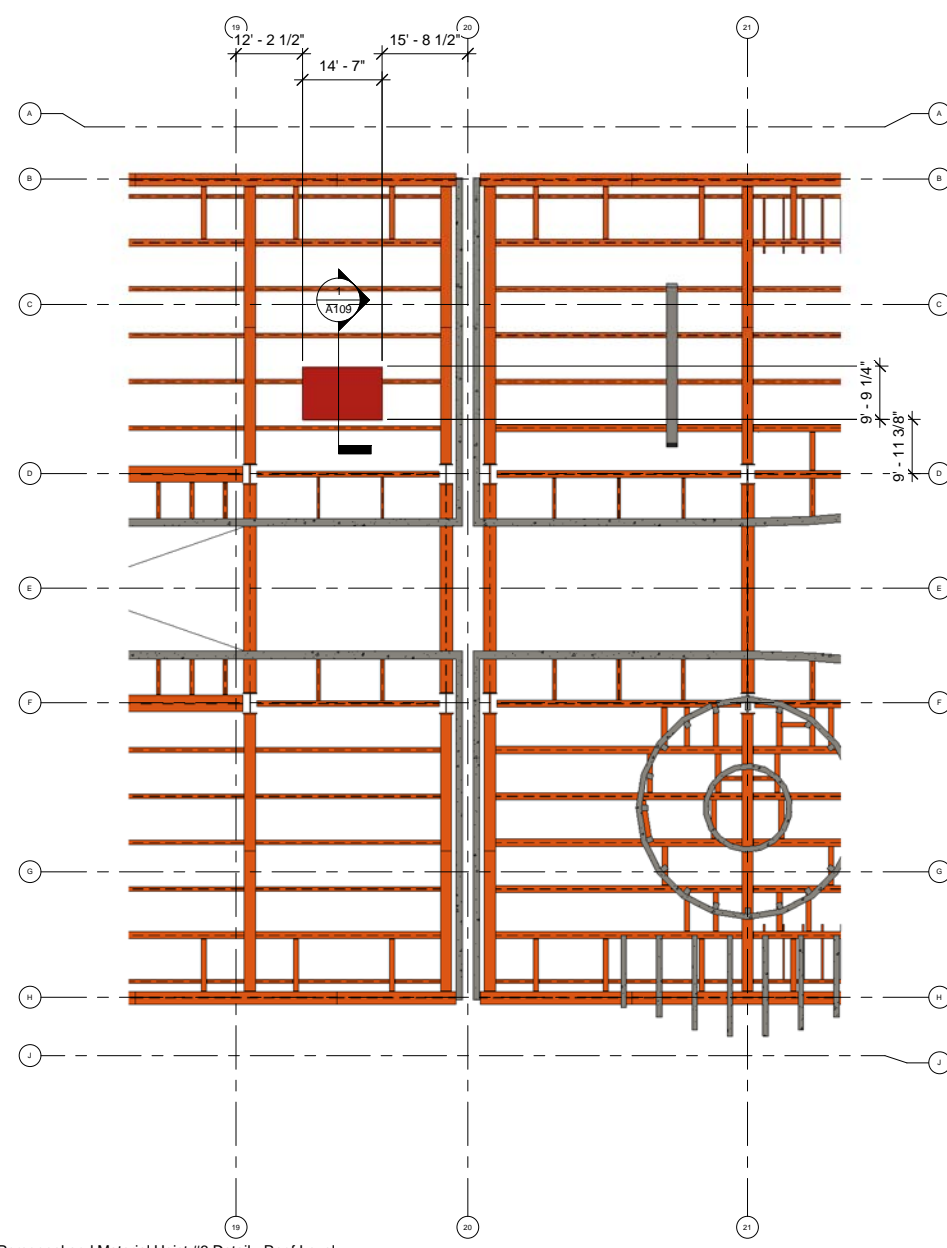


2 Personnel and Material Hoist #2 Detail - Roof Level
1/16" = 1'-0"

NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



① Personnel and Material Hoist #3 Location - 5 Stops
1/16" = 1'-0"



② Personnel and Material Hoist #3 Detail - Roof Level
1/16" = 1'-0"

NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



**175 Beale Street
San Francisco, CA**

Transbay Transit Center

San Francisco, CA

R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION
PROJECT NO: X		
MODEL FILE: X		
DRAWN BY: X		
CHKD BY: X		
COPYRIGHT		
SHEET TITLE		
Personnel and Material Hoist #3 Location		
A109		
Scale AS SHOWN		



175 Beale Street
San Francisco, CA

Transbay Transit Center
San Francisco, CA

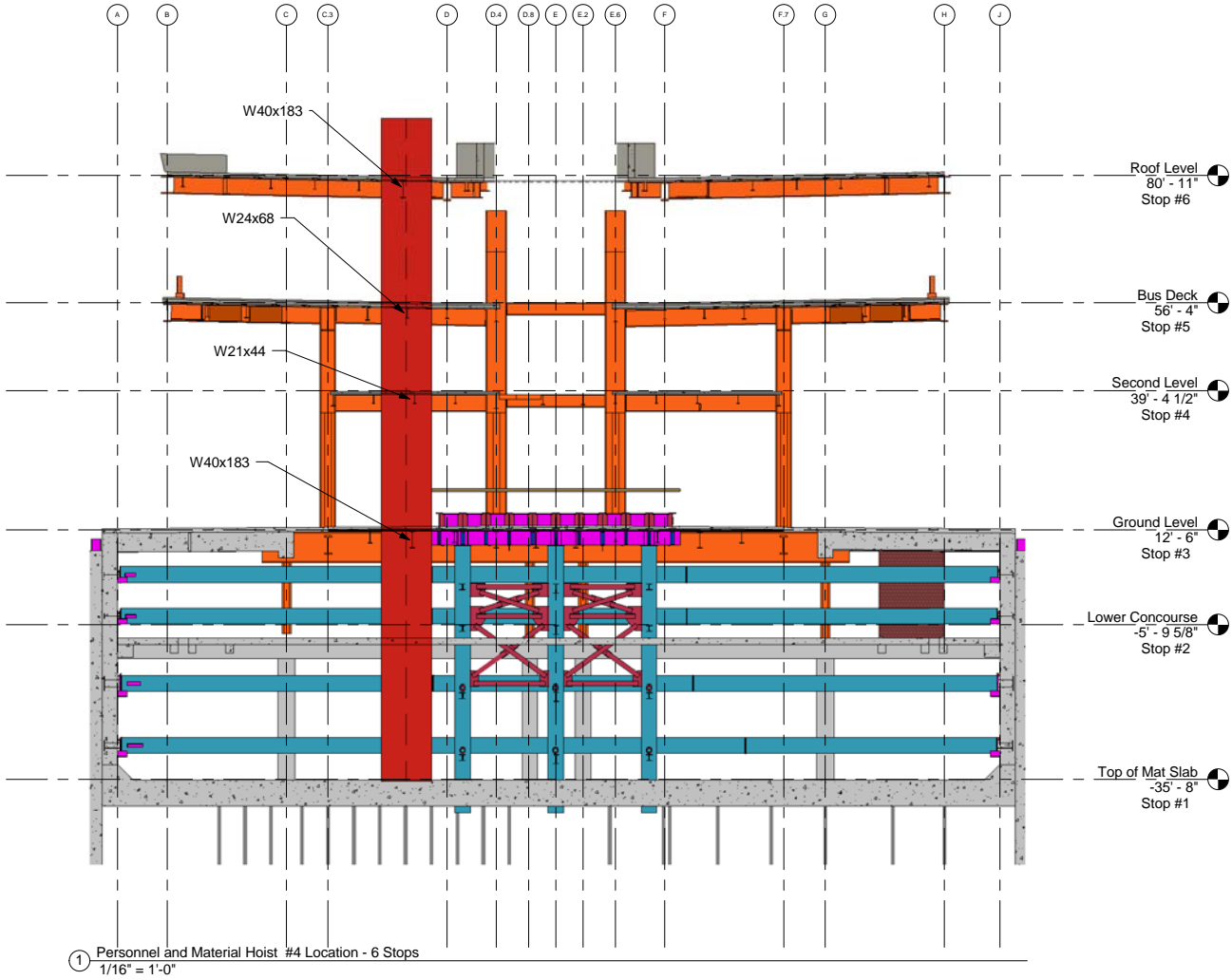
R1	12/16/2013	
R2	12/20/2013	
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	X
CHKD BY:	X
COPYRIGHT	

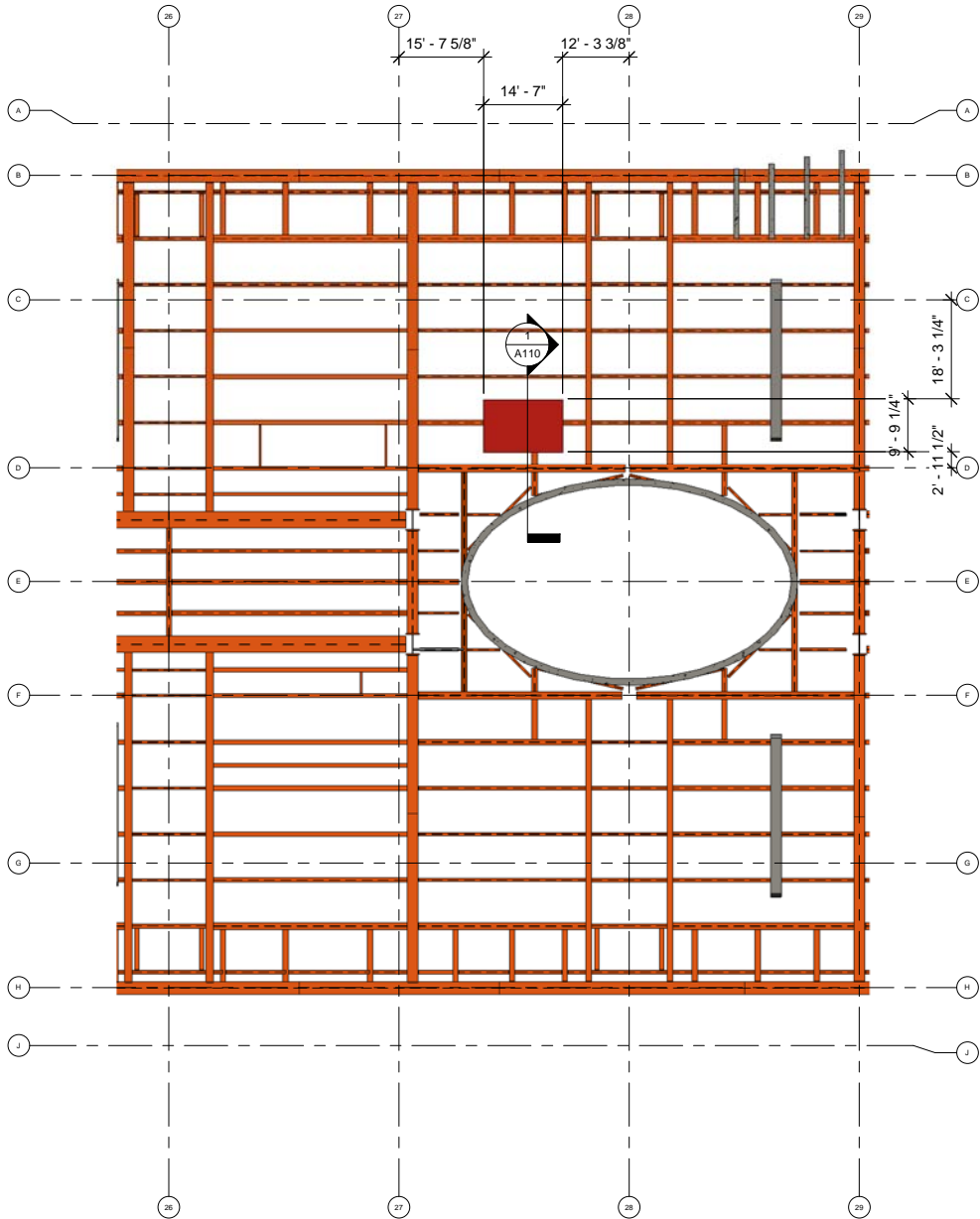
SHEET TITLE
Personnel and Material Hoist #4 Location

A110

Scale AS SHOWN

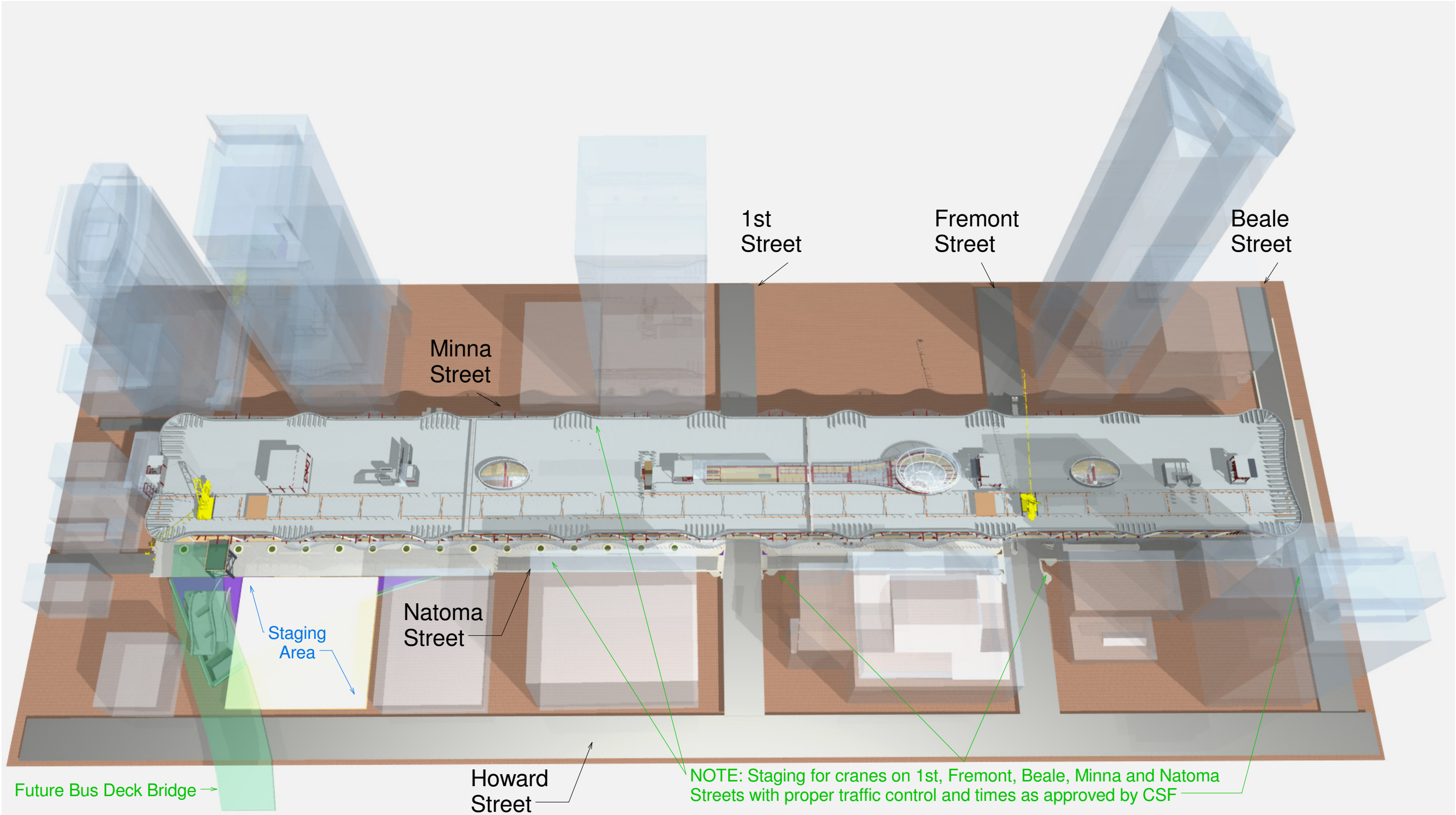


① Personnel and Material Hoist #4 Location - 6 Stops
1/16" = 1'-0"



② Personnel and Material Hoist #4 Detail - Roof Level
1/16" = 1'-0"

NOTE:
The size, quantity, and position of structural elements in based on the 100% Construction Documents dated 05/31/2013.
The size, quantity, and position of internal bracing elements is based on the Internal Bracing and Shoring Wall Drawings dated 09/13/2013.



Transbay Transit Center

San Francisco, California

MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig
CHK'D BY:	X
COPYRIGHT	

SHEET TITLE

Logistics
Aerial View



Transbay Transit Center

San Francisco, California

MARK	DATE	DESCRIPTION

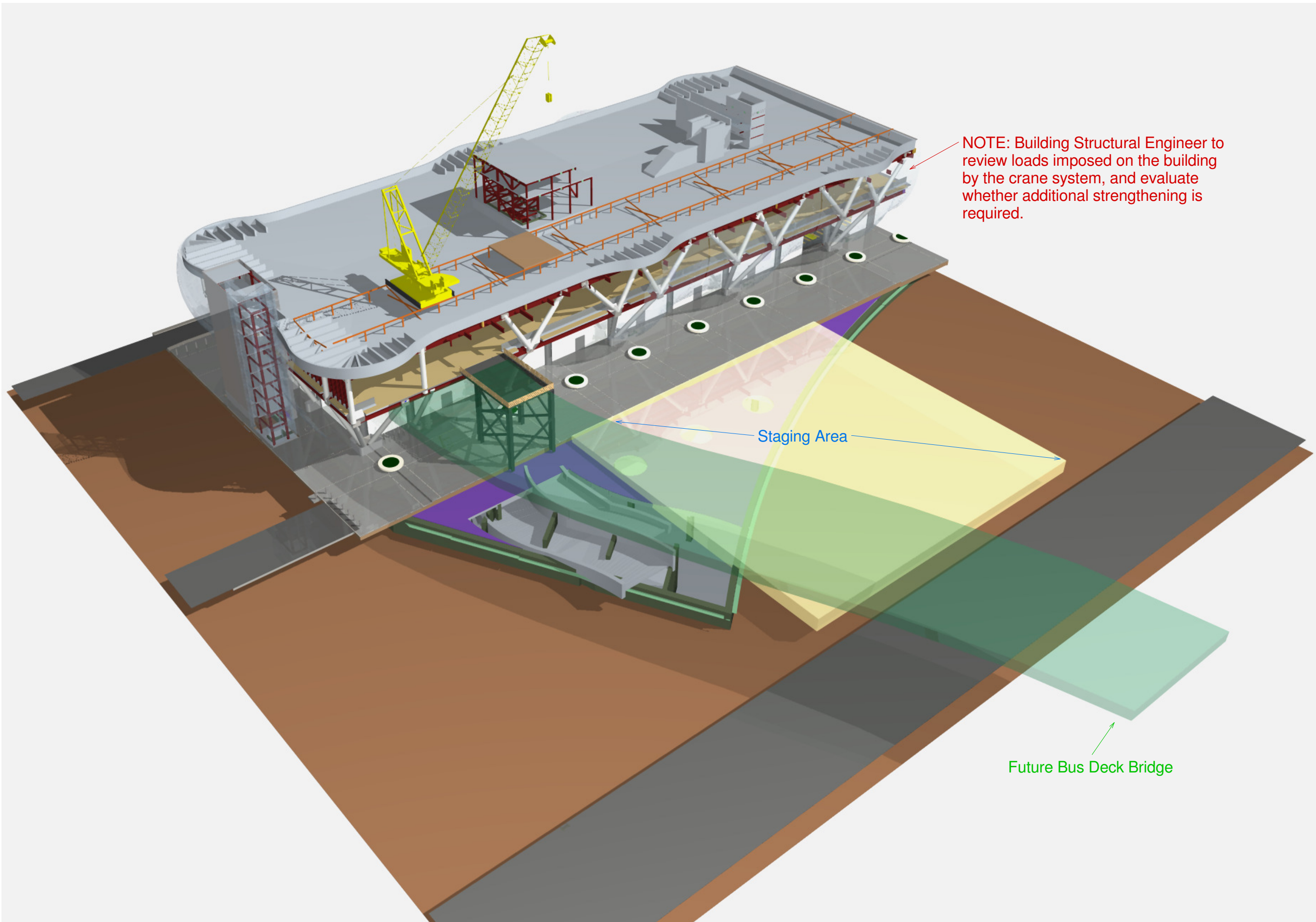
PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig
CHK'D BY:	X
COPYRIGHT	

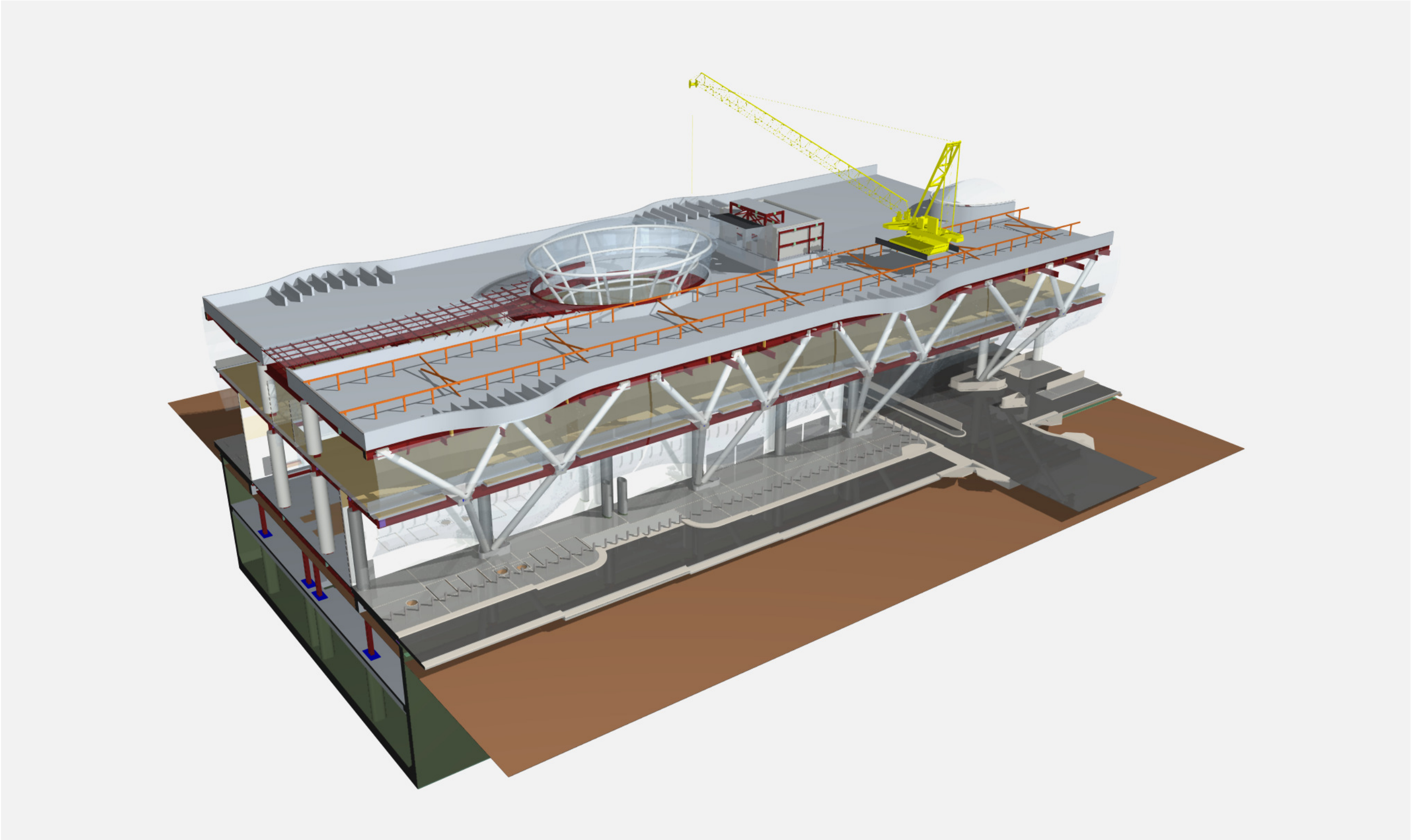
SHEET TITLE

3D Section

X-03

Scale	AS SHOWN
-------	----------





207 King Street, Suite 300
San Francisco, California 94107

Transbay Transit Center

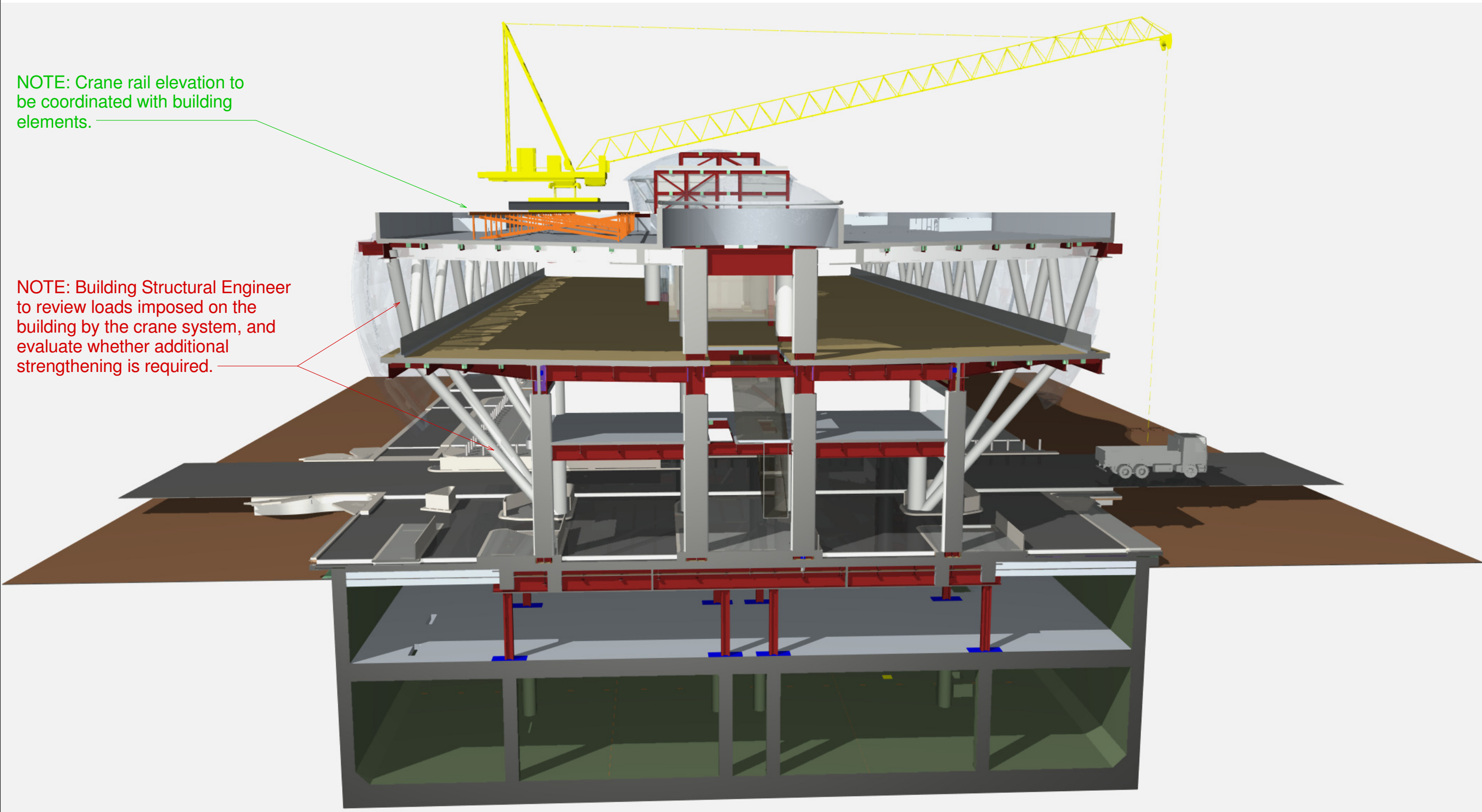
San Francisco, California

MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig
CHKD BY:	X
COPYRIGHT	

SHEET TITLE
3D Section

X-04
Scale AS SHOWN



NOTE: Crane rail elevation to be coordinated with building elements.

NOTE: Building Structural Engineer to review loads imposed on the building by the crane system, and evaluate whether additional strengthening is required.

Transbay Transit Center

San Francisco, California

MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig
CHKD BY:	X
COPYRIGHT	

SHEET TITLE

3D Section
West Facing



San Francisco, California

MARK	DATE	DESCRIPTION

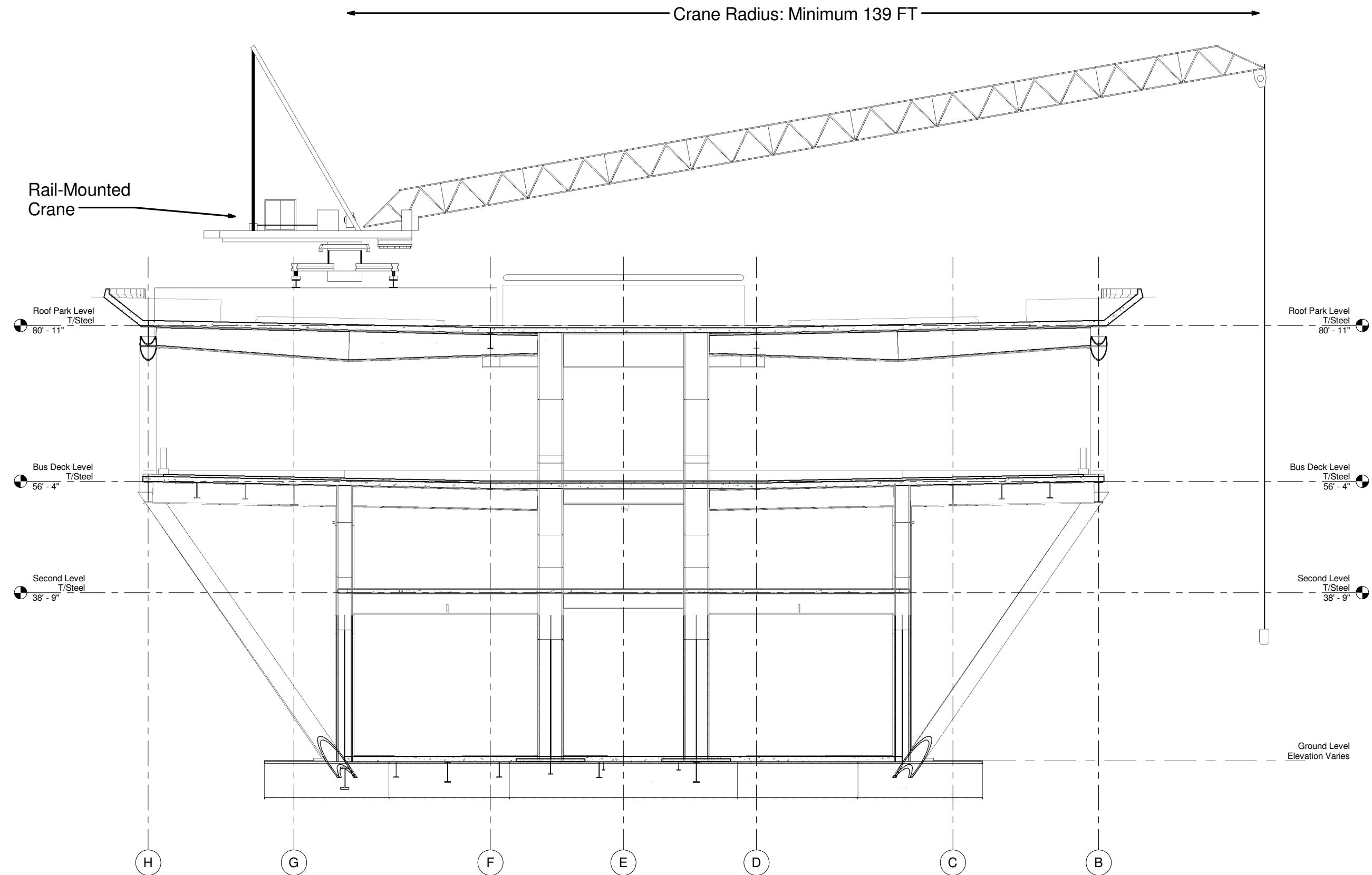
PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig
CHK'D BY:	X
COPYRIGHT	

SHEET TITLE

Crane Section

X-06

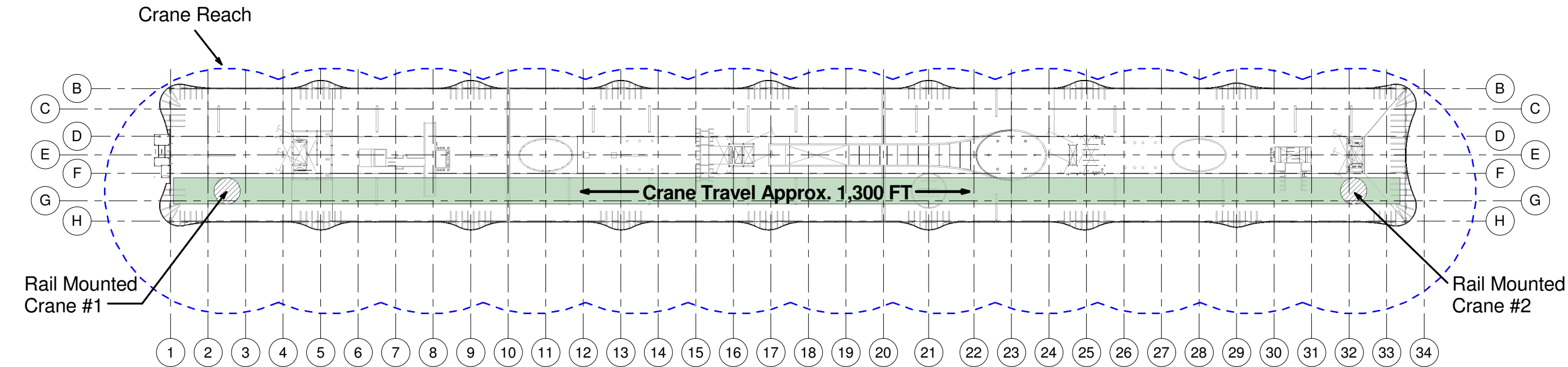
Scale AS SHOWN



① Crane Section
1/8" = 1'-0"

Transbay Transit Center

San Francisco, California



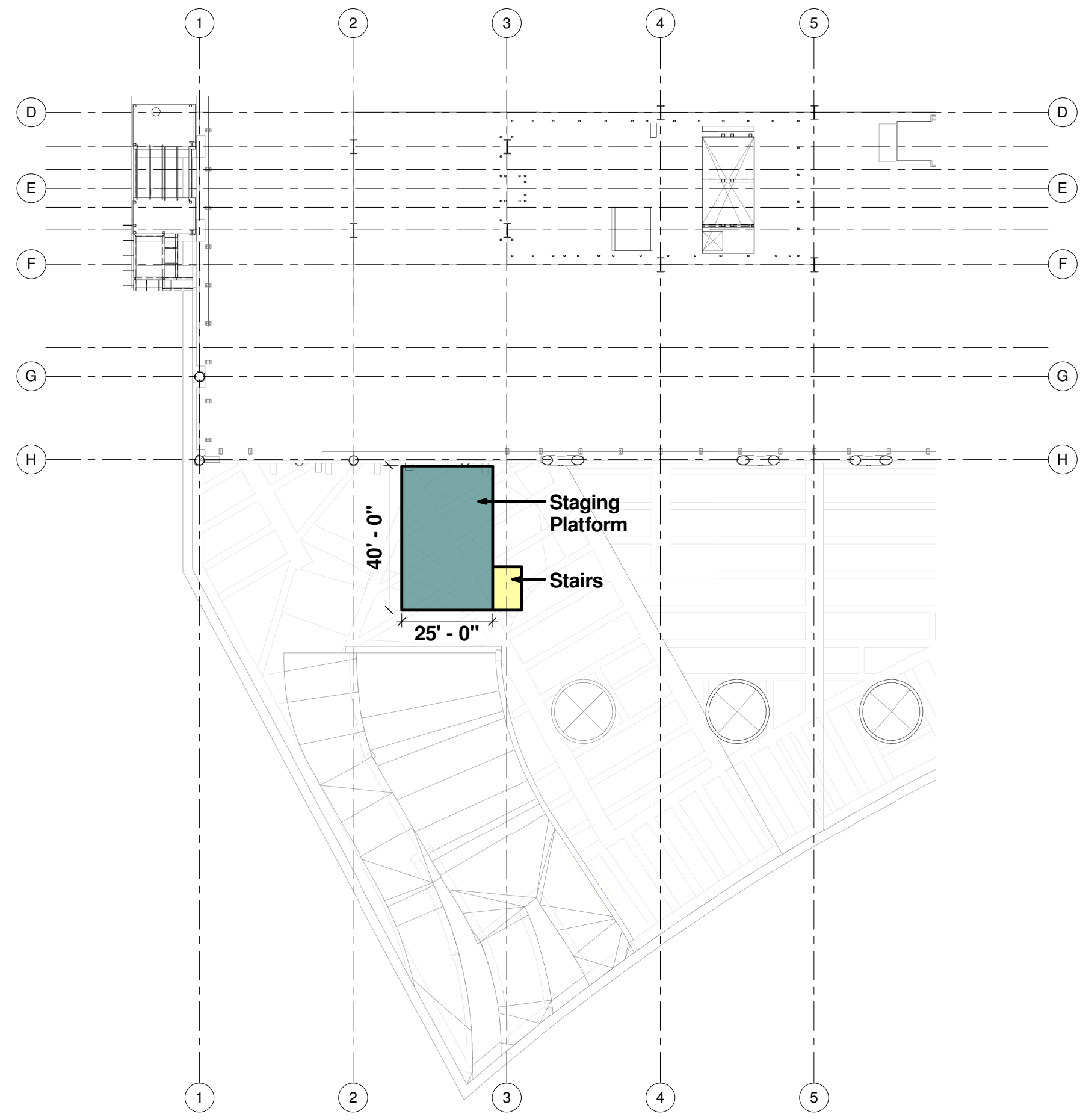
① Roof Park Level T/Steel
1/64" = 1'-0"

MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig
CHK'D BY:	X
COPYRIGHT	

SHEET TITLE
Roof Rail-Mounted Cranes

X-07
Scale AS SHOWN



① Bus Deck Level T/Steel
1/16" = 1'-0"



JOINT VENTURE

207 King Street, Suite 300
San Francisco, California 94107

Transbay Transit Center

San Francisco, California

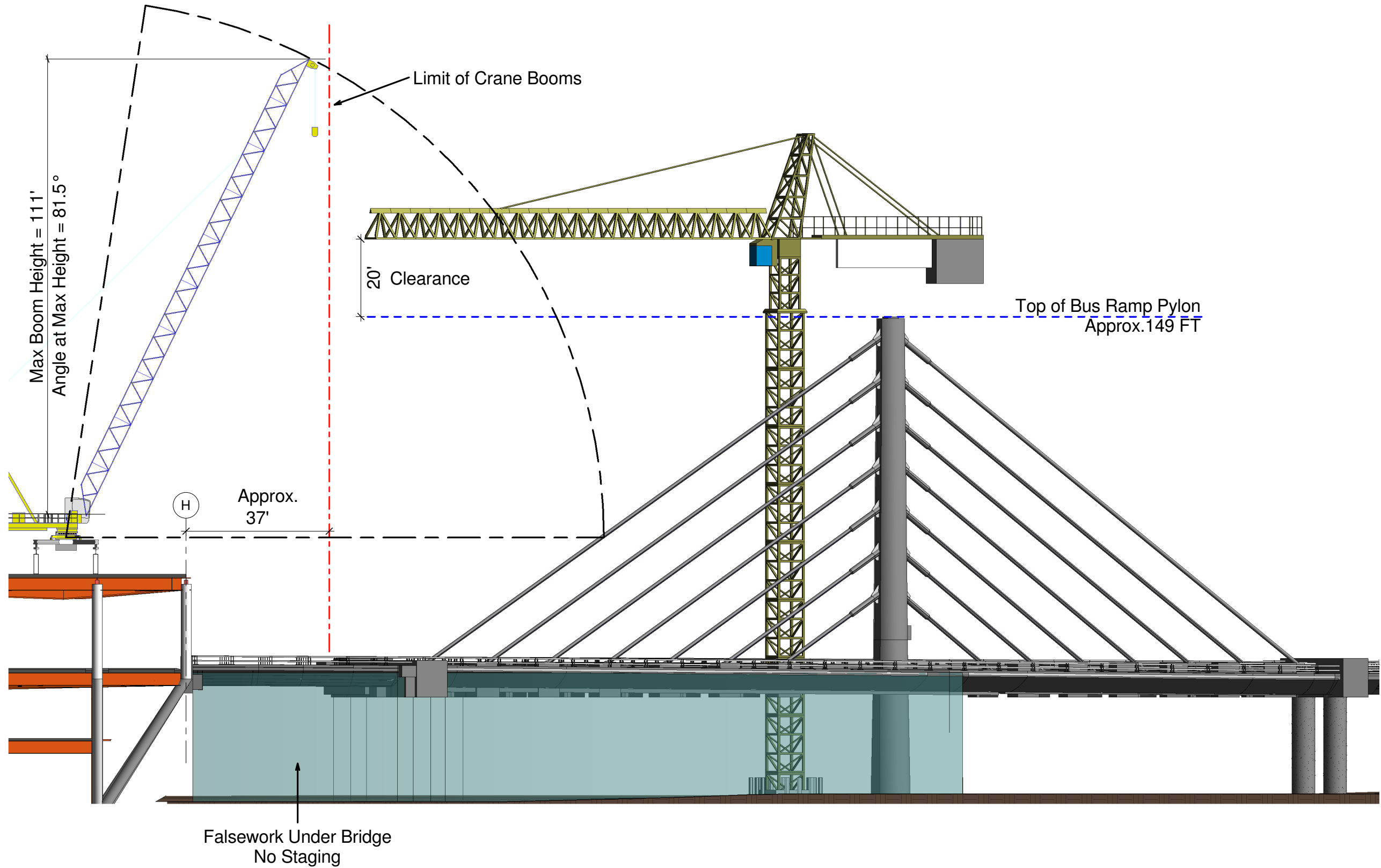
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig
CHK'D BY:	X
COPYRIGHT	

SHEET TITLE

Staging Platform

- Notes:
- All distances are approximate
 - Tower Crane and Rooftop Crane configuration subject to change



① Tower Crane & Bus Ramp Pylon
1 : 160

Transbay Transit Center

San Francisco, California

1	4/18/13	Bridge Logistics
2	4/23/13	Update
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig / Blair Hinojosa
CHK'D BY:	X
COPYRIGHT	

SHEET TITLE

Rooftop
Crane and
Tower Crane
Logistics

Transbay Transit Center

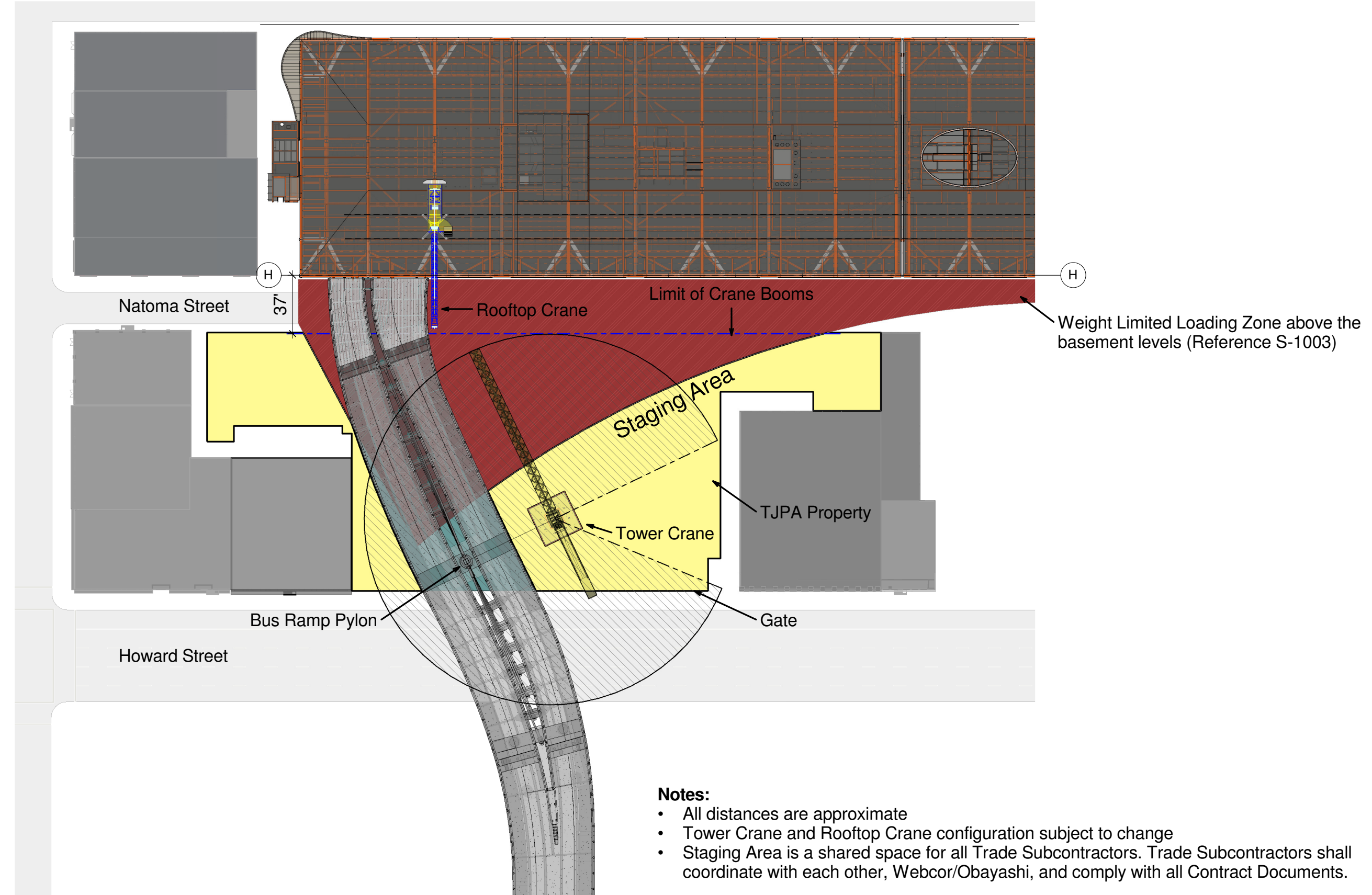
San Francisco, California

1	4/18/13	Bridge Logistics
2	4/23/13	Update
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig / Blair Hinojosa
CHK'D BY:	X
COPYRIGHT	

SHEET TITLE
Natoma - Howard St. Area Logistics

X-16





207 King Street, Suite 300
San Francisco, California 94107

Transbay Transit Center

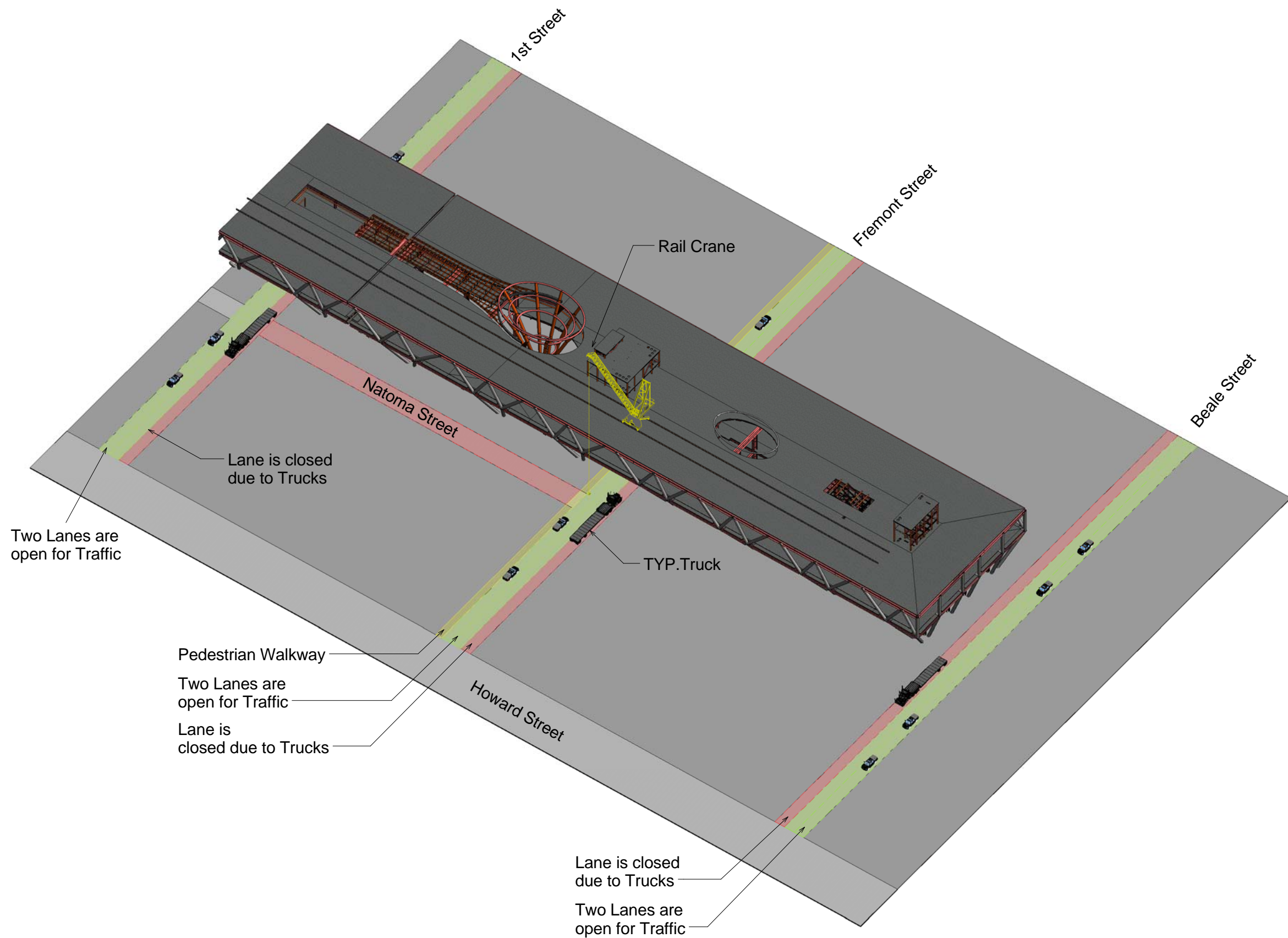
San Francisco, California

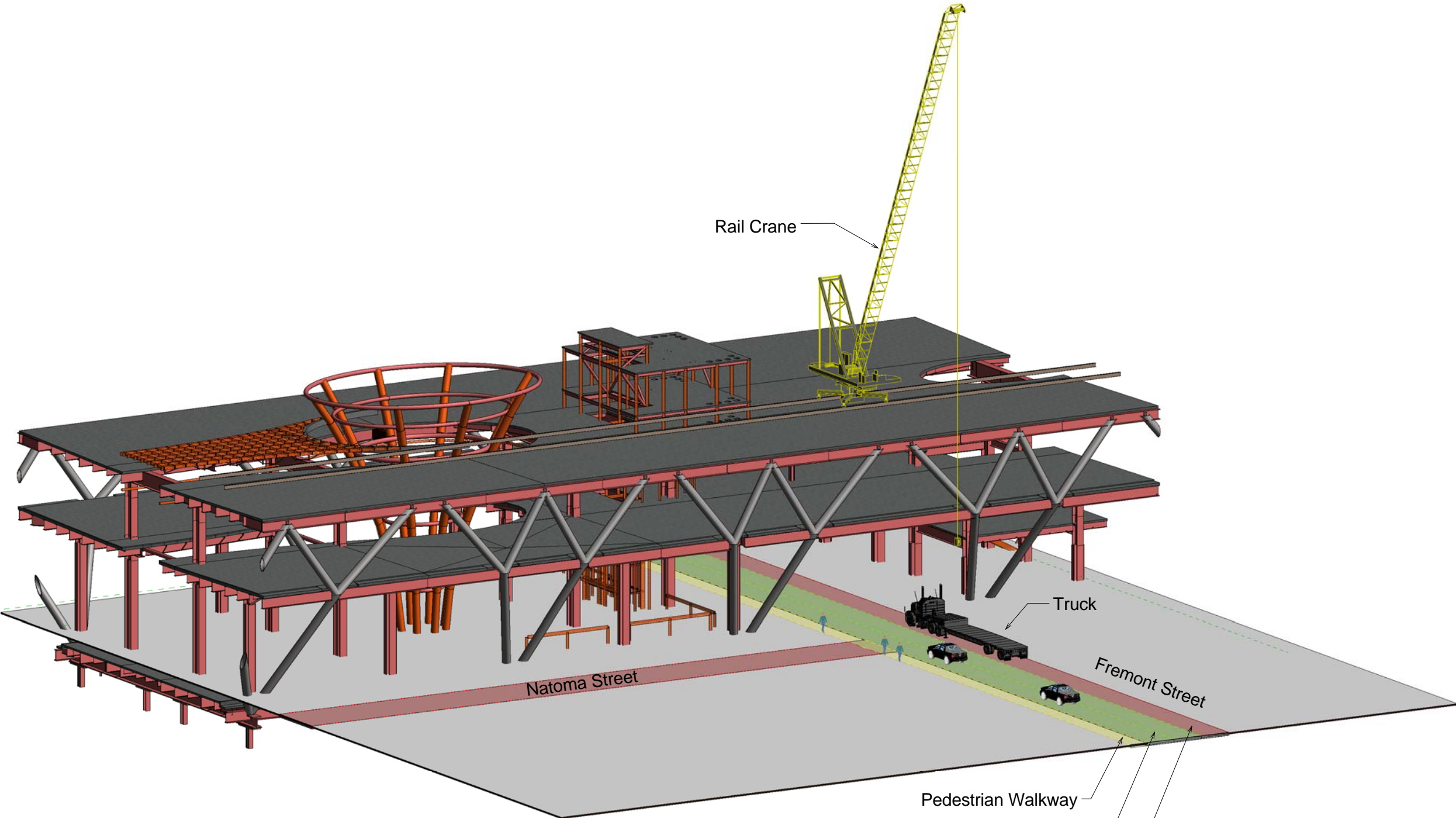
1	4/18/13	Bridge Logistics
2	4/23/13	Update
3	12/20/13	Update
MARK	DATE	DESCRIPTION

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig / Blair Hinojosa / Ty M.
CHKD BY:	X
COPYRIGHT	

SHEET TITLE
Rail Crane Logistics

X-17
Scale AS SHOWN





207 King Street, Suite 300
San Francisco, California 94107

Transbay Transit Center

San Francisco, California

1	4/18/13	Bridge Logistics
2	4/23/13	Update
3	12/20/13	Update

MARK	DATE	DESCRIPTION
------	------	-------------

PROJECT NO:	X
MODEL FILE:	X
DRAWN BY:	Matt Zwetzig / Blair Hinojosa / Ty M.
CHKD BY:	X
COPYRIGHT	

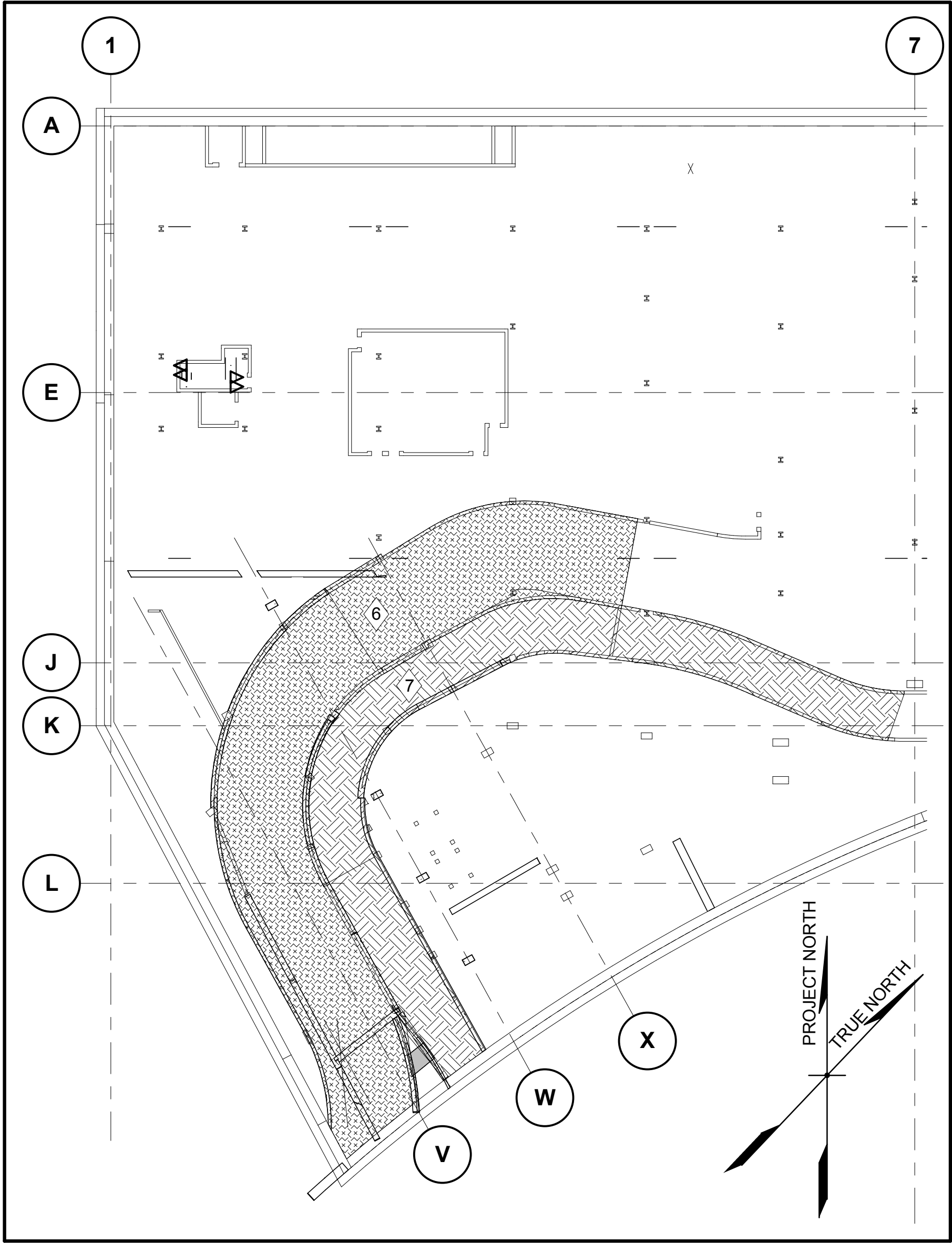
SHEET TITLE

Rail Crane
Logistics 3D
Section

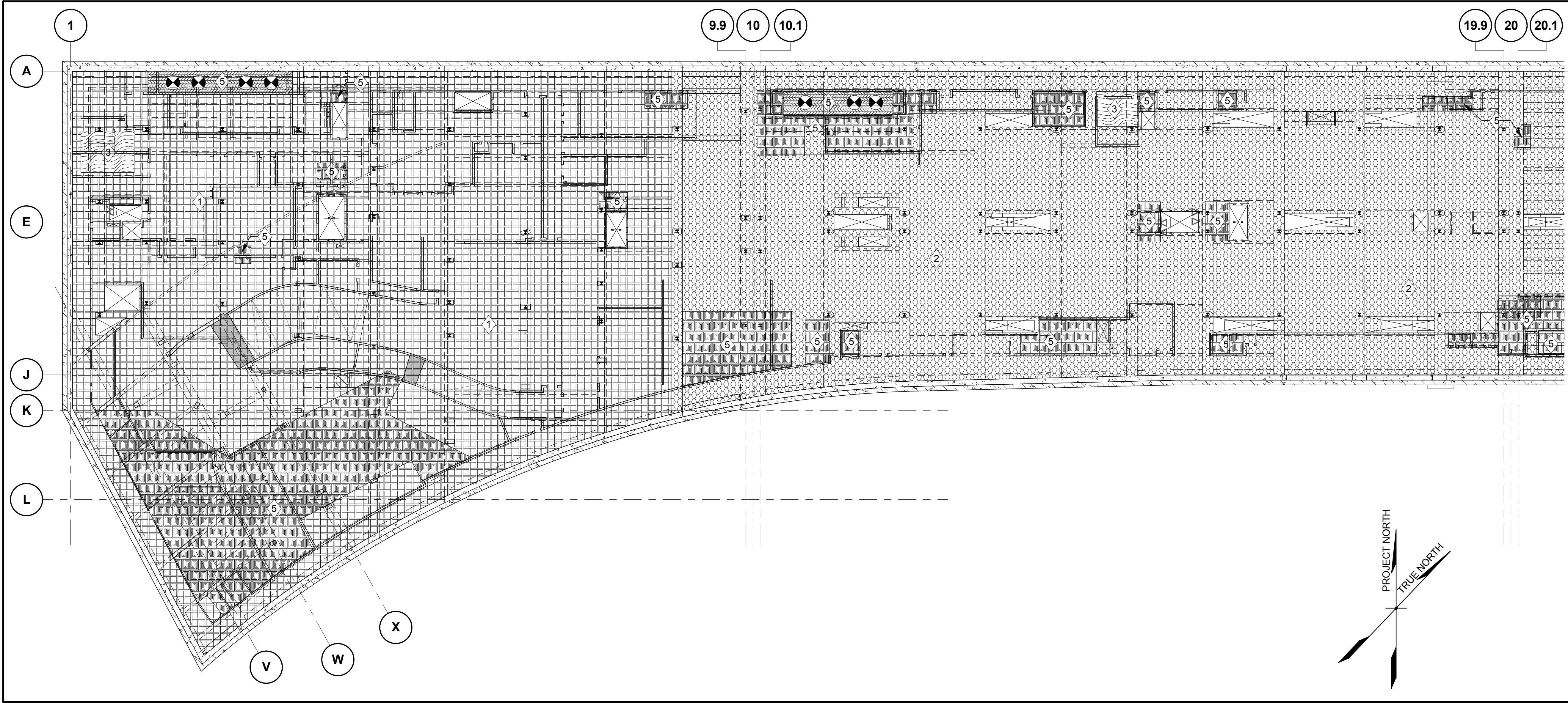
X-18

Scale AS SHOWN

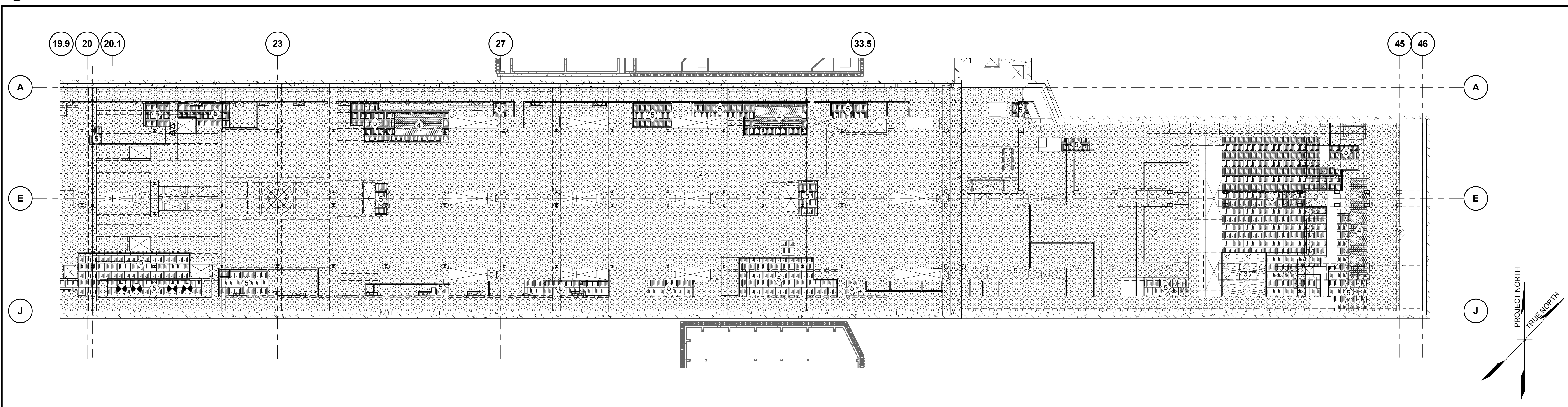
Note: If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.



1 **LOADING DIAGRAM PLAN - TAXI/BIKE RAMP**
SCALE: 1/32" = 1'-0"



2 **LOADING DIAGRAM PLAN-LOWER CONCOURSE LEVEL**
SCALE: 1/32" = 1'-0"



3 **LOADING DIAGRAM PLAN-LOWER CONCOURSE LEVEL**
SCALE: 1/32" = 1'-0"

LOWER CONCOURSE LEVEL FLOOR LOADING SUMMARY							
HATCH NUMBER	HATCH SYMBOL	HATCH INDEX AND LOCATION	FLOOR SLAB CONSTRUCTION	LIVE LOAD	SUPERIMPOSED DEAD LOAD		REMARKS
				DESIGN LOAD (PSF)	FLOOR/ROOF FINISHES (PSF)	MECHANICAL & CEILINGS (PSF)	
①		WEST OF GRIDLINE 9	CONCRETE SLAB	150	122	40	-
②		EAST OF GRIDLINE 9	CONCRETE SLAB	150	50	40	-
③		MECHANICAL	CONCRETE SLAB	282	75	50	-
④		MECHANICAL	CONCRETE SLAB	750	75	50	-
⑤		MECHANICAL	CONCRETE SLAB	150	75	50	-
⑥		VEHICLE RAMP	CONCRETE SLAB	100	85	-	-
⑦		BIKE RAMP	CONCRETE SLAB	100	100	-	-

LEGEND:
● DENOTES TRANSFORMER VAULTS WEIGHT = 15,800 LB EA
LIVE LOAD IS MAX OF LISTED PSF OR ACTUAL EQUIPMENT WEIGHT.

4 **LOADING DIAGRAM SCHEDULE-LOWER CONCOURSE LEVEL**
NOT TO SCALE

TRANSBAY TRANSIT CENTER

TRANSBAY JOINT POWERS AUTHORITY

CONSULTANT:

Thornton Tomasetti

Thornton Tomasetti, Inc.

6080 Center Drive, Suite 260

Los Angeles CA 90045-5318

T 310.665.0010 F 310.665.0101

01020304050607080910111213141516

Key Map

BY

SG

SG

REVISIONS

DESCRIPTION

ISSUED FOR CONSTRUCTION - BELOW GRADE PACKAGE

ISSUED FOR BID

DATE

08/01/13

09/23/13

NO.

1

2

08-04-CMGC-000

TRANSBAY TRANSIT CENTER PROGRAM

TRANSBAY TRANSIT CENTER

SAN FRANCISCO, CA

LOWER CONCOURSE LEVEL

LOADING DIAGRAM PLAN

ARCHITECT/ENGINEER SEAL

No. S4160

Exp. 12/31/14

APPROVED:

PRINCIPAL ENGINEER

B. GIBBONS

APPROVED:

PROJECT MANAGER

A. CHEN

APPROVED:

PROJECT ENGINEER

L. ISHIDA

DESIGNED BY:

A. MARTINEZ

CHECKED BY:

L. JOSEPH

DRAWN BY:

A. CASTILLO

DATE:

09/23/2013

SCALE:

AS NOTED

SIZE:

E

FACILITY NO.:

0

REVISION:

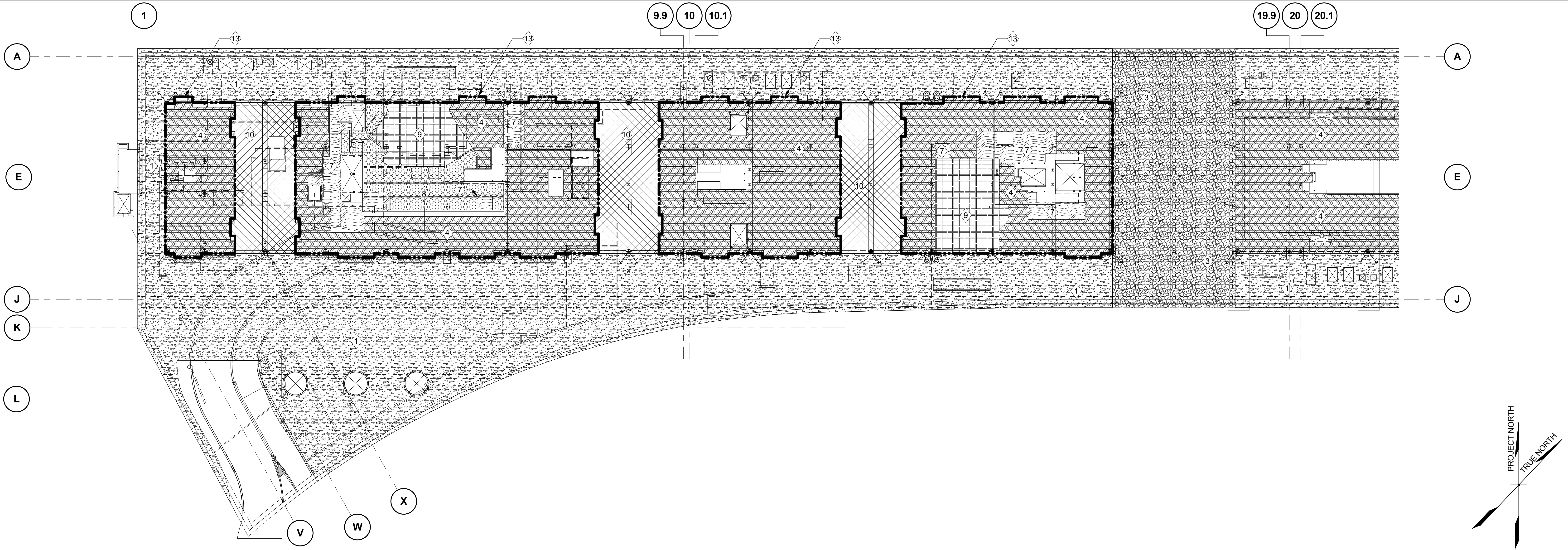
0

SHEET NUMBER

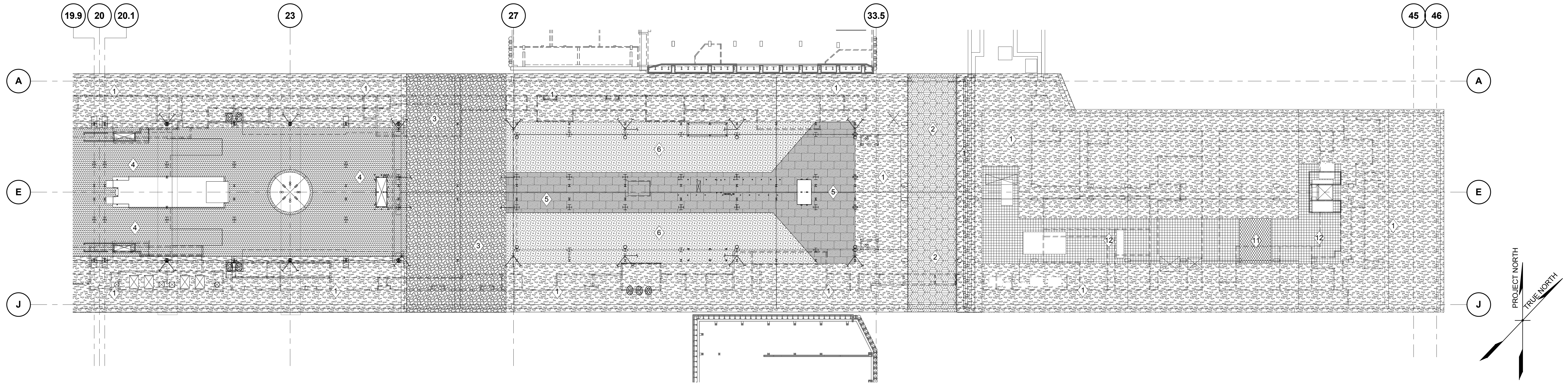
395 of 595

9/17/2013 4:39:48 PM S-1002 C:\Screen\11-SS8610-00-TTC-LOWER-CENTRAL_041610.rvt

Note: If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.



1 LOADING DIAGRAM PLAN-GROUND LEVEL
S-1003 SCALE: 1/32" = 1'-0"




2 LOADING DIAGRAM PLAN-GROUND LEVEL
S-1003 SCALE: 1/32" = 1'-0"

GROUND LEVEL FLOOR LOADING SUMMARY								
HATCH NUMBER	HATCH SYMBOL	HATCH INDEX AND LOCATION	FLOOR SLAB CONSTRUCTION	LIVE LOAD	SUPERIMPOSED DEAD LOAD		CONCENTRATED LOAD	REMARKS
				DESIGN LOAD (PSF)	FLOOR/ROOF FINISHES (PSF)	MECHANICAL & CEILINGS (PSF)		
1		SIDEWALKS	CONCRETE SLAB	SEE NOTE 2	225	20	AXLE LOADS	18" PAVEMENT
2		BEALE STREET	CONCRETE SLAB	SEE NOTE 1	635	20	AXLE LOADS	4'-0" SOIL + 6" PAVEMENT
3		FIRST AND FREMONT STREETS	CONCRETE SLAB	SEE NOTE 1	775	20	AXLE LOADS	5'-0" SOIL + 6" PAVEMENT
4		GRAND HALL AND RETAIL	SLAB ON METAL DECK	100	75	30 (20 FOR SEISMIC)	-	-
5		MUNI BUS PASSENGER AREA	SLAB ON METAL DECK	100	225	20	AXLE LOADS	18" PAVEMENT
6		MUNI BUS	SLAB ON METAL DECK	SEE NOTE 2	225	20	AXLE LOADS	18" PAVEMENT
7		MECHANICAL	SLAB ON METAL DECK	150	105	20	EQUIPMENT LOADS	PROVIDED BY MANUFACTURER
8		LOADING DOCK (BACK)	RAISED CONCRETE SLAB	125	-	30 (20 FOR SEISMIC)	-	-
9		LOADING DOCK (FRONT)	SLAB ON METAL DECK	SEE NOTE 2	105	30 (20 FOR SEISMIC)	AXLE LOADS	-
10		PASS THROUGH	SLAB ON METAL DECK	250	225	30	-	18" PAVEMENT
11		MECHANICAL	CONCRETE SLAB	275	225	20	-	GENERATOR
12		RETAIL	CONCRETE SLAB	100	75	30 (20 FOR SEISMIC)	-	-
13		EXTERIOR CLADDING	-	-	12	-	-	-

NOTES:
1. 250 PSF, AASHTO HL93 LOADING OR CALTRANS P15 LOADING, WHICHEVER IS GREATER.
2. 250 PSF OR AASHTO HL93 LOADING, WHICHEVER IS GREATER.

3 LOADING DIAGRAM SCHEDULE-GROUND LEVEL
S-1003 SCALE: 1 1/2" = 1'-0"



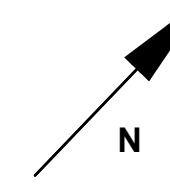
TRANSBAY JOINT POWERS AUTHORITY

CONSULTANT:

Thornton Tomasetti
Thornton Tomasetti, Inc.
6080 Center Drive, Suite 260
Los Angeles CA 90045-5318
T 310.665.0010 F 310.665.0101

01	02	03	04	05	06	07	08
09	10	11	12	13	14	15	16

Key Map




NO.	DATE	BY	DESCRIPTION
1	03/15/13	SG	ISSUED FOR CONSTRUCTION
2	07/17/13	SG	ISSUED FOR CONSTRUCTION
3	09/27/13	SG	ISSUED FOR BID

08-04-CMGC-000

TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

GROUND LEVEL LOADING DIAGRAM PLAN

ARCHITECT/ENGINEER SEAL



APPROVED: **B. GIBBONS**
PRINCIPAL ENGINEER

APPROVED: **A. CHEN**
PROJECT MANAGER

APPROVED: **K. GULEC**
PROJECT ENGINEER

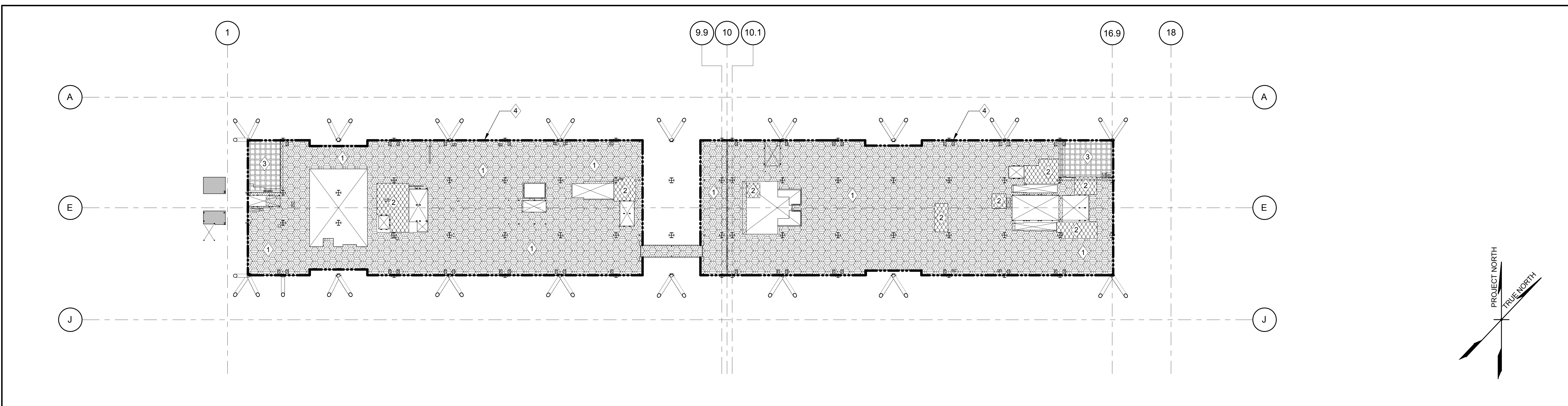
DESIGNED BY: **V. SETHI**
DRAWN BY: **A. CASTILLO**
DATE: **09/23/2013**

CHECKED BY: **L. JOSEPH**
DATE: **09/23/2013**

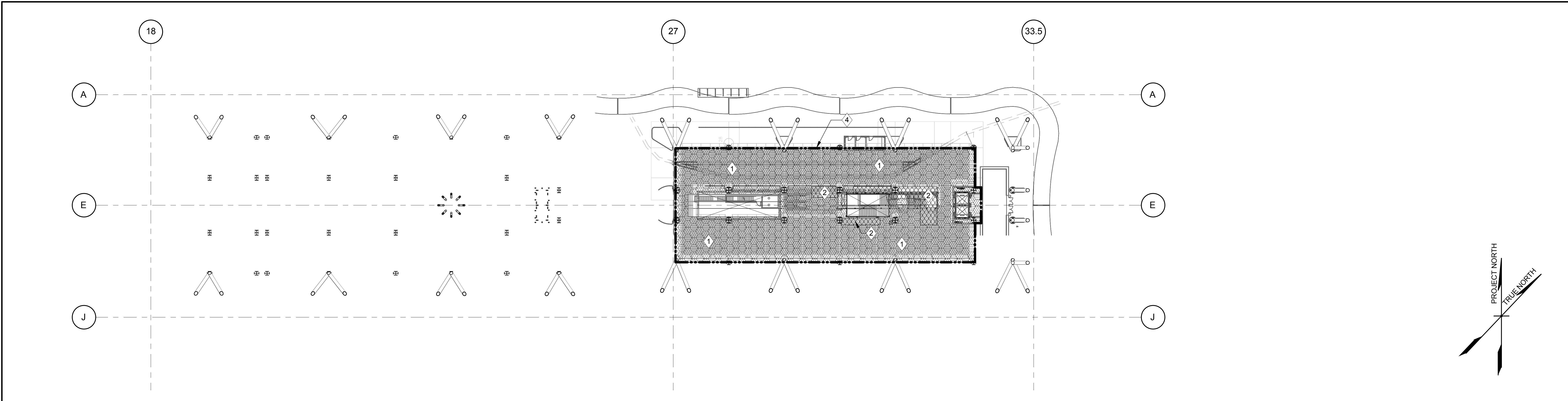
SCALE: **AS NOTED**
SHEET NUMBER: **S-1003**

REVISION: **0**
SEQUENCE NUMBER: **396 of 595**





Note: If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.



1 LOADING DIAGRAM PLAN - SECOND LEVEL (WEST)
S-1011 SCALE: 1/32" = 1'-0"



2 LOADING DIAGRAM PLAN - SECOND LEVEL (EAST)
S-1011 SCALE: 1/32" = 1'-0"

SECOND LEVEL FLOOR LOADING SUMMARY								
HATCH NUMBER	HATCH SYMBOL	HATCH INDEX AND LOCATION	FLOOR SLAB CONSTRUCTION	LIVE LOAD	SUPERIMPOSED DEAD LOAD		CONCENTRATED LOAD	REMARKS
				DESIGN LOAD (PSF)	FLOOR/ROOF FINISHES (PSF)	MECHANICAL & CEILINGS (PSF)		
①		RETAIL AREA	SLAB ON METAL DECK	100	50	30 (20 FOR SEISMIC)	-	-
②		MECHANICAL	SLAB ON METAL DECK	150	50	30 (20 FOR SEISMIC)	ACTUAL EQUIPMENT WT	150 PSF LL OR ACTUAL EQUIPMENT WT, WHICHEVER IS GREATER
③		GENERATOR ROOM	SLAB ON METAL DECK	225	75	30	-	-
④		EXTERIOR CLADDING	-	-	12	-	-	-

3 LOADING DIAGRAM SCHEDULE - SECOND LEVEL
S-1011 SCALE: 1" = 1'-0"

TRANSBAY JOINT POWERS AUTHORITY

CONSULTANT:

Thornton Tomasetti
Thornton Tomasetti, Inc.
6080 Center Drive, Suite 260
Los Angeles CA 90045-5318
T 310.866.0010 F 310.666.0101

01 02 03 04 05 06 07 08
09 10 11 12 13 14 15 16

Key Map

NO.	DATE	REVISIONS
1	03/15/13	ISSUED FOR CONSTRUCTION
2	07/17/13	ISSUED FOR CONSTRUCTION
3	09/23/13	ISSUED FOR BID

08-04-CMGC-000

TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

SECOND LEVEL LOADING
DIAGRAM PLAN

ARCHITECT/ENGINEER SEAL

APPROVED:

PRINCIPAL ENGINEER B. GIBBONS

APPROVED:

PROJECT MANAGER A. CHEN

APPROVED:

PROJECT ENGINEER K. GULEC

DESIGNED BY: V. SETHI

CHECKED BY: L. JOSEPH

DRAWN BY: J. RAMIROS

DATE: 09/23/2013

SCALE: AS NOTED

SIZE: E

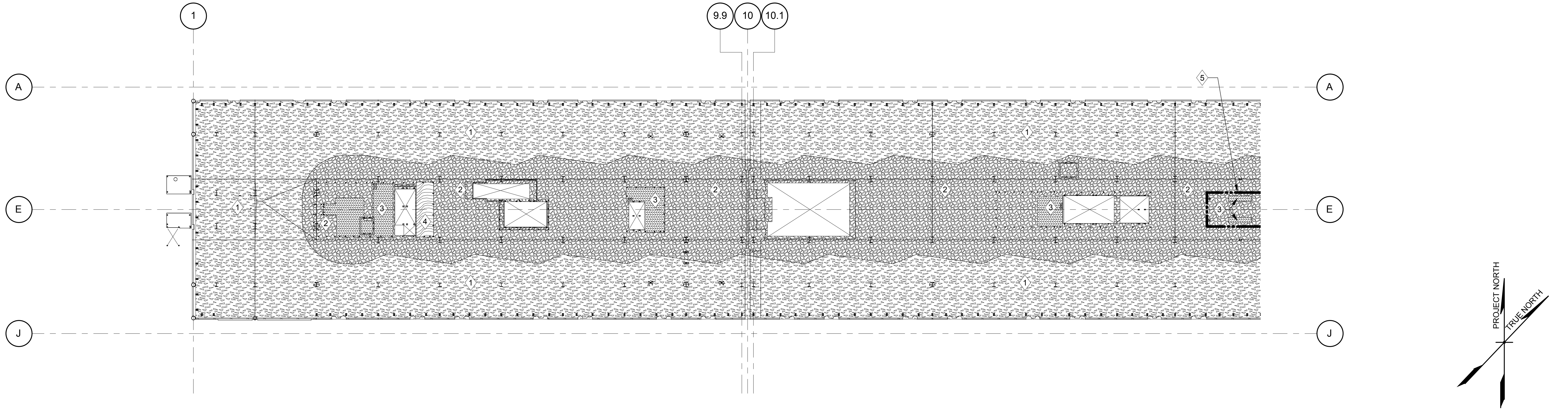
FACILITY NO.: 140

REVISION: 0

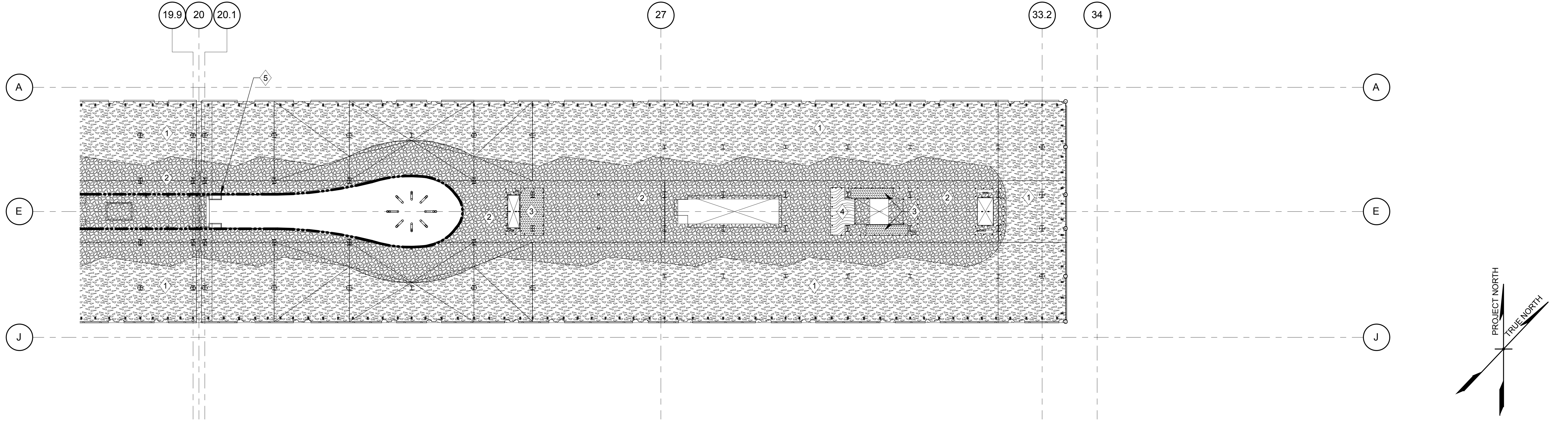
SHEET NUMBER: S-1011

SEQUENCE NUMBER: 397 of 595

Note: If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.



1 **LOADING DIAGRAM PLAN - BUS DECK LEVEL (WEST)**
S-1012 SCALE: 1/32" = 1'-0"



2 **LOADING DIAGRAM PLAN - BUS DECK LEVEL (EAST)**
S-1012 SCALE: 1/32" = 1'-0"

BUS DECK FLOOR LOADING SUMMARY							
HATCH NUMBER	HATCH SYMBOL	HATCH INDEX AND LOCATION	FLOOR SLAB CONSTRUCTION	LIVE LOAD	SUPERIMPOSED DEAD LOAD (NOTE 2) (PSF UON)		REMARKS
				DESIGN LOAD (PSF)	FLOOR/ROOF FINISHES	MECHANICAL & CEILINGS	
1		BUS AREA	SLAB ON METAL DECK	SEE NOTE 1	75	30	AXLE LOADS
2		PASSENGER AREA	SLAB ON METAL DECK	100	212.5 (137.5)	30	MAX OF AASHTO HL-93, TANDEM AND CALTRANS P15 TRUCK LOADS
3		MECHANICAL	SLAB ON METAL DECK	150	212.5 (137.5)	30	ACTUAL EQUIPMENT WEIGHT
4		WATER TANK	SLAB ON METAL DECK	900	212.5 (137.5)	30	150 PSF OR ACTUAL EQUIPMENT WEIGHT WHICHEVER IS GREATER
5		EXTERIOR CLADDING	-	-	312 PLF	-	900 PSF OR ACTUAL EQUIPMENT WEIGHT WHICHEVER IS GREATER

NOTES:
1. 250 PSF OR AXLE LOADS HL93 LOADING WHICHEVER IS GREATER.
2. FLOOR FINISH SDL VALUES OUTSIDE (INSIDE) BRACKETS ARE USED FOR GRAVITY (SEISMIC) DESIGN.

3 **LOADING DIAGRAM SCHEDULE - BUS DECK FLOOR**
S-1012 NOT TO SCALE

TRANSBAY JOINT POWERS AUTHORITY

Thornton Tomasetti
Thornton Tomasetti, Inc.
6080 Center Drive, Suite 260
Los Angeles CA 90045-5318
T 310.665.0010 F 310.665.0101

01	02	03	04	05	06	07	08
09	10	11	12	13	14	15	16

Key Map

BY	SG	SG	SG
REVISIONS	DESCRIPTION	DATE	NO.
	ISSUED FOR CONSTRUCTION	03/15/13	1
	ISSUED FOR CONSTRUCTION	07/17/13	2
	ISSUED FOR BID	09/23/13	3

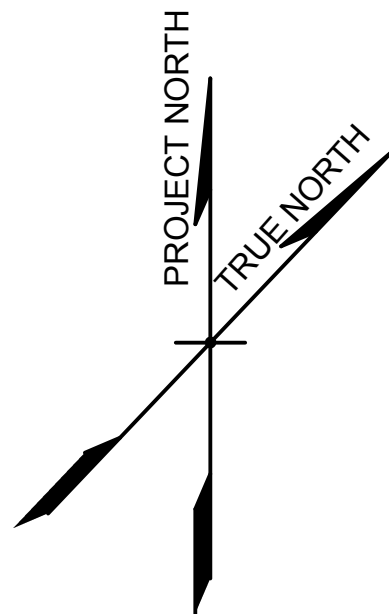
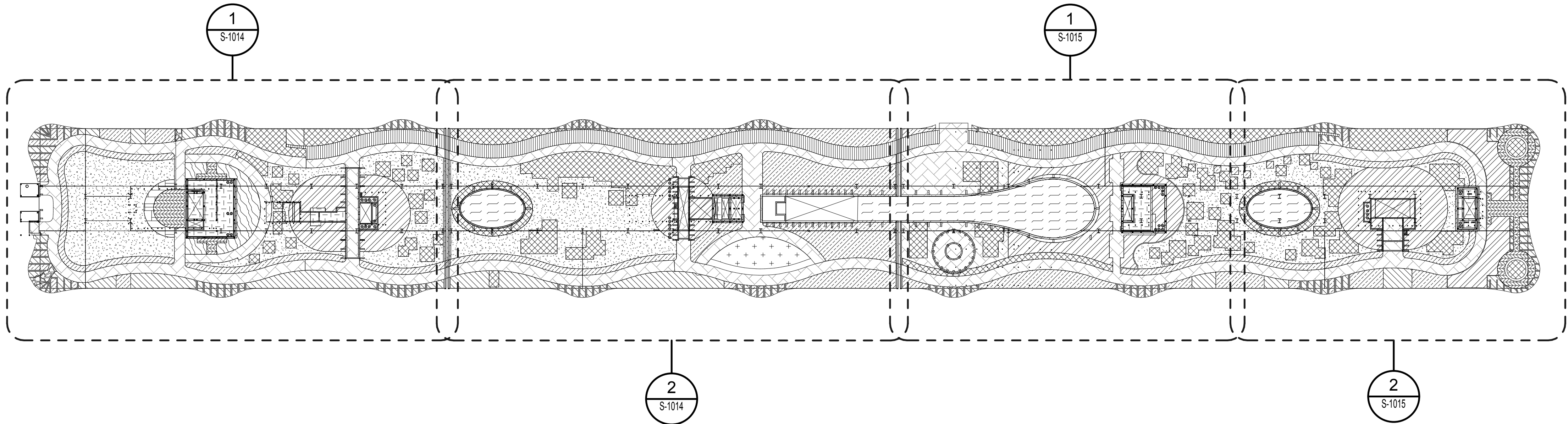
08-04-CMGC-000

TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

BUS DECK LEVEL LOADING
DIAGRAM PLAN

APPROVED:	B. GIBBONS
APPROVED:	A. CHEN
APPROVED:	K. GULEC
DESIGNED BY:	V. SETHI
CHECKED BY:	L. JOSEPH
DRAWN BY:	J. RAMIROS
DATE:	09/23/2013
SCALE:	AS NOTED
SHEET NUMBER:	398 of 595

Note: If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.



1 ROOF PARK LEVEL @ T.O.S. LOADING DIAGRAM - KEY PLAN
S-1013 SCALE: 1/64" = 1'-0"

LEGEND - TREE WEIGHTS				
SYMBOL	SPECIES	BOX DIM (INCHES)	SEISMIC DESIGN (LBS)	GRAVITY DESIGN (LBS)
A	BRAHEA	-	500	1000
B	WASHINGTONIA 14' OVERALL HEIGHT	-	800	1600
C	GINGKO LEPTOSPERMUM LOPHOSTEMON MAYTEN SEQUOIA	36 36 36 36	1300	2600
D	BUTIA	-	2000	4000
E	AESCULUS ALOE BARBERAE ARBUTUS CHAMAEROPS CYCAS REVOLUTA METROSIDEROS COLLINA RHOPALOSTYLIS BAUERI TRACHYCARPUS	36 - 36 48 48 - - -	2500	5000
F	SEQUOIA AESCULUS AESCULUS MAYTEN MONTEREY PLATANUS	48 48 60 48 48 48	2800	5600
G	BUTIA JUBAEA RHOPALOSTYLIS SAPIDA WASHINGTONIA 22' OVERALL HEIGHT	48 48 - -	3000	6000
H	PARAJUBAEA	-	4000	8000

LEGEND - TREE WEIGHTS				
SYMBOL	SPECIES	BOX DIM (INCHES)	SEISMIC DESIGN (LBS)	GRAVITY DESIGN (LBS)
J	SEQUOIA MAYTEN MONTEREY	60 60 60	5000	10000
K	DRACENA DRACO	-	6000	12000
L	CHAMAEROPS	60	8000	16000
M	SEQUOIA ARAUCARIA MONTEREY	72 72 72	10000	20000
N	JUBAEA QUERCUS QUERCUS SP	72 96 -	12000	24000
P	PLATANUS PLATANUS	84 96	13000	26000

2 TREE WEIGHT LEGEND - ROOF PARK LEVEL
S-1013

ROOF PARK LEVEL FLOOR LOADING SUMMARY							
HATCH NUMBER	HATCH SYMBOL	HATCH INDEX AND LOCATION	FLOOR SLAB CONSTRUCTION	LIVE LOAD	SUPERIMPOSED DEAD LOAD		REMARKS
				DESIGN LOAD (PSF)	FLOOR/ROOF FINISHES (PSF)	MECHANICAL & CEILINGS (PSF)	
1		18" AVG SOIL DEPTH	SLAB ON METAL DECK	100	284	30	TREE LOADS (SEE LEGEND ABOVE)
2		24" AVG SOIL DEPTH	SLAB ON METAL DECK	100	346	30	TREE LOADS (SEE LEGEND ABOVE)
3		28" AVG SOIL DEPTH	SLAB ON METAL DECK	100	388	30	TREE LOADS (SEE LEGEND ABOVE)
4		34" AVG SOIL DEPTH	SLAB ON METAL DECK	100	445	30	TREE LOADS (SEE LEGEND ABOVE)
5		48" AVG SOIL DEPTH	SLAB ON METAL DECK	100	590	30	TREE LOADS (SEE LEGEND ABOVE)
6		WALKWAY	SLAB ON METAL DECK	100	258	30	TREE LOADS (SEE LEGEND ABOVE)
7		BUS FOUNTAIN	SLAB ON METAL DECK	100	278	30	TREE LOADS (SEE LEGEND ABOVE)
8		WOOD DECK	SLAB ON METAL DECK	100	233	30	-
9		GLASS FLOOR	-	100	106*	-	*INCLUDES SELF WEIGHT OF GLASS
10		ROOF MEP AND CEILING	SLAB ON METAL DECK	40	30	-	-
11		PLAY AREA	SLAB ON METAL DECK	100	164	30	TREE LOADS (SEE LEGEND ABOVE)
12		LILY POND	SLAB ON METAL DECK	100	432	30	-
13		STONE STEPS	SLAB ON METAL DECK	100	220	30	-
14		FLAGSTONE PAVER	SLAB ON METAL DECK	100	126	30	-
15		UPTURNED CONCRETE BEAMS	SLAB ON METAL DECK	100	668	30	TREE LOADS (SEE LEGEND ABOVE)

NOTE: * EXCEPT FOR 'GLASS FLOOR' AND 'ROOF MEP AND CEILING', ALL FLOOR/ROOF FINISHES INCLUDE A 30 PSF CONTINGENCY LOAD.

3 LOADING DIAGRAM SCHEDULE - ROOF PARK LEVEL
S-1013

TRANSBAY JOINT POWERS AUTHORITY

CONSULTANT:

Thornton Tomasetti
Thornton Tomasetti, Inc.
6080 Center Drive, Suite 260
Los Angeles CA 90045-6318
T 310.866.0010 F 310.866.0101

01	02	03	04	05	06	07	08
09	10	11	12	13	14	15	16

Key Map

BY	DATE	DESCRIPTION
BS	03/15/13	ISSUED FOR CONSTRUCTION
BS	07/17/13	ISSUED FOR CONSTRUCTION
BS	09/22/13	ISSUED FOR BID

08-04-CMGC-000

TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

ROOF PARK LEVEL LOADING
DIAGRAM PLAN

CONTRACT NO.

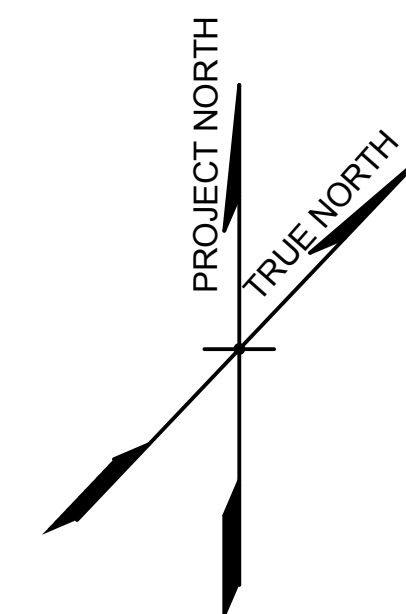
PROJECT TITLE

SHEET TITLE

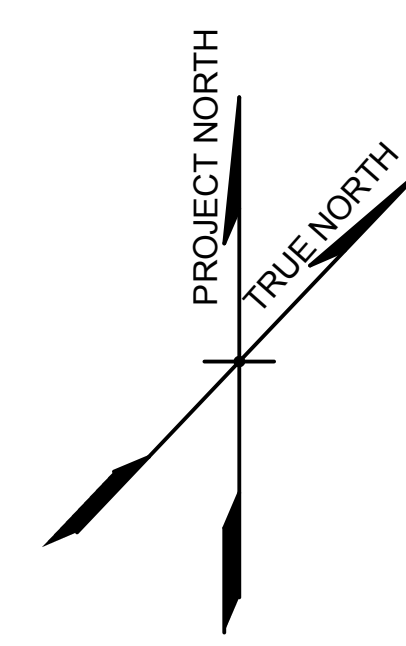
APPROVED:	PRINCIPAL ENGINEER	B. GIBBONS
APPROVED:	PROJECT MANAGER	A. CHEN
APPROVED:	PROJECT ENGINEER	K. GULEC
DESIGNED BY:	CHECKED BY:	
V. SETHI	L. JOSEPH	
DRAWN BY:	DATE:	
A. CASTILLO	09/23/2013	
SCALE:	SHEET NO.	REVISION
AS NOTED	140	0
SHEET NUMBER	SEQUENCE NUMBER	
S-1013	399 of 595	

ISSUED FOR BID

9/17/2013 4:35:50 PM S-1014 C:\Scratch\TT-SS8510.00-TTC-UPPER-CENTRAL_NEW_mhanson.rvt

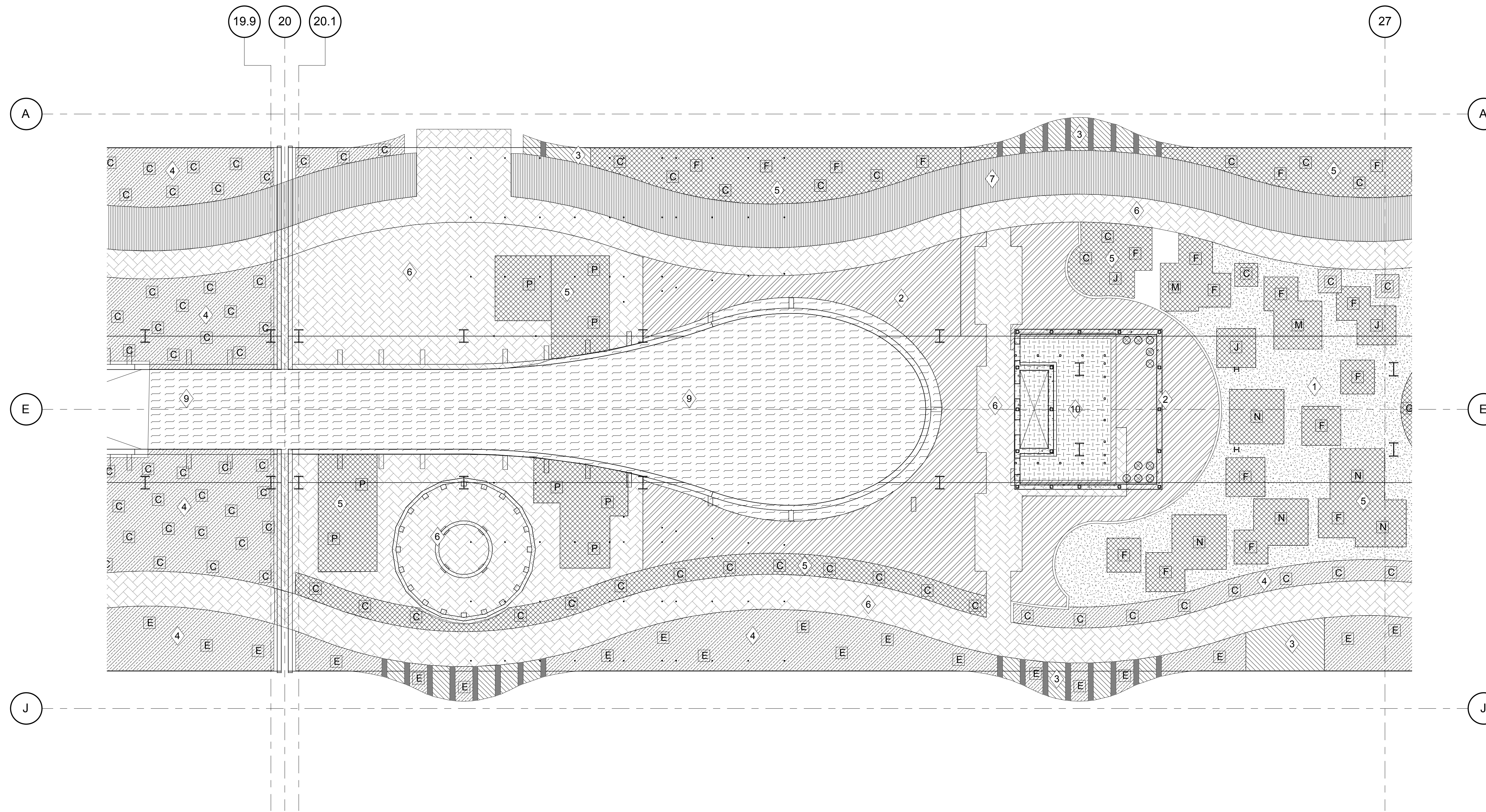


A horizontal scale bar with a black and white alternating pattern. It is labeled "SCALE IN FEET" below the bar. The bar has markings at 0, 8, 16, 32, and 40.

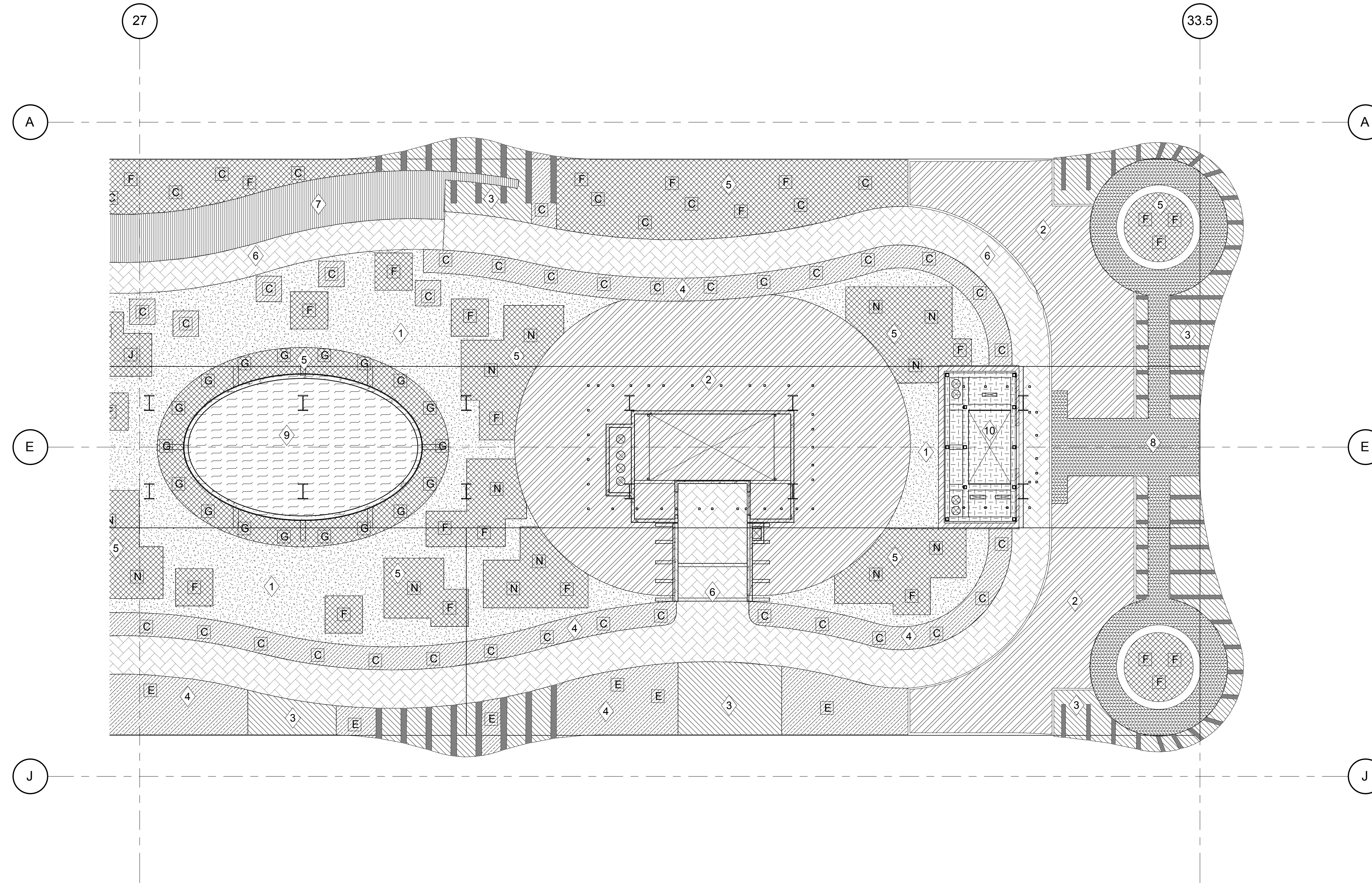
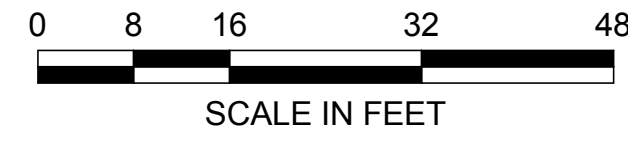


0 8 16 32 40
SCALE IN FEET

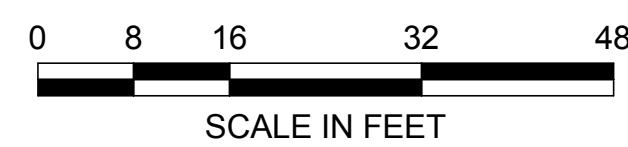
Note: If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.



1 LOADING DIAGRAM PLAN - ROOF PARK LEVEL - EAST
S-1015 SCALE: 1/16" = 1'-0"



2 LOADING DIAGRAM PLAN - ROOF PARK LEVEL - EAST
S-1015 SCALE: 1/16" = 1'-0"



Transbay Transit Center
TRANSBAY JOINT POWERS AUTHORITY

CONSULTANT:
Thornton Tomasetti
Thornton Tomasetti, Inc.
6080 Center Drive, Suite 260
Los Angeles CA 90045-5318
T 310.665.0010 F 310.665.0101

01	02	03	04	05	06	07	08
09	10	11	12	13	14	15	16

Key Map

NO.	DATE	REVISIONS	DESCRIPTION
1	03/15/13	BY: BG	ISSUED FOR CONSTRUCTION
2	07/17/13	BY: BG	ISSUED FOR CONSTRUCTION
3	09/22/13	BY: BG	ISSUED FOR BID

08-04-CMGC-000

TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

ROOF PARK LEVEL LOADING
DIAGRAM PLAN

ARCHITECT/ENGINEER SEAL

APPROVED: B. GIBBONS
PRINCIPAL ENGINEER

APPROVED: A. CHEN
PROJECT MANAGER

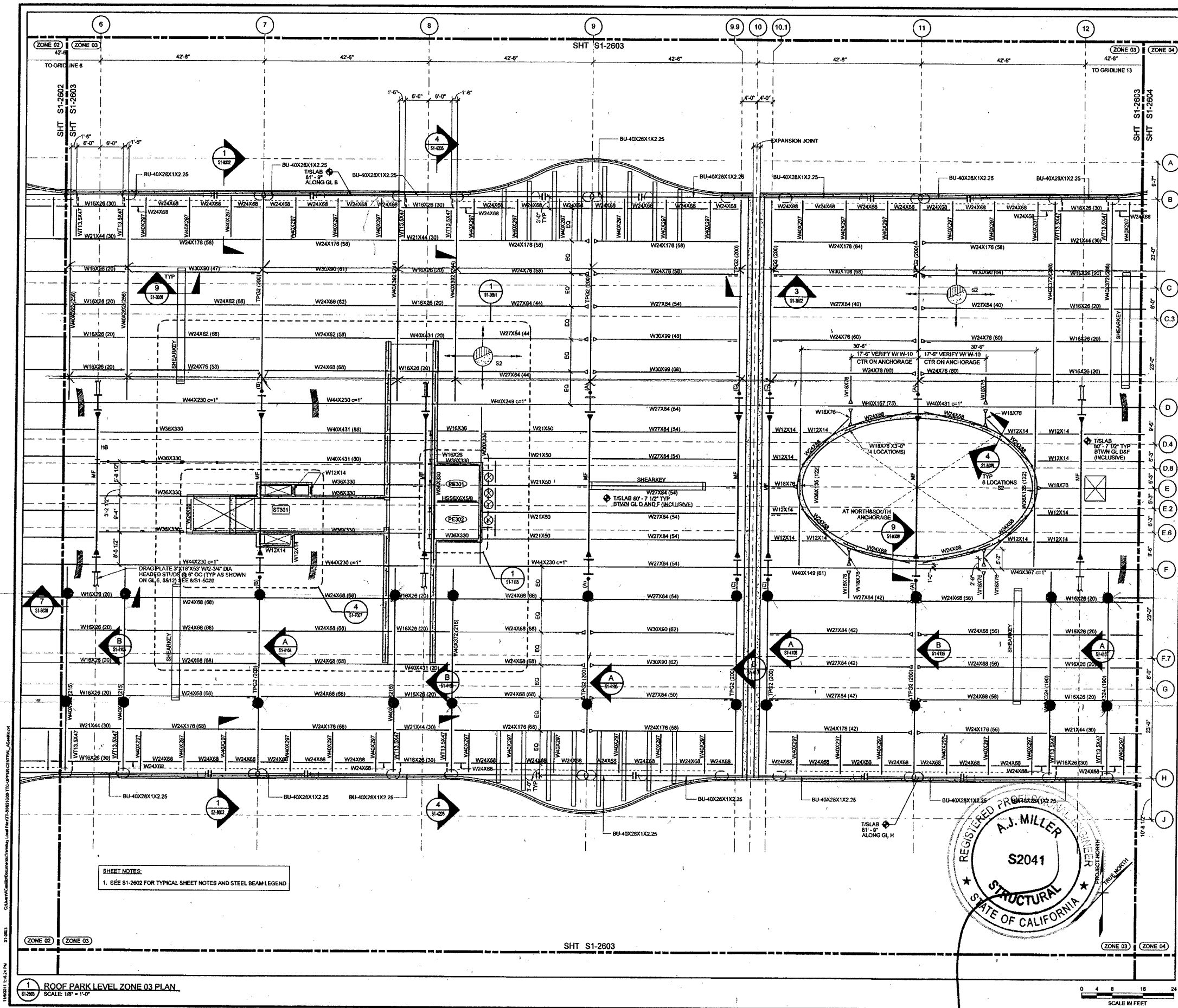
APPROVED: K. GULEC
PROJECT ENGINEER

DESIGNED BY: V. SETHI
CHECKED BY: L. JOSEPH

DRAWN BY: A. CASTILLO
DATE: 09/23/2013

SCALE: AS NOTED
SHEET NUMBER: 401 OF 595

SEQUENCE NUMBER: 0



Transbay Transit Center
TRANSBAY JOINT POWERS AUTHORITY

Thornton Tomasetti
Thornton Tomasetti, Inc.
6080 Century Drive, Suite 260
Los Angeles, CA 90045-6318
T 310.665.0010 F 310.665.0101

NO.	DATE	REVISIONS
01	09/10/08	ISSUED FOR CONSTRUCTION DOCUMENTS - PHASE 1
02	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
03	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
04	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
05	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
06	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
07	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
08	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
09	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
10	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
11	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
12	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
13	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
14	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
15	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1
16	10/01/08	REVISED FOR CONSTRUCTION DOCUMENTS - PHASE 1

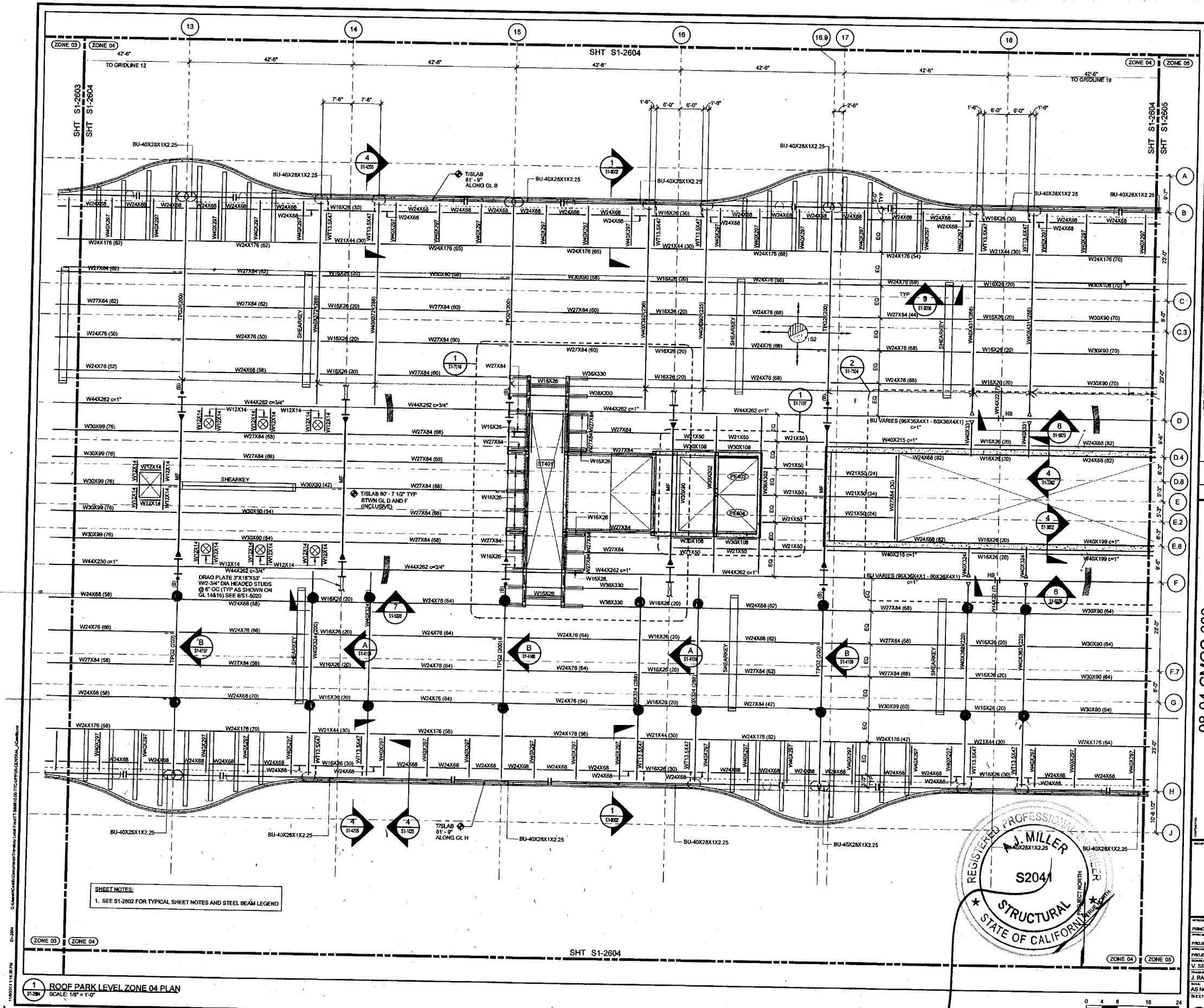
TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

ROOF PARK LEVEL - ZONE 03
FRAMING PLAN

NOT FOR CONSTRUCTION

PRINCIPAL ENGINEER	B. GIBBONS
PROJECT MANAGER	A. CHEN
PROJECT ENGINEER	K. GULEC
DESIGNED BY	L. JOSEPH
CHECKED BY	J. RAMBROS
DATE	11/15/2011
AS NOTED	140
SHEET NUMBER	SEQUENCE NUMBER

S1-2603 of



Transbay Transit Center
TRANSBAY JOINT POWERS AUTHORITY

Thornton Tomasetti
Thornton Tomasetti, Inc.
8080 Century Drive, Suite 200
Los Angeles CA 90045-5318
T 310.955.0010 F 310.955.0101

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

Key Map

NO.	DATE	DESCRIPTION
01	01/15/2011	PROPOSED SUBMITTAL - STAGE ONE SEISMIC RATING SYSTEM
02	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
03	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
04	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
05	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
06	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
07	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
08	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
09	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
10	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
11	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
12	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
13	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
14	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
15	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM
16	01/15/2011	REVISED CONSTRUCTION DOCUMENTS - STAGE ONE SEISMIC RATING SYSTEM

08-04-CMGC-000

TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

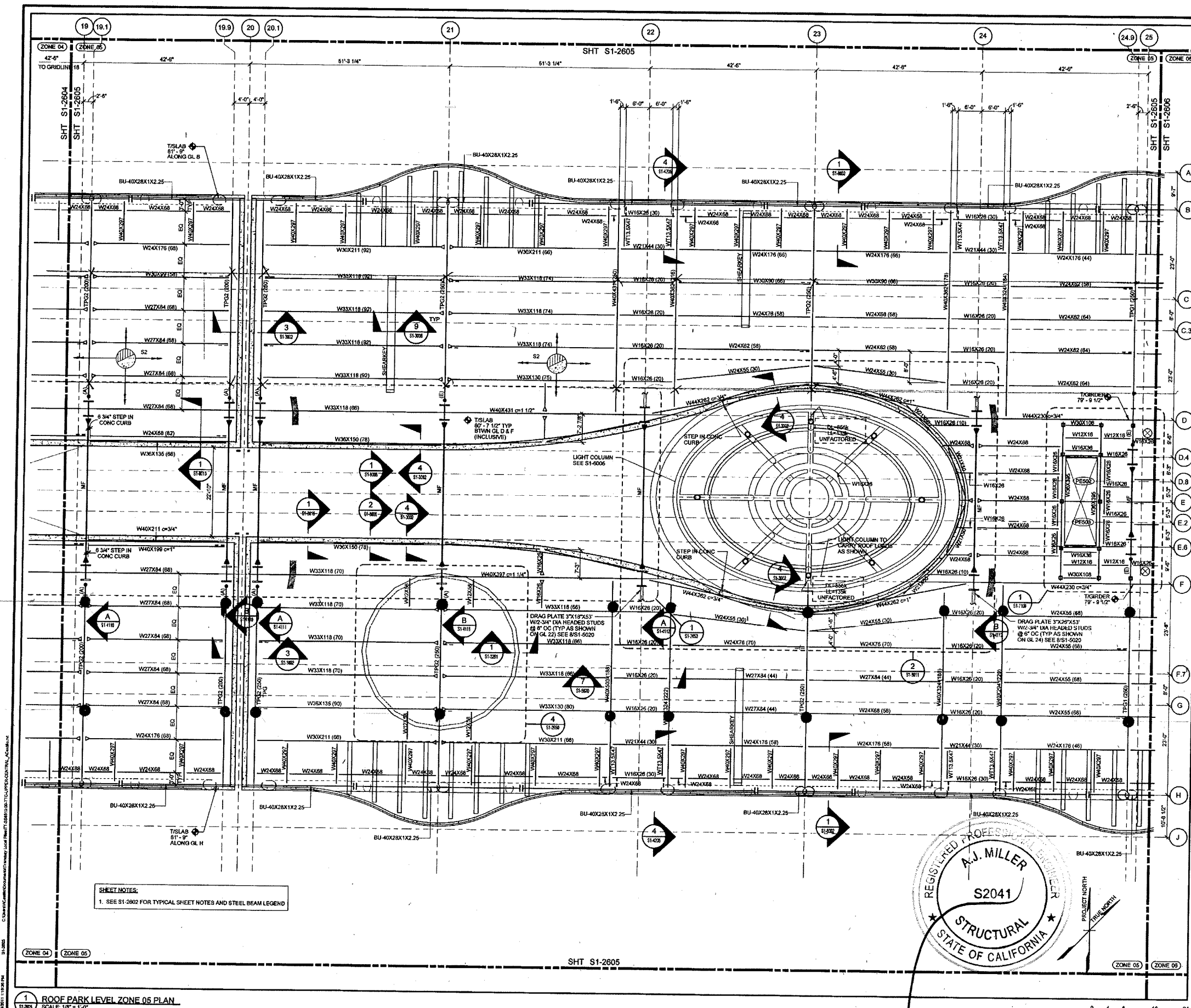
ROOF PARK LEVEL - ZONE 04
FRAMING PLAN

NOT FOR CONSTRUCTION

PROPOSED
PRINCIPAL ENGINEER
PROJECT MANAGER
PROJECT ENGINEER
CHECKED BY
DATE
11/15/2011
SCALE NUMBER

B. GIBBONS
A. CHEN
K. GULEC
L. JOSEPH
J. RAMIRO
AS NOTED
140

S1-2604 of



TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

ROOF PARK LEVEL - ZONE 05
FRAMING PLAN

08-04-CMGC-000

NOT FOR CONSTRUCTION

REVISIONS

NO.	DATE	DESCRIPTION
01	10/10/06	ISSUED FOR PERMIT
02	10/10/06	ISSUED FOR PERMIT
03	10/10/06	ISSUED FOR PERMIT
04	10/10/06	ISSUED FOR PERMIT
05	10/10/06	ISSUED FOR PERMIT
06	10/10/06	ISSUED FOR PERMIT
07	10/10/06	ISSUED FOR PERMIT
08	10/10/06	ISSUED FOR PERMIT
09	10/10/06	ISSUED FOR PERMIT
10	10/10/06	ISSUED FOR PERMIT
11	10/10/06	ISSUED FOR PERMIT
12	10/10/06	ISSUED FOR PERMIT
13	10/10/06	ISSUED FOR PERMIT
14	10/10/06	ISSUED FOR PERMIT
15	10/10/06	ISSUED FOR PERMIT
16	10/10/06	ISSUED FOR PERMIT

APPROVED

PRINCIPAL ENGINEER
B. GIBBONS

DESIGNED
A. CHEN

PROJECT MANAGER
K. GULEC

PROJECT ENGINEER
V. BETHI

CHECKED
L. JOSEPH

DATE
11/15/2011

BY
J. RAMIREZ

AS NOTED

140

SEQUENCE NUMBER

S1-2605

of

Thornton Tomasetti

Thornton Tomasetti, Inc.

8080 Century Drive, Suite 200

Los Angeles, CA 90049-5318

T 310.665.0010 F 310.665.0101

TRANSBAY TRANSIT CENTER

TRANSBAY JOINT POWERS AUTHORITY

Key Map

N

REGISTERED PROFESSIONAL ENGINEER

A.J. MILLER

S2041

STRUCTURAL

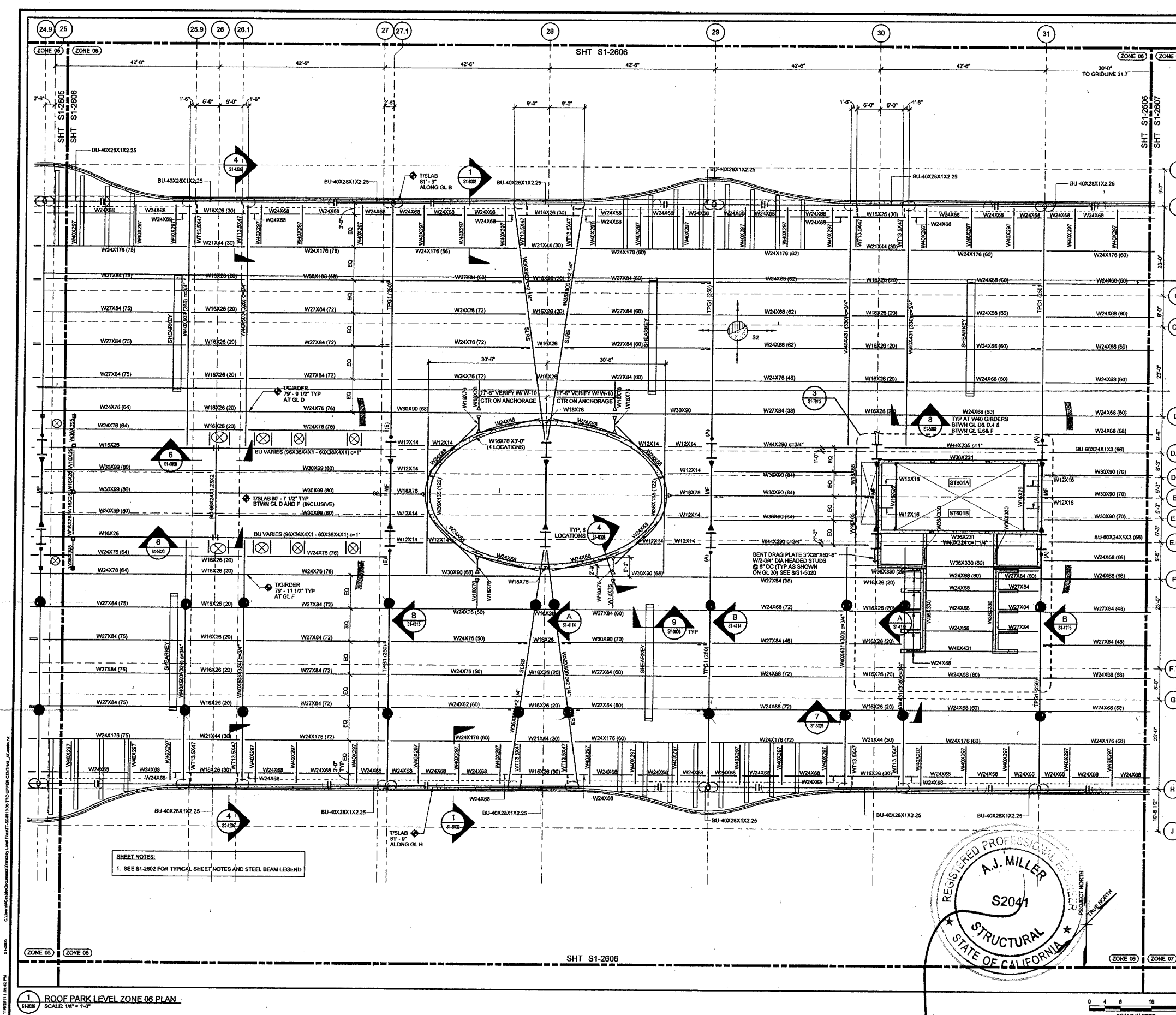
STATE OF CALIFORNIA

Copyright 2006 by the City and County of San Francisco. These documents are the sole property of the City and County of San Francisco and are protected by the Copyright Act. Any reproduction, publication, or use by any method, in whole or in part, without the express written consent of the Transbay Joint Powers Authority Commission is prohibited.

Note:

If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.

95% CONSTRUCTION DOCUMENTS - PHASE 1



Copyright 2006 by the City and County of San Francisco. These documents are the sole property of the City and County of San Francisco and are protected by the Copyright Act. Any reproduction, publication, or use by any method, in whole or in part, without the express written consent of the Transbay Joint Powers Authority Commission is prohibited.

Note: If this sheet is not 44" x 34", it has been revised from its original size. Scales noted on drawings/details are no longer applicable.

Transbay Transit Center
TRANSBAY JOINT POWERS AUTHORITY

Thornton Tomasetti
Thornton Tomasetti, Inc.
6080 Century Drive, Suite 280
Los Angeles, CA 90045-5318
T 310.665.0010 F 310.665.0101

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18

Key Map

REV	DATE	DESCRIPTION
1	11/15/2011	ISSUED FOR CONSTRUCTION

08-04-CMGC-000

TRANSBAY TRANSIT CENTER PROGRAM
TRANSBAY TRANSIT CENTER
SAN FRANCISCO, CA

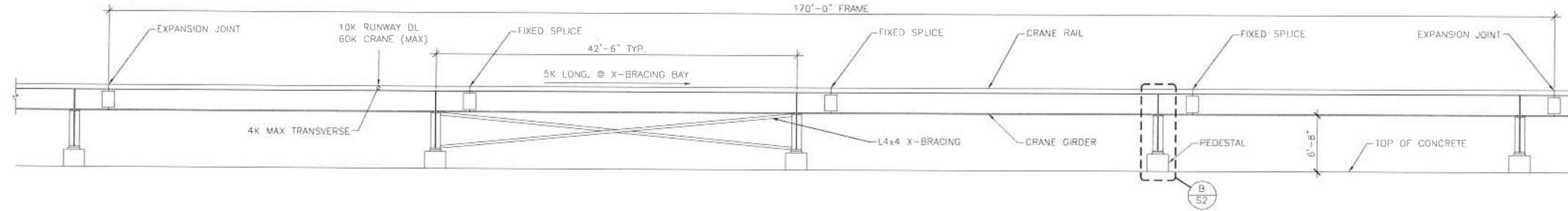
ROOF PARK LEVEL - ZONE 06
FRAMING PLAN

NOT FOR CONSTRUCTION

PRINCIPAL ENGINEER: B. GIBBONS
PROJECT MANAGER: A. CHEN
PROJECT ENGINEER: K. GULEC
DESIGNED BY: L. JOSEPH
CHECKED BY: J. RAMIREZ
DATE: 11/15/2011
SHEET NUMBER: 140
SEQUENCE NUMBER: 140

S1-2606

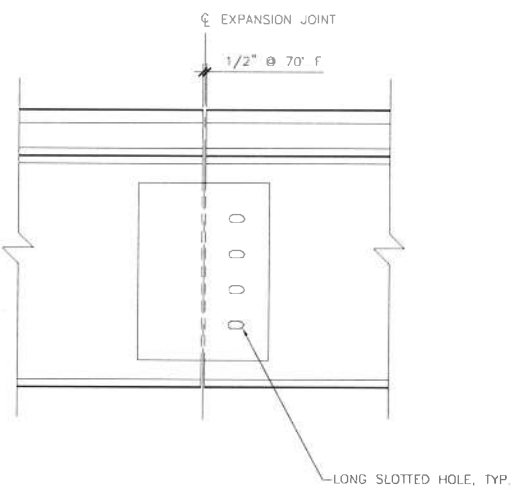
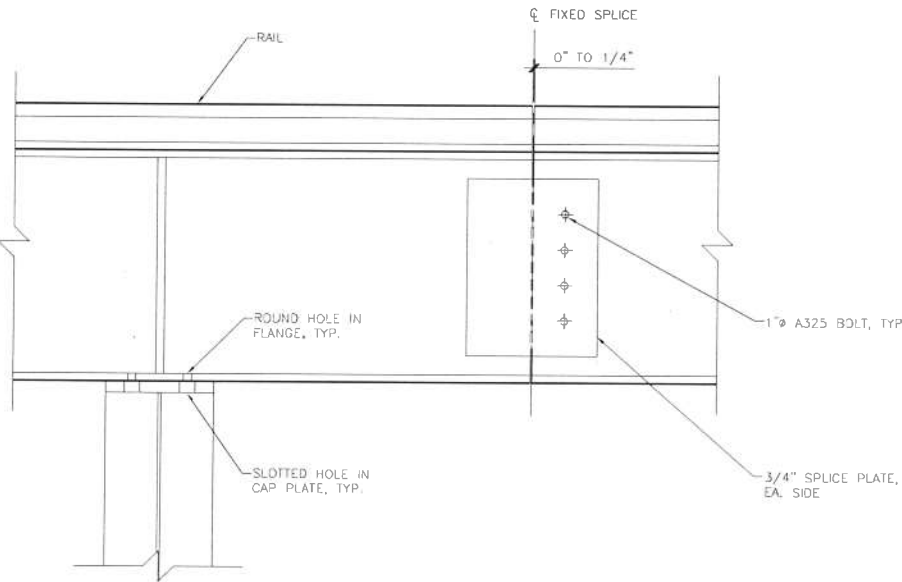
of



ELEVATION

SCALE: 1/8"=1'-0"

A
S1



FIXED SPLICE DETAIL

SCALE: 1"=1'-0"


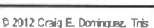
B
S1

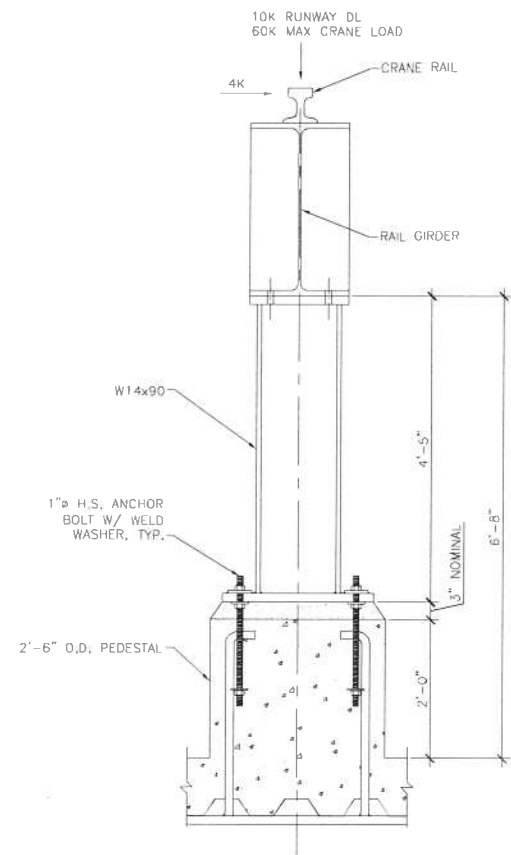
EXPANSION JOINT DETAIL

SCALE: 1"=1'-0"

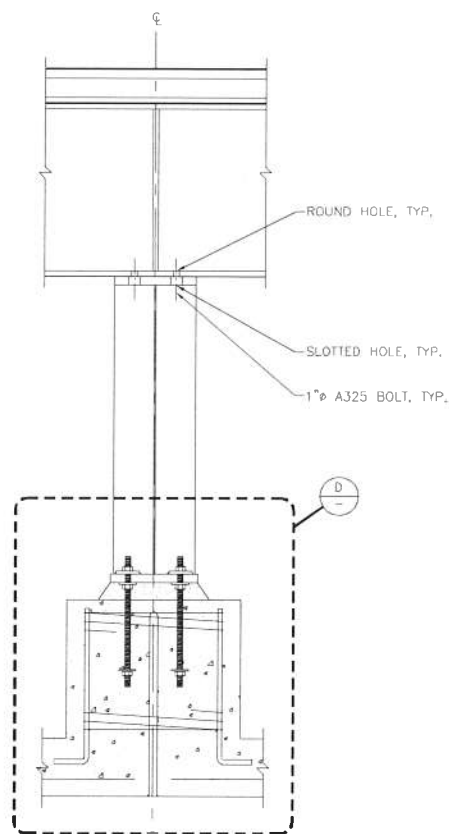
C
S1



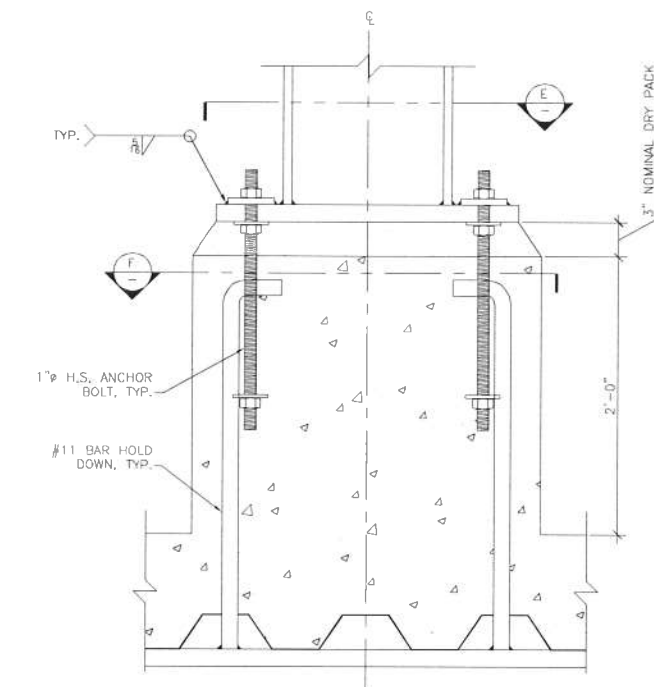
Engineer: A. J. MILLER & ASSOCIATES STRUCTURAL ENGINEERING CORPORATION 5588 Fremont Street Oakland, CA 94608 (510) 656-8401 JOB #12188	Client: WEBCOR/OBAYASHI JOINT VENTURE 175 Beale Street, San Francisco, CA 94105 (415) 978-5700 TransbayGeneralInfo@webcor-obayashi.com	Drafter:  Dominguez Drafting and Design San Leandro, CA (510) 512-0398 cedrafter@gmail.com		© 2012 Craig E. Dominguez. This document is property of Craig E. Dominguez. Use of this drawing without the express permission of Craig E. Dominguez is strictly prohibited.	Revisions: <table><thead><tr><th>No.</th><th>Date</th><th>Description</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>	No.	Date	Description																Sheet Name: CRANE RUNWAY ELEVATION, DETAILS Project Name and Location: TRANSBAY TRANSIT CENTER CRANE RUNWAY Mission Street & 1st Street San Francisco, CA 94105	Date: 8/27/12 Designed by: AJM Drafted by: CD Approved by: Scale: AS SHOWN Job Number: 1207	Sheet Number: S1 1 OF 2 SHEETS
No.	Date	Description																								



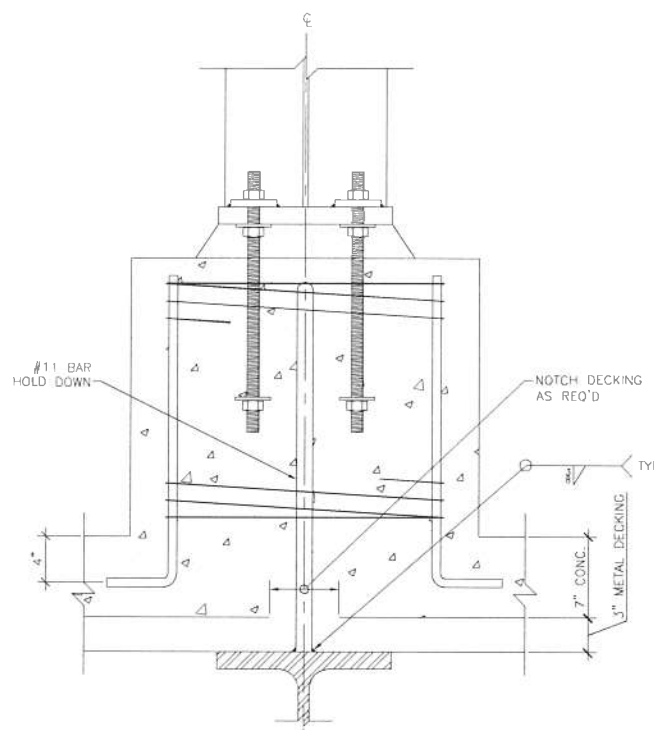
TRANSVERSE ELEVATION A
SCALE: 3/4"=1'-0" S2



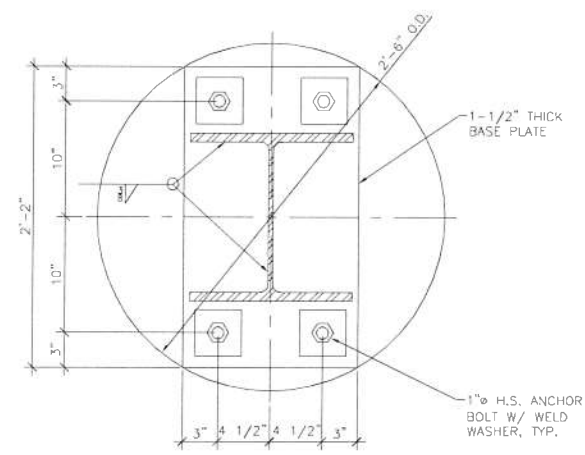
LONGITUDINAL ELEV. B
SCALE: 3/4"=1'-0" S2



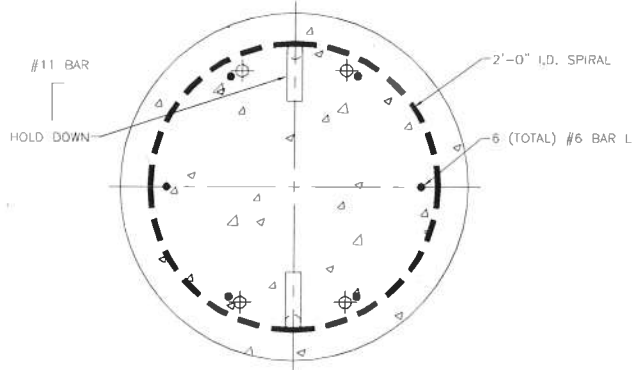
SIDE ELEVATION C
SCALE: 1-1/2"=1'-0" S2



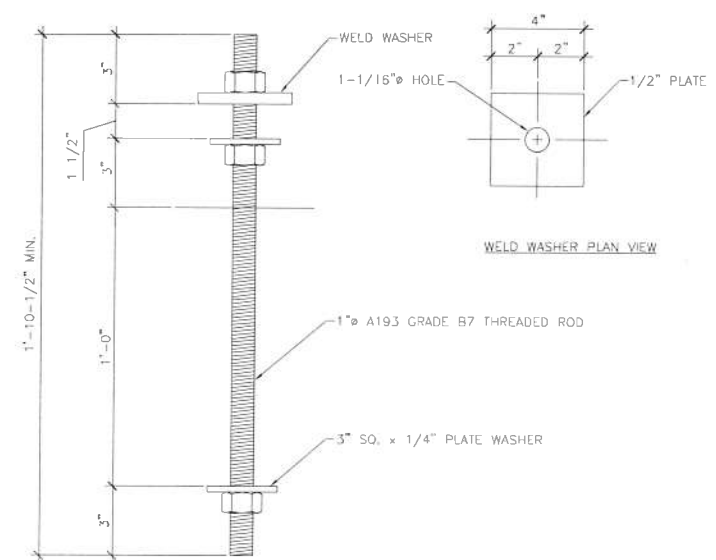
END ELEVATION D
SCALE: 1-1/2"=1'-0" S2



PLAN E
SCALE: 1-1/2"=1'-0" S2





PLAN SECTION F
SCALE: 1-1/2"=1'-0" S2



THREADED ROD DETAIL G
SCALE: 3"=1'-0" S2



Engineer: A. J. MILLER & ASSOCIATES STRUCTURAL ENGINEERING CORPORATION 5588 Fremont Street Oakland, CA 94608 (510) 556-8401 JOB #12188	Client: WEBCOR/OBAYASHI JOINT VENTURE 175 Beale Street, San Francisco, CA 94105 (415) 978-5700 TransbayGeneralInfo@webcor-obayashi.com	Drafter:  Dominguez Drafting and Design San Leandro, CA (510) 512-0398 cedrafter@gmail.com		© 2012 Craig E. Dominguez. This document is property of Craig E. Dominguez. Use of this drawing without the express permission of Craig E. Dominguez is strictly prohibited.	Revisions: No. Date Description <table><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table>																			Sheet Name: CRANE RUNWAY PEDESTAL DETAILS Project Name and Location: TRANSBAY TRANSIT CENTER CRANE RUNWAY Mission Street & 1st Street San Francisco, CA 94105	Date: 8/27/12 Designed by: AJM Drafted by: CD Approved by: Scale: AS SHOWN Job Number: 1207	Sheet Number: S2 2 OF 2 SHEETS

A.J. MILLER & ASSOCIATES
STRUCTURAL ENGINEERING CORPORATION

COMPUTATIONS

5588 FREMONT STREET • OAKLAND, CALIFORNIA 94608 • (510) 655-8401 • FAX 655-8425
 NO. _____ OF _____ SHEETS
 DATE 02/17/14 CLIENT Webcor Obayashi JOB NO. 12.88
 BY _____ CHK _____ PROJECT _____

50-TON ROOF MOUNT CRANE (SHEEDY)

$$P_{tot} = 168,000 \text{ k} \approx 170 \text{ k}$$

DETERMINE C.G.

	<u>WT. (k)</u>	<u>DIST. (ft)</u>	<u>W x dist. (k-ft)</u>
CWT. SUPPORT BEAM	18.4	-11	-202.4
LOWER TURNABLE	5.6	0	0
MACHINERY DECK	28.3	-4	-113.2
MAIN CWT.	12.4	-14	-173.6
ADD'L. CWT.	55.9	-14	-782.6

TOTAL ROTATING: 120.6 -1271.8

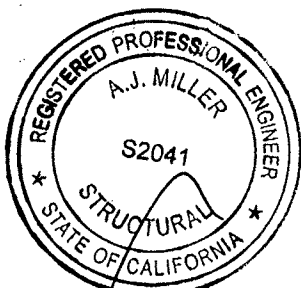
$$x_{-rot} = \frac{-1271.8 \text{ k-ft}}{120.6 \text{ k}} = -10.55 \text{ ft}$$

$$\text{dist. } \phi \text{ rot. to boom pin} = 3.0 \text{ ft}$$

LOAD = 5 k
 RADIUS = 160 ft
 BOOM = 100 ft, 6.6 k
 JIB = 60 ft, 3.0 k
 ANGLE = 11.11°

<u>ITEM</u>	<u>WT (k)</u>	<u>dist. (ft)</u>	<u>W x dist (k-ft)</u>
HOOK LOAD	5	160	800
BOOM	6.6	52.06	343.61
JIB	3	132.44	397.31
	<u>14.6</u>		<u>1540.9</u>

$$x = \frac{1540.9}{14.6} = 105.54 \text{ ft}$$



FEB 17 2014

A.J. MILLER & ASSOCIATES STRUCTURAL ENGINEERING CORPORATION

COMPUTATIONS

NO. _____ OF _____ SHEETS

5588 FREMONT STREET • OAKLAND, CALIFORNIA 94608 • (510) 655-8401 • FAX 655-8425

DATE _____ CLIENT _____ JOB NO. 12188

BY _____ CHK _____ PROJECT _____

50-TON ROOF MOUNT CRANE (SHIPPY)

STATIONARY PARTS

LOWER SILL BEAMS
UPPER SILL BEAMS
WHEELS

WT (k)

14.4

13

6.4

33.8

(42' x 30' x 0.09 ksf)

= 50 k

TOTAL CRANE + HOOK LOAD = 154.4 k

OT MOMENT = 269.1 k ft

CORNER REACTIONS - Skips @ 160' RADIUS

DIRECTION (DEGREES)	FRONT LEFT	FRONT RT	REAR LEFT	REAR RT	TOT
0	43.5 k	43.5 k	33.8 k	33.8 k	154.4
45	45.4	38.6	31.8		154.4

45° ORIENTATION OT DATA

$$I = (19.7)^2 (2) = 784$$

$$\frac{M_y}{I} = \frac{269.1 (19.8)}{784} = 6.8$$

70 k @ 20'

$$\left(\frac{154.4}{4} \right) + \frac{(70 k)(20')}{(28)(2)} = 63.6 k$$

w/ ADD'L 8 k OF CRANE WT. ...

$$\text{MAX R} = 45.4 + 2 = 47.4 k \rightarrow 48 k$$

$$\left(\frac{154.4}{4} \right) + \frac{70 (20) (19.8)}{784} = 74 k$$

A.J. MILLER & ASSOCIATES
STRUCTURAL ENGINEERING CORPORATION

COMPUTATIONS

5588 FREMONT STREET • OAKLAND, CALIFORNIA 94608 • (510) 655-8401 • FAX 655-8425

DATE _____ CLIENT _____ JOB NO. 12188

BY _____ CHK _____ PROJECT _____

50-TON ROOF MOUNT CRANE (SHEET)

CONSIDER ALSO 25 kips @ 40' RADIUS

	<u>WT</u>	<u>dist</u>	<u>W x dist</u>
HOOKE	25	40	1000
BOOM	6.6	20	132
JIB	<u>3</u>	68	<u>204</u>
	34.6		1336

$$x = \frac{1336}{34.6} = 38.6$$

$$P_{TOT} = 189 \text{ k}$$

$$M_{ot} = 64.2 \text{ k-ft}$$

CORNER REACTIONS — 25 kips @ 40' RADIUS					
ANGLE	FRONT LEFT	FRONT RT	REAR LEFT	REAR RT	TOT
Ø	48.4	48.4	45.7	45.7	189
ANGLE	FRONT	TWO MIDS	REAR		TOT
45	48.8	47.25	45.7		189

A.J. MILLER & ASSOCIATES
STRUCTURAL ENGINEERING CORPORATION

COMPUTATIONS

5588 FREMONT STREET • OAKLAND, CALIFORNIA 94608 • (510) 655-8401 • FAX 655-8425
 NO. _____ OF _____ SHEETS
 DATE 02/20/14 CLIENT Webcor Obayashi JOB NO. 12188
 BY _____ CHK _____ PROJECT _____

KOBELCO CK1600-11 w/ 25 kips @ 40' RADIUS

DETERMINE C.G.

	<u>WT (k)</u>	<u>DIST (ft)</u>	<u>W x dist (k-ft)</u>
CWT.	138.9	-15	-2083
BASE MACHINE	<u>86.4</u>	0	<u>0</u>
	225.3 k		-2083 k-ft

$$x_{rot} = \frac{-2083}{225.3} = -9.24 \text{ ft}$$

dist. C.L. of rot. to boom pin = 4.67'

	<u>WT (k)</u>	<u>DIST (ft)</u>	<u>W x dist (k-ft)</u>
HOOK LOAD	25	40	1000
BOOM	<u>11.3</u>	20	<u>226</u>
	36.3 k		1226 k-ft

$$x = \frac{1226}{36.3} = 33.8 \text{ ft}$$

$$P_{TOT} = 225.3 + 36.3 = 261.6 \text{ k}$$

$$M_{OT} = -857.6 \text{ k-ft}$$

A.J. MILLER & ASSOCIATES
STRUCTURAL ENGINEERING CORPORATION

COMPUTATIONS

5588 FREMONT STREET • OAKLAND, CALIFORNIA 94608 • (510) 655-8401 • FAX 655-8425

DATE _____ CLIENT _____ JOB NO. 12180

BY _____ CHK _____ PROJECT _____

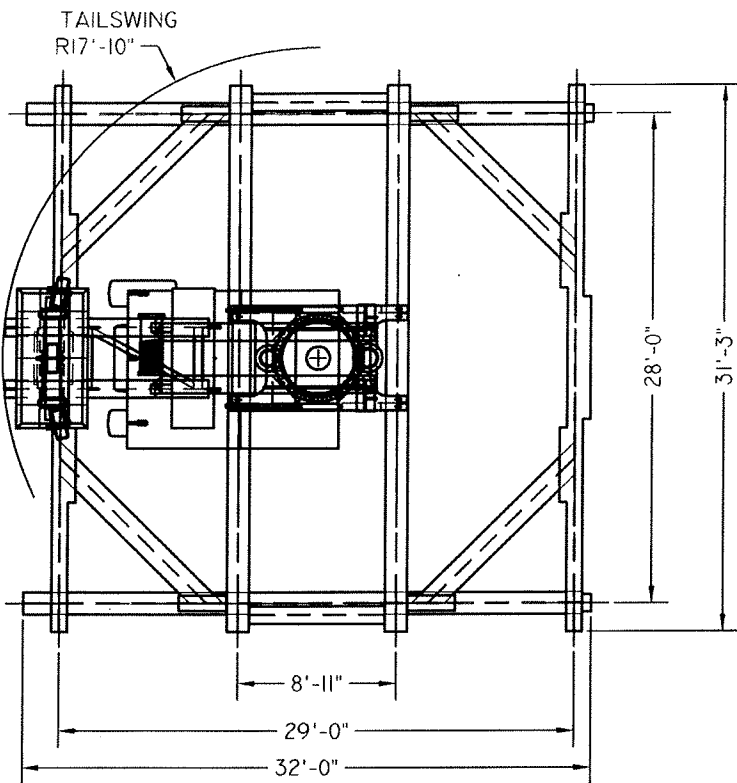
KOBELCO CK1600-11

CORNER REACTIONS - 25 kips @ 40' RADIUS					
DIRECTION (DEGREES)	FRONT LEFT	FRONT RT	REAR LEFT	REAR RT	TOT
0	80.7	80.7	50.1	50.1	261.6
45	FRONT	TWO MIDS	REAR		TOT
	87	65.4	43.8		261.6

CONSIDER 5 kips @ 160'-ft RADIUS

$$M_{ot} = [(5k)(160') + (11.3k)(80')] - 2083 = -379 < 857$$

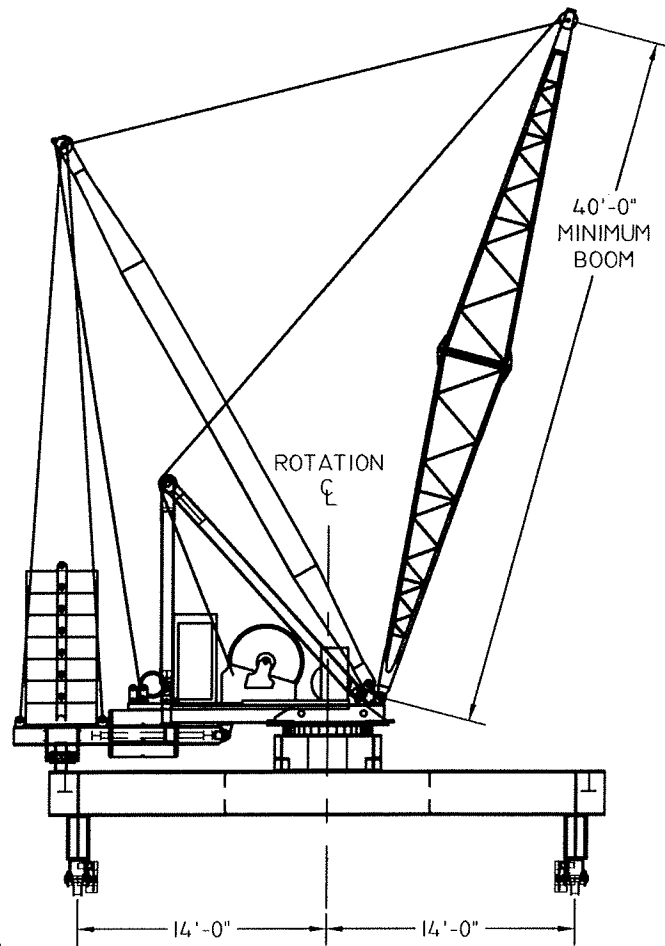
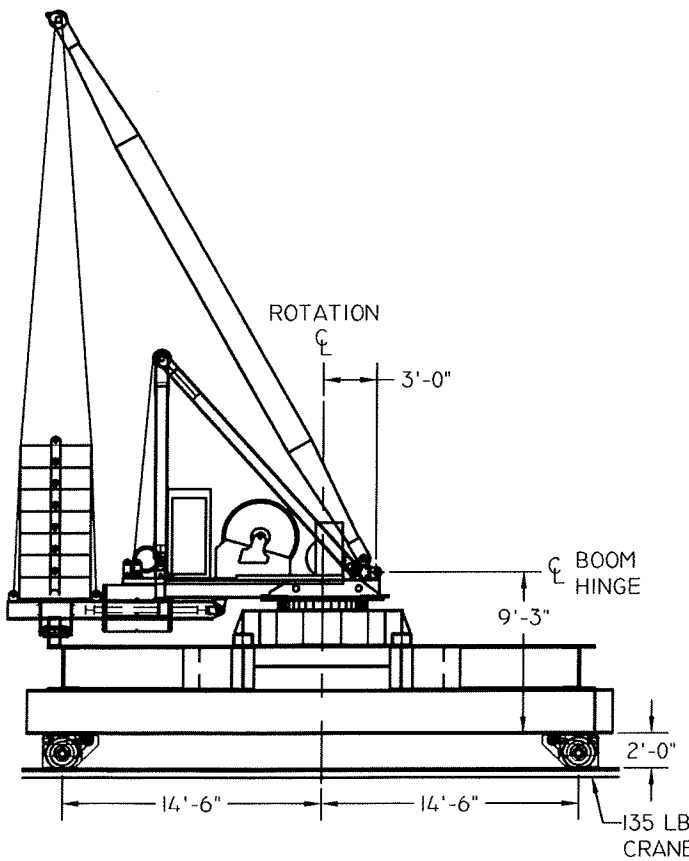
TOTAL LOAD IS LESS & CORNER LOADING DUE
 TO O.T. IS LESS → 25k @ 40' RADIUS
 WILL CREATE MAX REACTIONS



WEIGHT OF CRANE COMPONENTS	
DESCRIPTION	WT (LB)
UPPER SILL BEAMS (2) @ 6.5K	13,000
LOWER SILL BEAM (2) @ 7.2K	14,400
CWT SUPPORT BEAMS	18,400
MAIN COUNTERWEIGHTS 1 AND 2	12,400
MACHINERY DECK	28,300
LOWER TURNTABLE	5,600
HEAVY LIFT CWTS (7) @ 6.6K	46,200
HEAVY LIFT CWT CARRIER	9,700
20' BOOM BUTT + 20' TIP	4,200
20' BOOM INSERT (3) @ 800	2,400
TRAVEL WHEELS (4) @ 1.6K	6,400

TOTAL 161,000 LB

MAIN BOOM LENGTH: 40' MIN, 100' MAX
JIB LENGTH: 30' MIN, 60' MAX



MANUFACTURER	SHEEDY
EQUIPMENT	50 TON ROOF MOUNT CRANE HEAVY LIFT CONFIG W/ TRAVEL WHEELS
WEIGHT	161,000 LBS
CAPACITY	SEE LOAD CHART
BLOCK NAMES	P50THVY / S50THVY / E50THVY

1215 MICHIGAN ST.
SAN FRANCISCO, CA

PHONE (415) 648-7171
FAX (415) 648-1535



SCALE: 3/32" = 1'-0"

FILE REF: F:\CAD\DATASHEETS\E06

DATE: 03-11-99

DRAWING TITLE:
GENERAL DIMENSIONS--50TRM HVY LIFT CONFIG

DRAWING NUMBER
E0650-20

KOBELCO CK 1600-II

CK1600-II Main Boom Rated Loads

with 11 counterweights (116,840 lbs) and 2 carbody weights (22,050 lbs)

Refer to notes page 19

130' Boom			140' Boom			150' Boom			160' Boom		
Load Radius (ft)	Boom Angle (deg.)	360° Rated Load (lbs)	Load Radius (ft)	Boom Angle (deg.)	360° Rated Load (lbs)	Load Radius (ft)	Boom Angle (deg.)	360° Rated Load (lbs)	Load Radius (ft)	Boom Angle (deg.)	360° Rated Load (lbs)
30.0	79.5	134,000 *	32.0	79.4	122,100 *	34.0	79.3	112,600 *	34.0	80.0	110,800 *
32.0	78.6	124,100 *	34.0	78.5	113,500 *	36.0	78.5	105,100 *	36.0	79.3	103,600 *
34.0	77.7	115,500 *	36.0	77.7	106,200 *	38.0	77.8	98,700 *	38.0	78.5	97,000 *
36.0	76.7	108,200 *	38.0	76.9	99,800 *	40.0	77.0	93,000 *	40.0	77.8	91,200 *
38.0	75.8	101,600 *	40.0	76.0	94,100 *	45.0	75.0	81,100 *	45.0	76.0	79,500 *
40.0	74.9	95,600 *	45.0	73.9	81,700	50.0	73.0	70,500	50.0	74.1	70,100
45.0	72.6	82,000	50.0	71.7	70,700	55.0	71.0	61,900	55.0	72.2	61,500
50.0	70.3	70,900	55.0	69.6	62,100	60.0	69.0	54,800	60.0	70.3	54,600
55.0	67.9	62,300	60.0	67.4	55,100	65.0	66.9	49,100	65.0	68.4	48,900
60.0	65.5	55,500	65.0	65.1	49,300	70.0	64.8	44,500	70.0	66.5	44,000
65.0	63.0	49,800	70.0	62.8	44,700	75.0	62.6	40,300	75.0	64.5	40,100
70.0	60.5	44,900	75.0	60.5	40,700	80.0	60.4	37,000	80.0	62.5	36,500
75.0	57.9	41,000	80.0	58.1	37,200	85.0	58.2	33,900	85.0	60.4	33,500
80.0	55.3	37,400	85.0	55.6	34,100	90.0	55.9	31,300	90.0	58.3	30,800
85.0	52.5	34,600	90.0	53.1	31,700	95.0	53.6	29,100	95.0	56.2	28,600
90.0	49.7	31,900	95.0	50.5	29,300	100.0	51.1	26,800	100.0	54.0	26,600
95.0	46.7	29,700	100.0	47.7	27,300	105.0	48.6	25,100	105.0	51.7	24,600
100.0	43.5	27,500	105.0	44.9	25,300	110.0	46.0	23,300	110.0	49.4	23,100
105.0	40.2	25,700	110.0	41.8	23,800	115.0	43.2	22,000	115.0	47.0	21,600
110.0	36.6	24,200	115.0	38.6	22,200	120.0	40.3	20,700	120.0	44.4	20,200
115.0	32.6	22,700 *	120.0	35.2	20,900	125.0	37.2	19,400	125.0	41.8	18,900
			125.0	31.4	19,600 *	130.0	33.9	18,200 *	130.0	39.0	17,800
						135.0	30.2	16,500 *	135.0	36.0	16,700
									140.0	32.8	15,600 *

170' Boom			180' Boom			190' Boom			200' Boom		
Load Radius (ft)	Boom Angle (deg.)	360° Rated Load (lbs)	Load Radius (ft)	Boom Angle (deg.)	360° Rated Load (lbs)	Load Radius (ft)	Boom Angle (deg.)	360° Rated Load (lbs)	Load Radius (ft)	Boom Angle (deg.)	360° Rated Load (lbs)
36.0	79.9	102,000 *	38.0	79.8	88,400 *	40.0	79.8	88,100 *	45.0	78.8	75,100 *
38.0	79.2	95,600 *	40.0	79.2	88,400 *	45.0	78.2	76,400 *	50.0	77.3	66,100 *
40.0	78.5	89,900 *	45.0	77.6	77,600 *	50.0	76.7	67,200 *	55.0	75.9	58,800 *
45.0	76.8	78,200 *	50.0	75.9	68,500 *	55.0	75.1	59,900 *	60.0	74.4	52,900 *
50.0	75.1	69,200 *	55.0	74.3	61,000 *	60.0	73.5	53,700	65.0	72.9	47,600
55.0	73.3	61,200	60.0	72.6	54,000	65.0	72.0	48,000	70.0	71.4	42,900
60.0	71.5	54,200	65.0	70.9	48,200	70.0	70.4	43,200	75.0	69.9	38,800
65.0	69.7	48,500	70.0	69.2	43,600	75.0	68.7	39,200	80.0	68.3	35,200
70.0	67.9	43,800	75.0	67.5	39,400	80.0	67.1	35,700	85.0	66.8	32,400
75.0	66.1	39,600	80.0	65.8	36,100	85.0	65.5	32,600	90.0	65.2	29,700
80.0	64.2	36,300	85.0	64.0	33,000	90.0	63.8	29,900	95.0	63.6	27,300
85.0	62.3	33,200	90.0	62.2	30,400	95.0	62.1	27,700	100.0	62.0	25,300
90.0	60.4	30,600	95.0	60.4	27,900	100.0	60.4	25,500	105.0	60.3	23,300
95.0	58.4	28,200	100.0	58.5	26,000	105.0	58.6	23,800	110.0	58.7	21,800
100.0	56.4	26,200	105.0	56.6	24,000	110.0	56.8	22,000	115.0	57.0	20,200
105.0	54.4	24,400	110.0	54.7	22,400	115.0	55.0	20,500	120.0	55.2	18,700
110.0	52.2	22,700	115.0	52.7	20,900	120.0	53.1	19,100	125.0	53.5	17,600
115.0	50.1	21,100	120.0	50.6	19,600	125.0	51.2	18,000	130.0	51.6	16,500
120.0	47.8	19,800	125.0	48.5	18,200	130.0	49.2	16,700	135.0	49.8	15,400
125.0	45.5	18,700	130.0	46.4	17,100	135.0	47.2	15,800	140.0	47.9	14,300
130.0	43.0	17,400	135.0	44.1	16,000	140.0	45.0	14,700	145.0	45.9	13,400
135.0	40.5	16,500	140.0	41.7	15,200	145.0	42.9	13,800	150.0	43.8	12,700
140.0	37.8	15,400	145.0	39.3	14,300	150.0	40.6	13,000	155.0	41.7	11,900
145.0	34.9	14,500	150.0	36.6	13,400 *	155.0	38.2	12,300 *	160.0	39.5	11,200 *
150.0	31.8	13,200 *	155.0	33.8	12,300 *	160.0	35.6	11,200 *	165.0	37.1	10,300 *
			160.0	30.8	11,000 *	165.0	32.9	10,100 *	170.0	34.7	9,200 *
						170.0	30.0	9,000 *	175.0	32.0	8,300 *

5.2 Hydraulic pumps

All driven from heavy duty pump drive.

Load hoist and propel

2 Piston pumps, max flow rate 66.5 US gal./min x 2
(252 l/min x 2)

Boom Hoist

1 Piston pump, max flow rate 66.5 US gal./min
(252 l/min)

Swing

1 Piston pump, max flow rate 46.2 US gal./min
(175 l/min)

Control system and auxiliary

2 Gear pumps, max flow rate
16.1 US gal./min x 10.6 US gal (61 l/min x 40 l/min)

Brake cooling system

2 Gear pumps, max flow rate 19.3 US gal./min x 2
(73 l/min x 2)

5.3 Counterweight

Light Weight

one (1) base counterweight (A) and eight (8) side
counterweights (B) 105,820 lbs(48,000 kg)

Standard Weight

one (1) base counterweight (A), eight (8) side coun-
terweight (B) and two side counterweights (C)
116,840 lbs (53,000 kg)

two (2) carbody weight 22,050 lbs (10,000 kg)

Additional weight consists of two (2) side
counterweights (C) and two (2) carbody weights.

Description		Light	Standard
Base Counterweight (A)		1	1
Side Counterweight (B)		8	8
Side Counterweight (C)		0	2
Carbody Counterweight		0	2
Total Weight	Upper	105,820 lbs (48,000 kg)	116,840 lbs (53,000 kg)
	Lower	None	22,050 lbs (10,000 kg)

5.4 Gantry

This high folding type gantry is fitted with a sheave
frame for boom hoist reeving. Hydraulic lift is stan-
dard. It provides full up, full down positions with
linkage.

5.5 Operator's cab

Totally enclosed from weather, this full-vision cab has
safety glass all around. The adjustable, high-backed
seat with armrest is standard, allowing operators to
customize the position. Auxiliary controls and instru-
ments are on a side mounted console. A signal horn,
windshield wipers, air conditioner are all standard
features.

5.6 Controls

At operator's right are console-mounted adjustable
short levers for the front and rear drum and the boom
hoist control. Beside the operator's seat on the right
are two short levers for propel control, individual
speed shifts for front drum, rear drum and boom
drum. At the operator's left are the console mounted
swing lever, knobs for front and rear drum, boom
drum pawls, engine start / stop key. A swing brake
control switch and signal horn button are on the
swing lever.

5.7 Electric system

All wiring corded for easy serving, individual fused
branch circuit.

5.8 Hydraulic system

Maximum pressure rating 4,620 psi (31.9 Mpa)

Cooling Oil to air heat exchanger

Filtration

Full flow filters with replaceable paper elements

5.9 Boom hoist

Powered by hydraulic motor through planetary
reducer.

Drum

Single drum.

Grooved for 20.0 mm dia. wire rope.

Brake

A spring set, hydraulically-released, multiple-disc
holding brake is mounted inside the boom hoist
motor and is operated through a counter-balance
valve. An external ratchet is fitted for locking the
drum.

5.10 Front drum

Powered by hydraulic motor through planetary
reducer.

Drum

26.2" (666 mm) P.C.D. X 26.5" (672 mm) Lg.

Grooved for 26 mm dia. wire rope.

Brake

A spring set, hydraulically-released, multiple-disc
holding brake is mounted inside the hoist motor
and is operated through a counter-balance valve. An
external ratchet is fitted for locking the drum.

Free-Fall (Optional)

Wet-type disk brake free-fall is mounted inside the
drum.

5.11 Rear drum

Powered by hydraulic motor through planetary
reducer.

Drum

26.2" (666 mm) P.C.D. X 26.5" (672 mm) Lg.

Grooved for 26 mm dia. wire rope.

138 890#

86 920#

3(3770) = 11 310#

4 100#

240 720#

SAY $W_{TOT} = 245k$

CK1600-II Dimension and Weight

KOBELCO

Base Machine-1

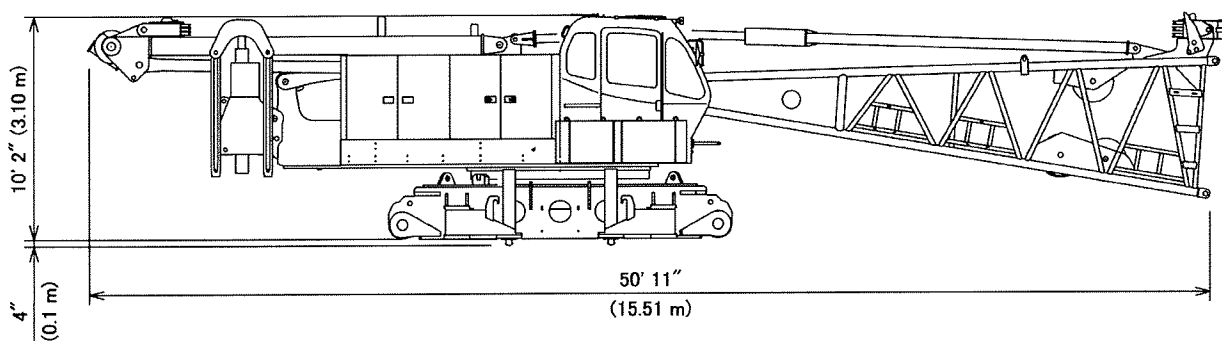
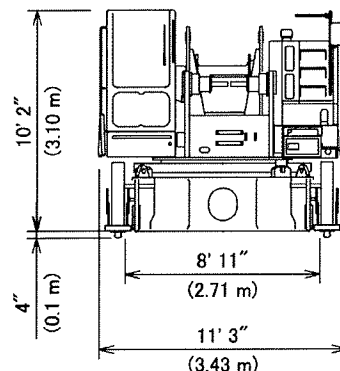
Boom base with self-assembly sheave, Counterweight Self-Removal Cylinder, Translifter and Front, Rear, Boom hoist wire rope
 Weight: 86,420 lbs (39,200 kg)

Base Machine-2

In addition Base Machine-1, optional Front/Rear Free-Fall Break equipped.
 Weight: 88,180 lbs (40,000 kg)

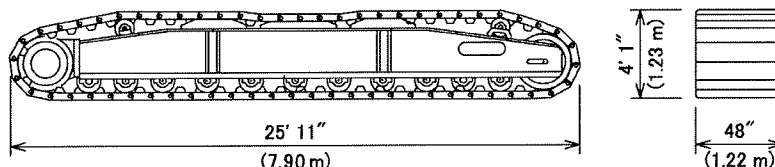
Base Machine-3

In addition Base Machine-2, optional Third drum and wire rope equipped.
 Weight: 92,480 lbs (41,950 kg)



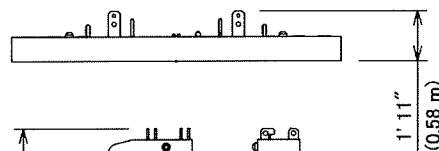
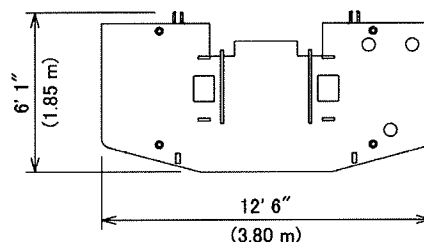
Crawler

Weight: 36,155 lbs (16,400 kg)



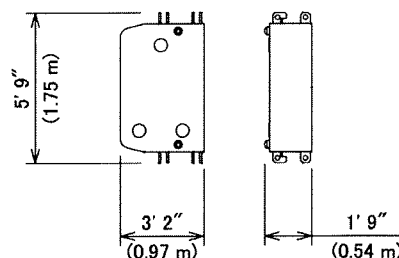
Counterweight (A)

Weight: 17,640 lbs (8,000 kg)



Counterweight (B)

Weight: 11,025 lbs (5,000 kg)



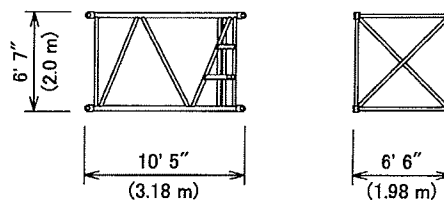
CK1600-II Dimension and Weight

KOBELCO

10 ft Insert Boom

Weight: 1,390 lbs (630 kg)

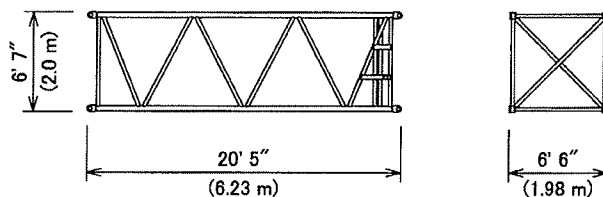
Includes cable roller and guy lines.



20 ft Insert Boom

Weight: 2,200 lbs (1,000 kg)

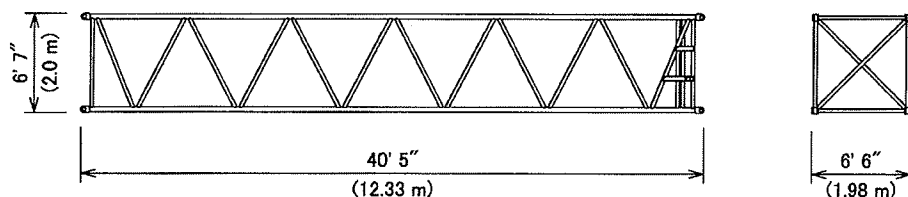
Includes cable roller and guy lines.



40 ft Insert Boom

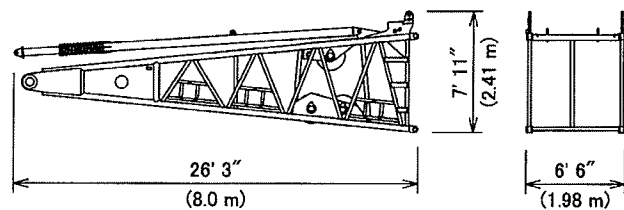
Weight: 3,770 lbs (1,710 kg)

Includes cable roller and guy lines.



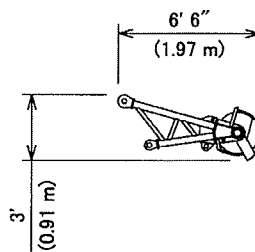
Boom Base with Backstop

Weight: 8,110 lbs (3,680 kg)



Auxiliary Sheave

Weight: 650 lbs (290 kg)

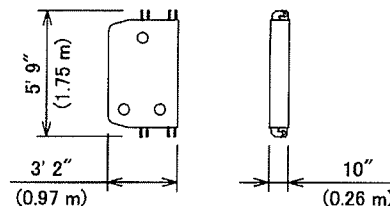


CK1600-II Dimension and Weight

KOBELCO

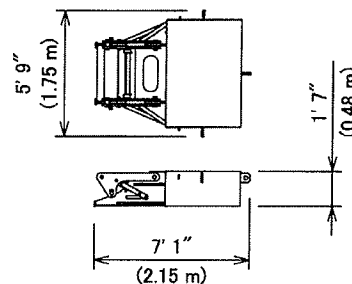
Counterweight (C) (optional)

Weight: 5,513 lbs (2,500 kg)



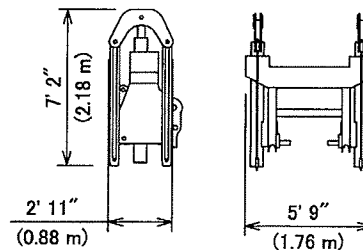
Carbody Weight (optional)

Weight: 11,025 lbs (5,000 kg)



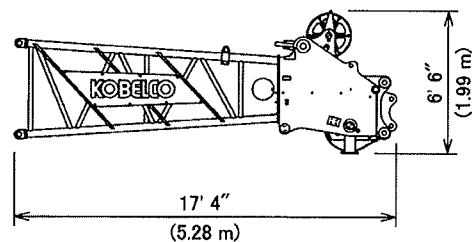
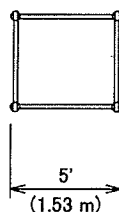
Counterweight Self-Removal Cylinder

Weight: 3,704 lbs (1,680 kg)



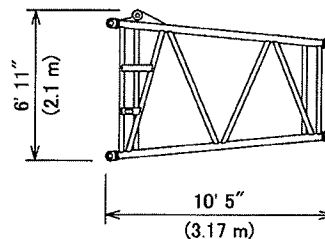
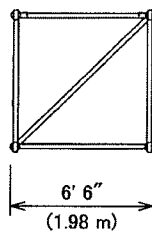
Boom Tip

Weight: 4,100 lbs (1,860 kg)
includes guy lines.



Taper Insert Boom

Weight: 1,190 lbs (540 kg)
includes cable roller.



FIND 1912

CK1600-II General Dimensions

KOBELCO

