WELCOME

BIDDER’S CONFERENCE/CONTRACTOR OUTREACH and NETWORKING EVENT
for
Yerba Buena Island Transition Structure, Contract 2 (YBI2)
Thursday, June 14, 2012

Derek J. Pool, P.E., Small Business Manager, Toll Bridge Program
Event Material

For copies of today’s handouts please visit:

www.baybridgeinfo.org/smallbusiness
BIDDER’S CONFERENCE/CONTRACTOR OUTREACH and NETWORKING EVENT
for
Yerba Buena Island Transition Structure, Contract 2 (YBI2)
Thursday, June 14, 2012

Bijan Sartipi,
District 4 Director, Caltrans
BIDDER’S CONFERENCE/CONTRACTOR OUTREACH and NETWORKING EVENT
for
Yerba Buena Island Transition Structure, Contract 2 (YBI2)
Thursday, June 14, 2012

Tony Anziano,
Toll Bridge Program Manager
SFOBB East Span Seismic Safety Project Retrospective

Bart Ney, Public Information Officer, Toll Bridge Program
Projects in Construction (3)
- Self Anchored Suspension (SAS)
  - YBI Transition Structure #1
  - Oakland Touchdown #2

Projects Complete (14)
- YBI Detour (Oct/2010)
- Oakland Touchdown #1 (Jun/2010)
- SAS E2/T1 Foundations (Jan/2008)
  - Skyway (Mar/2008)
  - Storm water (Dec/2008)
- 25KV Submarine Cable (Nov 2007)
- YBI Substation & Viaduct (May 2005)
  - SAS Pier W2 (Oct/2004)
- USCG Road Relocation (Jun/2004)
  - Oakland Geofill (Apr/2003)
- YBI Midden Site (Jan/2003)
- Pile Demonstration (Dec 2000)
  - Interim Retrofit (July 2000)
  - Seismic Retrofit Contract 1 (Oct 1997)

Project in Advertisement (1)
- YBI Transition Structure #2 & Cantilever Dismantling

Projects in Design (3)
- 504 / 288 Dismantling
- Marine Foundation Removal
- YBI Transition Structure #3 - YBI Landscaping
Small Business and DVBE Participation Summary

Derek J. Pool, PE., Small Business Manager
Toll Bridge Program

Patricia Padilla, Program Administrator
Padilla & Associates, Inc.

THE SAN FRANCISCO-OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT
# Sample of Small Business and DVBE Work Scopes

<table>
<thead>
<tr>
<th>Turbidity Booms</th>
<th>Geotechnical Borings</th>
<th>Integrated Drawings</th>
<th>Analysis Plan-Dredging</th>
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<tbody>
<tr>
<td>Diving Systems</td>
<td>PDA Monitoring</td>
<td>Metal Restrainers</td>
<td>Vibration Monitoring</td>
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<tr>
<td>SWPPP Services</td>
<td>Thermal Control Plans</td>
<td>Video Surveying</td>
<td>Photo Surveying</td>
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<tr>
<td>Material Testing</td>
<td>Transportation Services</td>
<td>Specialized Fabrication</td>
<td>Service Platforms</td>
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<tr>
<td>Marine Services</td>
<td>Diving Services</td>
<td>Blasting and Shoring</td>
<td>Geotextile Fabrics</td>
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<tr>
<td>Rebar Supply</td>
<td>Seismic Joints</td>
<td>Temporary Bearing</td>
<td>Modeling Services</td>
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<tr>
<td>Bridge Modeling</td>
<td>Demolition</td>
<td>Traffic Control</td>
<td>Gas/Fuel Supply</td>
</tr>
</tbody>
</table>
Accessing SB/DVBE Opportunities and Availability

- SB Program Team establishes a base goal for SB and DVBE participation using prescribed Federal DOT goal-setting methodology

- Utilizes various databases, including DGS and CUCP, in contrast to census data

- Identify firms located in, and willing to work in, the area by NAICS, SICS, and UNSPSC codes
Turning Opportunities into Results

- Step 1: Identify and quantify potential subcontracting opportunities based on bid items with Department program management team

- Conduct tailored SB/DVBE searches to identify viable SB/DVBE firms with proven capabilities poll if necessary

- Use internal project databases in conjunction with DGS and CUCP

- Step 2: Access SB/DVBE Availability against corresponding industry Census Business Patterns database

Certified Firms = Census Firms = SB/DVBE Goal
Turning Opportunities into Results (continued…)

- Provide SB/DVBE Categorized Availability Pool to Prospective Bidders

- Make Plans available on Pier to facilitate SB/DVBE Utilization to prepare takeoffs

- Provide a list of Prospective Planholders

- Post Award Focus: Small Business Team presence in the field in order to strategically partner with Prime Contractors, and work with Toll Bridge Design and Construction to identify ongoing unobligated scopes of work
### SFOBB Dollars Awarded and Actual Attainments

Based on Payments made to SB/DVBEs as of June 2012 *

<table>
<thead>
<tr>
<th>Certified Firms</th>
<th>No. of SB/DVBE</th>
<th>Dollars Paid</th>
<th>No. of Local SB/DVBEs</th>
<th>Local Dollars Paid</th>
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</thead>
<tbody>
<tr>
<td>DVBE</td>
<td>10</td>
<td>$7.8 M</td>
<td>4</td>
<td>$7.3 M</td>
</tr>
<tr>
<td>Small Business</td>
<td>117</td>
<td>$91.9 M</td>
<td>71</td>
<td>$71.2 M</td>
</tr>
<tr>
<td>Totals</td>
<td>127</td>
<td>$99.7 M</td>
<td>75</td>
<td>$78.5 M</td>
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</table>

*-Inclusive of activity on the following contracts: Skyway, Geofill, OTD1, SSD, E2/T1, Submarine Cable, Stormwater, SAS, W2 Land Foundations, OTD1, and YBID*
<table>
<thead>
<tr>
<th>Certified Firms</th>
<th>No. of SB/DVBE</th>
<th>Dollars Committed</th>
<th>No. of Local SB/DVBEs</th>
<th>Local Dollars Committed</th>
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</thead>
<tbody>
<tr>
<td>DVBE</td>
<td>7</td>
<td>$31.5 M</td>
<td>4</td>
<td>$9.4 M</td>
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<tr>
<td>Small Business</td>
<td>117</td>
<td>$66.7 M</td>
<td>80</td>
<td>$60.2 M</td>
</tr>
<tr>
<td>Totals</td>
<td>124</td>
<td>$98.2 M</td>
<td>84</td>
<td>$69.6 M</td>
</tr>
</tbody>
</table>
SB/DVBE Participation in D4

Total SB/DVBEs: 251
SB/DVBEs in MTC Counties: 158 (63%)
Total Payments and Commitments to SBs and DVBEs

Millions of Dollars

- $188 Million
- $148 Million

Years:
- 2008
- 2009
- 2010
- 2011
- 2012

THE SAN FRANCISCO-OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT
Schedule to Achieve Seismic Safety and Description of Work to Complete Project

Brian Maroney, Deputy Toll Bridge Program Manager
POTENTIAL SMALL BUSINESS OPPORTUNITIES for Dismantling

Opportunities found within this contract MAY include, but are not limited to, services, suppliers, removal and/or installation of the following items:

- Marine Services/Access
- Barge Services
- Diving Services
- Trucking Services
- Plant Establishment
- Debris Containment
- Electrical Lighting
- Traffic Control
- Traffic Signs
- Air/Noise Monitoring
- Blasting / Welding
- Lead Containment/Compliance/Disposal
- Asbestos Containment/Compliance/Disposal
- Demolition Services
- False work/ Platforms
- Gas/Fuel
- Crane/Rigging/Cables
- Hazardous Waste Disposal
- Irrigation and Drainage
- Landscaping
- Biological Monitoring (Bird Specialist)

Electricians, Welders and Carpenters will also be needed on this construction contract.
BREAK

THE SAN FRANCISCO-OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT
Additional Information

- Please submit questions in writing on the cards provided. Any answers provided today are preliminary and not considered final until posted on the bidder web site.

- Webpage for Bidders Inquiry:
  http://www.dot.ca.gov/dist4/construction/Inquiries/04-0120T4_inquiry.html

- Future inquiries may be addressed to the Duty Senior
  email: Duty_Senior_District04@dot.ca.gov
  Mailing address: P.O. Box 23660, Oakland, CA 94623-0660
  Phone number: (510) 286-5209

All inquiries must include the contract number (04-0120T4)
DESIGN and SPECIFICATIONS

Bob Zandipour, P.E., Senior Engineer, Toll Bridge Design

THE SAN FRANCISCO-OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT
1. Tentative Schedule
   - Bid Opening: September 25th, 2012
   - Start Field Work: Fall 2013
   - Total Contract Duration: 1120 Calendar Days

2. An A+B Contract
   - The B-value will be for eastbound on-ramp, bike path and Southgate Rd. opening (including partial bridge demolition).
   - Maximum number of working days for B-value is 610 calendar days starting on January 1st, 2014.
YBI 2 Scope

- Realign EB Off-Ramp
- Construct EB On-Ramp
- Reconstruct USCG Base
- Construct Quarters & Access
- Realign Southgate Road
- Stabilize Slope
- Remove YBI Detour Structure
- Remove Cantilever Truss
POTENTIAL SMALL BUSINESS OPPORTUNITIES

Opportunities found within this contract MAY include, but are not limited to, services, suppliers, removal and/or installation of the following items:

- Demolition Services
- Lead and Asbestos Compliance Plan
- Concrete Barriers
- Material Sampling and Analysis
- Concrete Services
- Biological and Environmental Monitoring
- Lumber
- Steel/Plastic Piping
- Crash Cushions
- Roadway Excavation
- Aggregate Base
- Asphalt Concrete
- Fencing and Railing
- Electrical and Lighting
- Asbestos Services
- Traffic Control/Management
- Drainage Systems
- Transportation Services
- Traffic Striping and Delineation
- Construction Area Signs
- Landscaping and Irrigation
- Environmental Protection/Controls
- Site Maintenance
- Document Management System
- Vibration Monitoring
- Mapping/Surveying

Electricians, Welders and Carpenters will also be needed on this construction contract.
Remove Cantilever Truss Span & YBI Detour of Existing Bay Bridge
Remove Cantilever Truss Span

CANTILEVER TRUSS SPAN REMOVAL
Construct EB On & Off Ramps
Construct Southgate Road, Bike Path, and Soldier Pile Wall
Stabilize Steep Slope
Utility Work

- Relocation of utilities on the U.S. Coast Guard base:
  - Gas Lines
  - Water Lines
  - Sewer Lines
  - TV Lines
  - Fiber Optic Duct Bank
  - Electrical Work including the 15 kV duct bank and lighting

- Relocation of utilities along Southgate Road:
  - Gas Lines
  - Water Lines
  - Electrical Lines

- Other electrical work on YBI.
### Utilities on the Existing Bay Bridge

<table>
<thead>
<tr>
<th>Utility</th>
<th>Description</th>
<th>Owner</th>
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</thead>
<tbody>
<tr>
<td>Electrical</td>
<td>12 KV cable</td>
<td>Caltrans</td>
</tr>
<tr>
<td>Water</td>
<td>100 mm</td>
<td>Caltrans</td>
</tr>
<tr>
<td>Compressed Air</td>
<td>100 mm</td>
<td>Caltrans</td>
</tr>
<tr>
<td>Fiber Optic</td>
<td>12 strands Fiber Optic Cable</td>
<td>Caltrans</td>
</tr>
<tr>
<td>Water</td>
<td>300 mm</td>
<td>CCSF</td>
</tr>
<tr>
<td>Fiber Optic</td>
<td>Four 1&quot; Cables</td>
<td>AT&amp;T</td>
</tr>
</tbody>
</table>

- The 300 mm CCSF Water Line and the AT&T Fiber Optic Cable will remain in service until December 1, 2013.
Traffic Handling/Access Challenges

- **EMERGENCY ACCESS ROAD CONTINGENCY PLAN**
  - See specifications for details.

- **USCG REQUIREMENTS**
  - Access to the USCG base needs to be maintained 24/7.
  - Maximum closure is 15 minutes.
  - See specifications for closures more than 15 minutes.

- **YBI ROAD CONDITIONS**
  - YBI roads are narrow and winding.
Schedule  
(Contract Award through Bridge Opening)

- Contract Award: November 24\textsuperscript{th}, 2012
- First Working Day: 55 days after contract approval.
- Pre-Construction Activities (Working Drawings, Submittals, Etc.) will take place until the new bridge is open to traffic. There will be no access to the construction site.
Schedule
(Bridge Opening through Jan. 1st, 2014)

- It is anticipated that the existing San Francisco-Oakland Bay Bridge will be closed over Labor Day weekend of year 2013 and the new Bay Bridge opened to public traffic by others.
- The Contractor will have access onto the existing Bay Bridge to commence limited bridge removal activities after the opening of the new Bay Bridge to public traffic.
Overall Schedule Summary

- Schedule dates are tentative.
Areas for Contractor’s Use
(Jan. 1st, 2014 through Contract Completion)

- After 1/1/14, the Contractor will have access onto YBI, and have access in the bay to begin construction of temporary supports and the marine trestle, as detailed in the subsequent slides.
- Start “B” value for Designated Portion of Work.
EXISTING BRIDGE ACCESS

- Contractor may access Oakland using the existing Bay Bridge for hauling materials and equipment to and from the project site.
- However, the upper deck from Bent 23 to Bent 39 will be demolished by others during the Labor Day 2013 work.
- The entire bridge (upper and lower deck) will be available for a period of 360 days following Labor Day 2013.
- After which, an 8 meter wide path along lower deck will be available for an additional period of 180 days.
- The Contractor will also be able to access the bridge from YBI.
Areas for Other’s Use
(Through Jan. 1st, 2014)

04-0120S4 Area until January 1, 2014
04-0120F4 Area until January 1, 2014
Areas for Other’s Use
(Through Jan. 1st, 2014)

04-0120S4 Area until January 1, 2014
04-0120F4 Area until January 1, 2014
Areas for Contractor Use
(Jan. 1st, 2014 through Contract Completion)
Areas for Contractor Use at Oakland Touchdown
After the Upper Deck from Bent 23 to Bent 39 has been Removed

Construction Access to Cantilever
Contractor shall have access to Pier 7 through April 17th, 2015.
Thank You
DESIGN and SPECIFICATIONS

Brian Maroney, Deputy Toll Bridge Program Manager
STRUCTURES SPECIFICATIONS

Steve Margaris, P.E., Structures Specifications Manager, Toll Bridge Design
Remove Cantilever Truss Span
CANTILEVER TRUSS REMOVAL
ADDENDUM 3 - Major Changes
Special Provisions

1) Revise “Submittals With Bid”
2) Revise “Bridge Removal, Portion (Cantilever Truss)”
3) Revise “Pre-Award Qualifications Questionnaire”
Special Provisions Changes
Revise 2-1.03 “Submittals With Bid”

1) Reduced the required Civil Engineer experience from 10 to 5 years.

2) Defined and expanded qualifying engineer experience to include sequential erection and sequential dismantling analysis of at least three completed bridge projects.

3) Allows sequential retrofit analysis of a continuous steel truss as qualifying experience for one project.

4) Defined the minimum length of a qualifying continuous steel truss as 80 meters.
Special Provisions Changes
Revise 2-1.03 “Submittals With Bid” (cont’ed)

5) Defined the qualifying analysis performed i.e. stability evaluation.

6) Requires qualifying bridge to carry highway truck traffic, railroad traffic or equivalent loading.

7) Eliminates blasting as a qualifying removal method.

8) Allows qualifying experience under the supervision of a registered Civil Engineer.

9) Clarifies resumes to include qualifying project information.
Special Provisions Changes
Revise 2-1.03 “Submittals With Bid” (cont’ed)

10) Requires documentation to be provided including a copy of stamped plans of qualifying projects.

11) Requires signed design calculations for the qualifying projects and a copy of the plans stamped by others.
Special Provisions Changes
Revise 10-1.58 “Bridge Removal, Portion (Cantilever Truss)”

1) Reduced the required Civil Engineer experience from 10 to 5 years.

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11) Requires signed design calculations for the qualifying projects and a copy of the plans stamped by others.
Special Provisions Changes

Revise 10-1.58 “Bridge Removal, Portion (Cantilever Truss)”, “Debris Containment System”

1) Created Debris Containment System subsection.

2) Debris containment working drawings must be submitted along with Material Containment Collection and Handling Program.

3) Defines the content of debris containment working drawings - description, details, connections, erection and removal methods, etc.
ADDENDUM 3 CHANGES

Pre-Award Qualifications Questionnaire

1) Clarifies contractor pertinent experience to include sequential erection or sequential dismantling of a steel truss bridge.
ADDENDUM 3 CHANGES
PLANS

Revise Plan Sheet 536 of 821

1) Requires the use of Allowable Stress Design (ASD) for analysis and modifications to the Cantilever Truss.

2) Defines $F_{\text{allowable}}$ for the existing structural steel listed in the table is for axial tension only.

3) Delete connection for existing rivets.
ADDITIONAL NOTES

1. Design Specifications:
   - Cantilever bridge design specifications, 2004
   - ADA Manual of Steel Construction, 1995
   - Notes on the cantilever design sequence of the existing cantilever truss and all components and modifications shall be based on the allowable stress design (ASD) only.

2. Load:
   - Wind load: 1.05 kip/ft²
   - Live load: 0.3 kip/ft²

3. Existing Structural Steel:

<table>
<thead>
<tr>
<th>Steel Type</th>
<th>Carbon Medium</th>
<th>Carbon Mild</th>
<th>Silicon</th>
<th>Manganese Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fy</td>
<td>370</td>
<td>375</td>
<td>207</td>
<td>3%</td>
</tr>
<tr>
<td>Recut</td>
<td>374</td>
<td>375</td>
<td>207</td>
<td>3%</td>
</tr>
</tbody>
</table>

Allowable shown is for stress only. For other failure modes refer to Design Specifications.

Where the material is not otherwise specifically designated on as-built plans, medium carbon steel was used.

4. Existing Holes Input:
   - Stays: 18 mm, 22 mm, 28 mm, 32 mm, 54 mm
   - Bearing Connections:
     - For Steel: 201
     - For Silicon Steel: 282
     - For Nickel Steel: 310

5. Elevation:
   - Elevation based on 1903 NAVD Datum.
   - Mean Lower Low Water (MLW): 1.87
   - Mean Dike Level (ML): 0.87
   - Lowest Observed Elevation (LE): 0.61

Contractor shall verify tidal elevations prior to beginning work.

6. Drawing:
   - Coordinate, distances, and bearings are based on 1933 as-built plans.

7. Diagram:
   - Depending on the existing structure and equipment used, existing structure members and connections may require strengthening and/or supplemental bracing.

THE SAN FRANCISCO-OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT

REVISED PER ADDENDUM No. 1 DATED APRIL 25, 2012

REVISED PER ADDENDUM No. 3 DATED JUNE 6, 2012

NOTE:
- The contractor shall verify all controlling field measurements before ordering or fabricating any material.
Q&A Session
Environmental Regulatory Agency Permits

San Francisco Bay Conservation & Development Commission (BCDC)
State and Regional Water Quality Control Boards
California Department of Fish & Game (CDFG)
United States Fish & Wildlife Service (USFWS)

United States Coast Guard (USCG)
United States Army Corp of Engineers (ACOE)
National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NMFS)
Biological Resources

- Double-Crested Cormorant (*MBTA, CDFG Watch List*)
- American Peregrine Falcon (*fully protected species*)
- California Least Tern (*endangered*)
- Western Gull (*MBTA*)
- Pacific Herring (*State Managed Commercial Fishery*)
- Chinook Salmon & Steelhead (*endangered/threatened*)
- Green Sturgeon (*threatened*)
- Longfin Smelt (*threatened*)
- Marine Mammals (*MMPA*)
- Eelgrass Beds (*Special Aquatic Habitats*)
Environmentally Sensitive Areas
SFOBB Nesting Birds

The Bay Bridge provides Nesting Habitat for Birds. Project permits and state and federal laws (including the Migratory Bird Treaty Act) regulate protection of special status & nesting birds in the project area.
Highlights of Bird Protection & Monitoring

• Contractor will provide a Bird Protection Plan (based on SFOBB Dismantling Bird Management Plan provided in Information Handout).

• Contractor will hire 2 or more District-approved Bird Biologists.

• Contractor and Contractor Supplied Biologists are expected to work closely and cooperatively with the Department to avoid impacts and resolve issues.
Highlights of Bird Protection & Monitoring

• Contractor Supplied Biologists are responsible for:
  • Preparing and implementing Bird Protection Plan
  • Avoidance of impacts through:
    • Bird monitoring
    • Scheduling of construction activities
    • Implementing and maintaining bird deterrence and exclusion measures
    • Establishing no-work exclusion zones for active nests

• Contractor Supplied Biologists are responsible for monitoring birds and nesting activity year-round. The results will be provided to the Department via weekly reports and meetings.

• Monitoring requires a minimum of:
  • 5 days a week from Jan 1st through Aug 31st (one Sat / Sun)
  • 1 time per week from Sep 1st – Dec 31st
  • Monitoring frequency may change per direction from Engineer
Pile Driving

Marine Mammals and listed fish including Steelhead, Salmon, Green Sturgeon, Herring and Longfin Smelt occur within the project area. Underwater noise generated by pile driving can harm or kill marine life.
Pile Driving Restrictions

- Pipe piles maximum diameter is 36 inches. Piles must be initially installed with a vibratory hammer for the majority of the total pile length (greater than 50% of the pile length).

- If pipe piles are entirely installed with a vibratory hammer, a maximum of 10% of those piles may be proof-tested with an impact hammer. Proof-testing is limited to 2 piles per day for less than 1 minute per pile, with a maximum of 20 blows per pile. Proof-testing may be performed year-round without the use of sound attenuation.

- The balance of the pipe piles not installed entirely with the vibratory method may be impact driven during the June 1 to November 30 window, with attenuation.

- A maximum of 20 pipe piles may be impact driven per day.

- Impact driving of H-piles (for YBI trestle only) does not require attenuation, max. 10 piles per day.

<table>
<thead>
<tr>
<th>IMPACT PILE DRIVING WORK WINDOWS</th>
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<tbody>
<tr>
<td>Jan</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>
Pile Driving Restrictions (cont.)

• The Contractor must coordinate schedule and access with the Department to allow biological and hydroacoustic monitoring to be performed by the Department in accordance with project permits.

• The Contractor must stop or delay pile installation activities when directed by the Engineer in accordance with project permits to protect fisheries and marine mammals.

• Herring spawns may delay in-water work within 200 meters (656 ft) for 14 days.
Water Quality Permit Compliance

Contractor must comply with the following State and Regional Water Quality Control Board permits and plans as applicable:

- State NPDES Construction General Permit (CGP) DWQ 2009-0009
- State Industrial General Permit (IGP) 97-03-DWQ
- Caltrans Statewide MS4 NPDES Permit DWQ 99-06
- SFOBB Water Quality Certification Order 01-120 (401 Cert)
- SFOBB Waste Discharge Requirements Order R2-2002-0011 (WDRs)
- SF RWQCB Basin Plan
- Other associated permits
Waste Discharge Requirements

Waste Discharge Requirements, R2-2002-0011 and Basin Plan include water quality objectives for:
- Turbidity
- Floatables
- Petroleum Hydrocarbons
- Dissolved Oxygen
- Dissolved Sulfide
- pH
- Other Constituents.

RWQCB Order/WDRs also include:
- Self Monitoring Program
  (performed by Department)
Storm Water Pollution Prevention Plan (SWPPP)

Contractor must submit a SWPPP to identify pollutant sources, minimize discharges and prevent material or equipment from falling into or being discharged to waters through the use of Best Management Practices.

YBI 2 Contract Risk Level 2 SWPPP shall include:

- Construction Site Monitoring Program (CSMP)
- Sampling and Analysis Plan (SAP)
- Rain Event Action Plan (REAP)
- Dewatering & Discharge or Active Treatment System Plan
- Turbidity Control Plan
- Weekly Inspection & Reporting
- Material Containment Collection Handling Plan (MCCHP) (MCCHP includes Debris Containment System)
Debris Containment System

Project water quality permits prohibit the direct discharge of wastes including: steel, asphalt, concrete, sawdust, bird nesting material, and other material into bay waters.
Debris Containment System (cont.)

• A written Material Containment, Collection and Handling Program (MCCHP) is required.

• The MCCHP shall include Debris Containment System details for the installation, maintenance, and removal of the system. A civil engineer registered in California must design and oversee the implementation of the Debris Containment System.

• The containment must prevent burning metal debris from falling through. The sides of the Containment must be tall enough and all seams sealed to prevent debris from falling. The lower bridge deck may serve as containment when feasible.

• The contractor supplied Water Pollution Control (WPC) Manager must monitor solid waste storage and disposal procedures & inspect the site daily for the operation of the debris containment system.
Hazardous Material

- Existing paint system includes red lead primer: contains 40 percent lead (400,000 parts per million)

- Work & disposal must comply with all applicable state and Federal law

- There is potential for other hazardous materials to be present
Q&A Session
THANK YOU