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1 INTRODUCTION

PREFACE

This Guideline for Professional Consulting Services is issued to provide the Consultant with an understanding of the Port of Long Beach’s (POLB’s) interpretation of specific language that may be used in the contract Scope of Work. The Scope of Work is described in attachments to the Contract for Engineering Services, or elsewhere in communications between the Port of Long Beach (POLB) and the Consultant, and provides guidance with respect to requirements that relate to processes, deliverables or submittals. These Guidelines express understanding of the way the Consultant will be expected to conduct business with POLB.

The version of these Guidelines that will be applied to a project will be the version that exists at the time of contract execution. If the Guideline is revised during the life of the project, the revised Guideline will only apply by mutual written agreement of the Consultant and POLB. These Guidelines are written to include a wide range of services, while most contracts will include only a few specific elements or sections. To assist in clarifying which elements are applicable, refer to the Professional Consulting Guidelines Checklist at the end of this document. Only the items marked in the checklist will be applicable to the subject contract.
EXECUTIVE SUMMARY

This Guideline is organized to provide the Consultant with a ready reference regarding POLB’s expectation for the conditions of professional consulting services. Each of the sections contain complementary material designed to answer specific questions and provide related material to assist the Consultant in meeting these expectations. The Consultant shall perform Work in accordance with these guidelines. It is the Consultant’s responsibility to fully comprehend the material in this Guideline, follow the processes and procedures outlined, and ask questions if something needs clarification.

A brief description of the sections of this Guideline follows:

Definitions - In the engineering field, many words have multiple meanings. In this section we clarify POLB’s understanding and use of engineering terminology.

Project Administration, Management and Coordination - This general description of POLB structure, how we operate, and how we would like the Consultant to operate within this system is designed to enhance coordination. Through the creation of a sound Project Management Plan the team can ensure clear communication and understanding of the project requirements and roles and responsibility of each member of the team including POLB contract administration staff.

Project Fees and Payments - It is POLB’s express intent to pay Consultants for services received in a timely manner. To accomplish this task, uniform and complete invoices are necessary. Included in this section is a definition of the services and items that can and cannot be invoiced to POLB. Conformance with these requirements will ensure timely and accurate payment.

Environmental Issues - POLB regularly needs to consider environmental issues and how they impact our engineering projects. This section defines and most significant and most frequent areas of environmental interaction.

Survey and Base Mapping - POLB reserves the right to do its own surveying and will supply the Consultant with the surveys and maps used to define the Project area. It is critical that interactions between the survey and mapping staff and the Consultant are precise and accurate.

Studies - Studies are important because accurate information is required to produce efficient and safe projects. In this section standards are set for the kind of information that POLB requires.

Permit Preparation Assistance - The engineering expertise required to develop a project is also required to permit the project. This section describes the input requirements from the Consultant to assist the permit preparation process.
General Requirements for Consulting Services - POLB has a number of general engineering requirements with which the Consultant shall compile. This section defines these requirements which are the foundation of a successful project.

Design Services - In this section, we describe the phasing of design work, the scope of services provided in each of the phases of work, and the requirements for design deliverables to POLB.

Specification - The requirements for providing POLB with specifications and the necessary bid documents is described in this section.

Drafting - POLB requires all Drawings to adhere to POLB standards for format and content. It is the Consultant's responsibility to ensure drafting follows these Guidelines and the Engineering Bureau CAD Drafting Standards (see attachment).

Construction Management Services - This section defines the requirements for Construction Management Services as required by POLB. Construction Management Teams for any given project may be comprised of both Consultant and POLB staff.

Pre-Fabricated Building Design - This area of engineering requires special considerations. It is a combination of traditional design work and design-build. It is very important to understand the POLB defined responsibilities when doing pre-fabricated building design.

OTHER INFORMATION:

Small Business Enterprise Program (SBE) - Almost all POLB projects are subject to POLB Small Business Enterprises (SBE) Program, which is explained in Section 9-D, Small Business Enterprise Program Requirements.

Attachments - Listed in this section are documents that supplement this Guideline and are formatted as links to the POLB web page.

Information and Work Product - All designs, sketches, drawings, specifications, data, and other information, in whatever form or medium, compiled or prepared by Consultant in performing its services or furnished to Consultant by City of Long Beach (City) shall be the property of the City. The City shall have the unrestricted right to use or disseminate this information without payment of further compensation to Consultant. Copies of Consultant’s work product may be retained by Consultant for its own records.
GUIDELINES CHECKLIST

Project Name: ____________________________________________

Project Identifier:________________________________________
HD ________  HD-S ________
HDI-S ________ HA___________

The Consultant shall deliver the items checked below under the contract for consulting services. All items are to be accomplished and delivered in accordance with the Port’s Guidelines for Professional Consulting Services.

MANAGEMENT
☐ Project Management Plan
   Subsidiary Plans:
   ☐ Communications Management Plan
   ☐ Quality Control Plan
   ☐ Risk Management Plan
   ☐ Value Engineering Plan
   ☐ Waste Management Plan
   ☐ Other Study - (specify):
   ☐ Monthly Status Report
☐ Use of Primavera Expedition Requirement
☐ Federally Funded (requires compliance w/Fed regs)

STUDY/ ANALYSIS
☐ Hydraulics & Hydrology Study
☐ Feasibility Study
☐ Geotechnical Exploration/Report
☐ Tunnel Underground Classification
☐ Other Study - (specify):

DESIGN/ DRAFTING
☐ Design
☐ Drafting
☐ Specifications: if checked, indicate whether:
   ☐ CSI    ☐ Non-CSI
☐ Construction Support Services
☐ Wharf Design Criteria Guide

SURVEY
☐ Design Survey
☐ Construction Survey

DELIVERABLES
☐ Conformed As-Bid Drawings (must include digital copies)
☐ Complete set of AS-Built Drawings (must include digital copies)
☐ Complete set of ASCII Survey Files (must include digital copies)
Conformed Specifications (must include digital copies)

SPECIAL REQUIREMENTS
☐ Compliance with Fed DBE Requirements
☐ Monthly Utilization Report for SBE-3P

CONSTRUCTION MANAGEMENT SERVICES
☐ Constructability Review
☐ Partnering
☐ Construction Surveying
☐ Traffic & Public Safety Review
☐ Construct Sched Services, if checked, select SW:
   ☐ MS Project
   ☐ Primavera Version 3.1 or later
☐ Other (Specify):
☐ Construct mgnt of on-call laboratory services
☐ DBE/MBE/WBE
☐ Caltrans procedures
☐ Federal Contract Compliance
☐ Temp Facilities & Const Field Office
☐ Consultant provides telephone
☐ Provide Deputy Inspectors for:
   ☐ Welding
   ☐ Structural steel
   ☐ Masonry
   ☐ Concrete
☐ Other - (specify)
# 2 DEFINITIONS

Whenever in the Agreement, or elsewhere in the Attachments or Amendments to the Agreement, the following words and defined terms are used, the meaning will be as follows, applicable to both the singular and plural forms thereof:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>The fully executed Contract for Professional Consulting Services entered into between POLB and the Consultant for the completion of the Work.</td>
</tr>
<tr>
<td></td>
<td>The Agreement includes all Attachments and Amendments to the Agreement, and represents the entire integrated agreement between POLB and the Consultant. It supersedes all prior discussions, negotiations, representations, or agreements pertaining to the Work, whether written or oral. The term “Agreement” is also referred to as “Contract.”</td>
</tr>
<tr>
<td>Amendment</td>
<td>A written document entered into between POLB and the Consultant on or after the date of the execution of the Agreement which authorizes and directs any one or any combination of the following: an addition, deletion, or revision in the Work; an adjustment in the Contract Time or Contract Amount; or other change as may be required.</td>
</tr>
<tr>
<td>As-Bid Drawings</td>
<td>The complete set of conformed drawings as issued shortly after bids are received, incorporating all changes up to the date of bid opening.</td>
</tr>
<tr>
<td>As-Built Drawings</td>
<td>Project Drawings modified by the Consultant after completion of the Work to incorporate all changes issued by amendment or changes in actual construction that are different from the original as-bid drawings.</td>
</tr>
<tr>
<td>Assumptions</td>
<td>The representation of an unknown element or quantity as a fact, by estimating or choosing a set of conditions or a likely value, for the purpose of achieving a related solution.</td>
</tr>
<tr>
<td>Base Map</td>
<td>A map with fundamental information that allows the Consultant to locate and orient the project. Generally, it is a background map used to create new plan construction drawings. This map can be obtained in computer file format by submitting a completed Design Request Form to the Engineering Design GIS Section.</td>
</tr>
<tr>
<td>Basis of Design Document</td>
<td>A document that describes the basis for the design of the Project including, but not limited to, the following: a description of the Project, scope of work, permits, codes, standards, assumptions, design criteria, existing conditions, research sources, schedule, and budget.</td>
</tr>
</tbody>
</table>
**Betterments**  
An improvement that adds to the value of the facility or property at a cost, but which is not required or normally provided for the utility or functionality of the facility or property.

**Bid Addendum**  
A material change to the Construction Bid Package that is formally issued by POLB prior to the bid opening.

**Bid Clarification**  
An explanation of an item or items in the Construction Bid Package that has been identified as unclear to the potential bidders, prior to the bid opening. A Bid Clarification is not a change to the Construction Bid Package.

**Bid Phase Support**  
Assistance provided by the Consultant to assist POLB during the bidding phase of a construction Project.

**Bid Documents**  
A compilation of documents, exclusive of the Drawings and Technical Specifications, which include: forms to be used in connection with the construction contract; the advertisement for bids; the instructions to bidders; the supplementary instructions to bidders; proposal and bid forms; and the General and Special Conditions.

**Budget**  
A Work Breakdown Structure (BS) based estimated cost of the Project. Budget includes all cost elements required for completion of the Project, including the following: investigations, payments to regulatory bodies or agencies, environmental assessment and remediation, right-of-way or property costs, permits, design, other professional services, laboratory testing, construction, Construction Management, inspection, contract management, Construction Support Services and contingency.

**CAD Manual**  
See Engineering Bureau Computer-Aided Design (CAD) Drafting Standards.

**Cash Flow**  
The expected or actual flow of money for an activity over time, including both expenditures and revenue, broken down on the basis of the WBS.

**Chief Harbor Engineer**  
The Chief Harbor Engineer of the Harbor Department, City of Long Beach, and such agents as are authorized to act on his behalf.

**Clarification**  
A modified description of the Work that clarifies a previous description. A Clarification is intended to provide increased understanding of the Work or other element of the Project without making any change in the Work.

**Client**  
Generally, that entity that has caused POLB to initiate the Project and which stands to directly benefit from the Project and the Work. Many times this entity is also referred to as the “Tenant” or “Customer.”
City
The City of Long Beach or its designated representatives, which include the various departments and divisions of the City. The term “City” is also sometimes referred to and may be also designated as “POLB” or “Owner.”

City Inspector
The individual designated by the City of Long Beach Department of Planning and Building to inspect construction activities for conformance with the Permitted Project Drawings and applicable codes and standards.

Additionally, for buildings or facilities within the City of Los Angeles, that individual designated by the City of Los Angeles to inspect the construction conformance with City of Los Angeles approved construction documents, codes, standards, and regulations.

Codes
A statement of principles or rules that are published by a recognized professional body for the purpose of achieving standardization within an area or areas of engineering expertise. Codes may have the force of law.

Communication Plan
The Consultant's method and procedures for documenting, transmitting, and storing communication items of significance to the Project including: minutes of meetings, correspondence, submittals, background data, site investigations, communications with utility owners, responses to regulatory agency questions and comments, responses to questions of bidders, and other material as may be applicable to the Project. The Communication Plan is a component of the Project Management Plan.

Conditional Award Date
Date the Board of Harbor Commissioners authorizes the conditional award of a contract to a contractor or consultant.

Constructability Review
A structured, independent (out-of-office) review that shall include a review of Specifications including General and Special Conditions, Drawings, technical specifications, systems, details, and procedures to ensure that the Project can be constructed as designed within the specified construction Schedule and Budget. Details shall be examined for clarity and application. The Consultant shall provide the results of the Constructability Review to the Director of Construction Management prior to the Final Design submittal.

Construction Bid Package
The final integrated set of documents that provide a comprehensive description of the Project, including background material that is not part of the Construction Documents. The Construction Bid Package includes the final POLB approved Specifications, Drawings, and all background support material that is known to POLB.
**Construction Contractor**  The individual, partnership, firm, corporation, joint venture, or other business entity with which the City has entered into an Agreement to provide construction services. The term “Construction Contractor” is also sometimes referred to and may also be designated as “Contractor,” and includes the Contractor and all of its representatives and Subcontractors.

**Construction Documents**  The Construction Documents consist of the Project Drawings and Specifications, including all referenced documents.

**Construction Inspector**  An authorized representative of the Chief Harbor Engineer who is assigned immediate charge of the inspection of the construction of the Project.

**Construction Manager**  The person or entity in responsible charge to perform Construction Management.

**Construction Management**  Services provided during pre-construction, construction, and post construction phases as specified in the consulting contract. Services include the following: administrative supervision of construction, constructability review of Drawings and Specifications, monitoring and verification of the construction contractor’s safety and quality control programs, tracking of contractor submittals, verification of construction materials and quantities as appropriate when given the measurement and payment conditions in the Specification, approval of progress payments, coordination of schedule, anticipation and negotiation of change orders and claims, and coordination of physical interferences with other POLB or third-party projects. Construction Management may also include construction inspection. Construction Management provided by POLB or its designated agent does not relieve the construction Contractor from responsibility for the timeliness, safety, quality, or completeness of construction.

**Construction Packaging Plan**  A plan that compiles the various elements of the Project or Program into discrete and separate construction packages to provide a mechanism for preparing documents for the construction bid process.

**Construction Phasing Plan**  A plan that identifies the phasing for the construction of a Project or Program, or elements thereof, indicating which portions of the Project or Program are constructed in which locations and in what order. The intent of the Construction Phasing Plan is to coordinate construction activities in a manner that will facilitate construction and maintain operations of existing facilities or services to the greatest extent possible.
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<td><strong>Construction Support Services</strong></td>
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<td><strong>Design Criteria</strong></td>
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<td><strong>Design Milestones</strong></td>
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<td><strong>Digital Survey Data</strong></td>
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Definitions

**Disadvantaged Business Enterprise (DBE)**
A small business that is owned and controlled by a minority or woman and has been certified by the California Unified Certification Program as described in 49CFR26.

**Drawings**
The graphic presentation of the Work, or parts thereof, which indicates the size, form, location, and arrangement of the various elements of the Work. “Drawings” are also sometimes generally referred to and may also be designated as “Plans.”

**Earned Value System**
A system that calculates the value of Work completed by multiplying the measured percent of actual completion of a Work element times the budgeted cost for the Work element.

**Engineering Bureau CAD Drafting Standards**
A document that establishes uniform standards for engineering drawings and electronically produced Computer-Aided Design and Drafting (CAD) submittals. Also referred to as the CAD Standards Manual. The consultant shall use the current version when NTP is issued.

**Environmental**
Relating to the circumstances and conditions, including the complex of physical, chemical, biological, and human factors (such as climate, soil, traffic, and living organisms) that act upon or are a part of an ecological community and influence the wellbeing of that ecological community.

**Estimate - Bid Estimate**
The Consultant's best WBS-based estimate of the cost to construct the Project. The Bid Estimate may or may not be the same as the Cost Estimate. At the time of bid, POLB refers to this engineer's estimate as the “Engineer's Opinion of Probable Construction Cost (EOPCC)”.

**Estimate - Budget Estimate**
A WBS-based preliminary estimate of the cost of all elements of a Program or a Project including: planning, permitting, property acquisition, engineering, investigations, construction, administration, and an appropriate contingency. The Budget Estimate of individual elements of a Program is used to develop the Program Budget. Refer to the Finance Division Program/Project Budget Policy (attached).

**Estimate - Cost Estimate**
The Designer's best professional estimate of the Fair Market Value of the Construction Project. The cost information in the Cost Estimate shall be based on POLB Work Breakdown Structure and adjusted to reflect construction costs effective the date that bids are opened. POLB assumes the accuracy of this estimate to be -5% to +10% of the final constructed value. The Consultant shall provide the Project Cost Estimate at the Final Design submittal.
**Existing Conditions**  Conditions that exist at the time of the start of the project or at any time during the project, including both physical and environmental conditions, which may affect the design or construction of the project.

**Fair Market Value**  The purchase value of an item to a buyer based on the existing general market conditions without regard to special circumstances of individual sellers of that item.

**Feasibility Study**  A preliminary study generally conducted as the first element of the Work. The Feasibility Study investigates: critical issues to determine if the Project is possible as defined, defines constraints and opportunities, develops a Budget Estimate, develops a Preliminary Schedule for major activities, and develops a graphical layout of the concept of the Project.

**File Management System (FMS)**  The software system utilized by POLB for storage and retrieval of drawings and other engineering-related data is Project Wise.

**General Conditions**  That section of the Specifications that defines the contractual terms and conditions of the construction of the Project. The term “General Conditions” is also sometimes referred to and may be also designated as the “General Conditions.” POLB provides this document.

**Guide Specification**  A generic template or an actual specification on file with POLB, which shall be used as a guide to the format and content of Specifications.

**Hazardous Substance**  Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties that are described as hazardous by any Federal, California, Long Beach, or Los Angeles City or County law, code, or regulation. “Hazardous” is also sometimes referred to and may also be designated as “Hazardous Substances,” “Hazardous Materials,” or “Hazardous Waste.”

**Hazardous Material Abatement**  Hazardous Material Abatement is the proper removal of any asbestos-containing material (ACM), materials coated with lead-based paint, and fluorescent light fixture ballast that may contain polychlorinated biphenyls (PCBs) prior to any renovation or demolition work. All Hazardous Material Abatement work must be performed in accordance with the requirements set forth by the State of California, Cal-OSHA, Title 8; California Code of Regulations, Section 1529; as well as all other applicable Federal and State regulations, local codes, and ordinances.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incidental Work</strong></td>
<td>Any Work, materials, or equipment, other than that specifically defined in the scope of work, which is reasonably required to produce the intended result.</td>
</tr>
<tr>
<td><strong>Laboratory</strong></td>
<td>The laboratories designated by POLB, including either private or public laboratories, which are authorized by POLB or permitting agency to test elements of the construction of the Project, soils, or materials.</td>
</tr>
<tr>
<td><strong>LEED®</strong></td>
<td>Leadership in Energy and Environmental Design, a “green” building rating system developed, registered, and promulgated by the United States Green Building Council.</td>
</tr>
<tr>
<td><strong>Meta-data</strong></td>
<td>Additional information on the subject data such as fieldbook information, utility drawings, and/or hard copy drawings.</td>
</tr>
<tr>
<td><strong>Operator</strong></td>
<td>The Operator is an entity that moves cargo on a pier or POLB terminal. The Operator may either be a POLB Tenant or be hired to perform services for the Tenant.</td>
</tr>
<tr>
<td><strong>Outline Specification</strong></td>
<td>A list of specification sections that are anticipated for the Project. The list includes applicable Guide Specifications, and indicates where new specifications will be developed.</td>
</tr>
<tr>
<td><strong>Owner</strong></td>
<td>The City of Long Beach Harbor Department. The term “Owner” is also sometimes referred to and may be also designated as “POLB” or “City.”</td>
</tr>
<tr>
<td><strong>Permit Preparation Assistance</strong></td>
<td>Services provided by the Consultant to assist POLB in obtaining all necessary regulatory permits related to the Project, including preparation and submission of applications through final issuance of permits.</td>
</tr>
<tr>
<td><strong>POLB</strong></td>
<td>The City of Long Beach Harbor Department acting by and through the Board of Harbor Commissioners. The term “POLB” also includes all of the Harbor Department's officers and other authorized representatives. The term “POLB” is also sometimes referred to and may be also designated as “City” or “Owner.”</td>
</tr>
<tr>
<td><strong>POLB Construction Manager</strong></td>
<td>That individual who is designated by POLB to oversee the Contractor’s Work in constructing the project. For construction management consulting contracts, POLB's Director of Construction Management or his designee will be the Contract Manager for administration of the contract.</td>
</tr>
<tr>
<td><strong>POLB Construction Inspector</strong></td>
<td>A POLB employee designated to inspect construction activities for conformance with the Project Contract Documents and applicable codes and standards.</td>
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*Definitions*
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<tr>
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<td><strong>POLB Designated Manager</strong></td>
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<td><strong>Program</strong></td>
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<td><strong>Project Engineer</strong></td>
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<td><strong>Project Management Plan</strong></td>
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<td><strong>Provide</strong></td>
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<td><strong>Punch List</strong></td>
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Quality Assurance

The process of monitoring the implementation of the Quality Control Plan for the purpose of assuring Quality in the finished product. A senior-level individual not directly connected to the Project shall provide Quality Assurance. A report of the findings of this Quality Assurance effort shall be provided to POLB at submittal of final design. Quality Assurance is considered to provide a standard level of professional service.

Quality Control Plan

A plan that describes the Consultant's methods and procedures for controlling the quality of the Work. The Quality Control Plan shall provide for Quality Assurance. A Quality Control Plan is considered to provide a standard level of professional service and should be demonstrated by the Consultant's standard in-house quality control procedures.

Quality Control Review

A professional review of the Construction Documents performed to ensure that: the Construction Documents accurately reflect the Project Scope of Work; the Basis of Design has been clearly documented and conforms to the design concept and intent; and the design calculations have been correctly completed. Senior level design professionals, independent from the design team, shall conduct the Quality Control Review.

Records Center

POLB's main repository and ultimate manager of data.

Relocation

The physical removal of material, equipment, and/or facilities from one location to another location for the purpose of maintaining the operation or use of the material, equipment, and/or facilities for same purposes as from the original site without benefit of betterments.

Research Sources

Repositories of information pertaining to POLB, POLB facilities, or facilities that serve POLB or are on POLB property. The information stored in Research Sources shall be fully investigated by the Consultant and used to prevent unforeseen discovery of materials, equipment, or other facilities that affect the project.

Re-Design

Design work that develops an alternative or modification to a design that has been previously completed. Elements of the previous design are generally re-utilized in the re-design effort.

Re-Construction

Construction work that modifies or reconstructs a facility or structure that is already in existence, utilizing part of the existing facility or structure in the construction of the alternative or modified facility or structure.
<table>
<thead>
<tr>
<th><strong>Retention</strong></th>
<th>A portion of a progress payment withheld pending a particular deliverable or milestone. POLB, at the discretion of the designated Manager, may retain a portion of any progress payment under the Agreement.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Management Plan</strong></td>
<td>A written plan that identifies project risks, as far as can be known, assesses the project impact of those risks, assigns responsibility and ownership of identified risks, and develops mitigations in accordance with POLB’s Risk Assessment Manual.</td>
</tr>
<tr>
<td><strong>SBE</strong></td>
<td>See Small Business Enterprise.</td>
</tr>
<tr>
<td><strong>Schedule</strong></td>
<td>A Schedule of the Work that, at a minimum, contains those elements of POLB generic Work Breakdown Structure which are applicable to the Project, and defines all critical milestones.</td>
</tr>
<tr>
<td><strong>Scope of Work</strong></td>
<td>A narrative description of the elements of Work that define the project to be completed by the Consultant.</td>
</tr>
<tr>
<td><strong>Small Business Enterprise (SBE)</strong></td>
<td>An SBE is a business that is independently owned and operated, and conforms to certain size criteria that are based on a firm’s annual receipts earned in its primary field, number of employees, and type of work. POLB has adopted the U.S. Small Business Administration (SBA) standards. Visit the regional SBA website for more information: <a href="http://www.sba.gov/ca/la">www.sba.gov/ca/la</a> Refer to POLB website for complete standards at <a href="http://www.polb.com/sbe">www.polb.com/sbe</a>.</td>
</tr>
<tr>
<td><strong>Small Business Enterprise Program</strong></td>
<td>POLB’s established program for encouraging participation of Small Business Enterprise (SBE) and Very Small Business Enterprise (VSBE) entities in contracting opportunities at POLB. See POLB website at <a href="http://www.polb.com/sbe">www.polb.com/sbe</a>.</td>
</tr>
<tr>
<td><strong>Special Conditions</strong></td>
<td>That portion of the Specifications which amends or supplements the General Conditions in a manner specific to the Project. The term “Special Conditions” is also referred to and may be also designated as “Supplementary Conditions.”</td>
</tr>
<tr>
<td><strong>Special Deliverables</strong></td>
<td>Deliverables specified in Section 4.0, for which compensation over and above the hourly rate will be considered if specified by POLB designated Manager in the Professional Services Guidelines Checklist, as applicable to the particular contract.</td>
</tr>
</tbody>
</table>
Definitions

**Specification**
A document, usually bound, which contains or refers to the bidding requirements, forms to be used in connection with the construction contract, instructions to bidders, supplementary instructions to bidders, General and Special Conditions, the bid form, sample forms, Technical Specifications, and all other Contract Documents existing as of the day of first publication of the advertisement for bids.

**Stamp**
The stamp of a Professional Engineer, Architect, or Landscape Architect currently registered in the State of California who is qualified and regularly and customarily engages in the technical discipline of the Work, which is approved by the stamp. May also be referred to as “Seal.”

**Stamped**
The impression or inked mark of the Stamp including the original signature of the individual registered by the Stamp. May also be referred to as “Signed and Stamped as Signed.”

**Standards**
A statement of principles or rules that are published by a recognized professional body for the purpose of achieving standardization within an area or areas of professional expertise. Standards may have the force of law.

**Study**
An investigation that shall result in the acquisition of knowledge through the analysis of a proposed Project or issue. At the completion of the Study, the Consultant shall provide POLB with a written report.

**Sub-consultant**
A Sub-consultant is an individual or a business entity which has a direct contract with the Prime Consultant to perform a portion of the Work. The term “Sub-consultant” means and includes the Sub-consultant and the Sub-consultant's authorized representatives.

**Substantial Completion**
When the project is contractually complete, fit for safe operation for the purpose intended, code compliant, permits signed, and occupancy certified; however, there may remain a punch list of relatively minor items to be fixed prior to final acceptance by POLB.

**Supplier**
A vendor, purveyor, distributor, or otherwise described business or individual which supplies or provides material or equipment used in the performance of the Work.
Definitions

**Technical Specifications**
Written technical requirements of the Project design that may include, but are not limited to, descriptions of materials, equipment, construction systems, standards, quality of workmanship, measurement for payment, method of payment, and other requirements which govern the quality and performance of the construction of the Project.

**Tenant**
The business entity that holds a lease or other prescribed rights with POLB for the use of POLB Property.

**Timely**
The need for special attention to assure a short duration for an element of Work. A Timely response provides the requested information within a time frame that allows the application of the information without adversely affecting the Work schedule.

**Tunnel**
An underground passageway 30 inches in diameter or greater, excavated by employees working below the earth's surface, that provides a subterranean route along which employees, equipment, or substances can move; other than passageways excavated by mine or quarry operators in connection with such operations. For the purpose of safety orders, “tunnels” include shafts, raises, underground chambers, and premises appurtenant thereto.

**Utility Relocation Plan**
A plan for the relocation of utilities, as required, for the successful completion of the constructed Project that includes text and Drawings which: identify all utilities; identify the point of contact at each utility; and show both the existing and new location for the utility. Also included is a Cost Estimate and Schedule for each relocation with the name, address, and telephone number of the appropriate contact person.

**Value Engineering**
Value Engineering (VE) is a formal, structured review of the Project concept and intent, as well as the Scope of Work and Basis of Design, to examine cost effective design and construction options, energy efficiency options, and options with decreased lifecycle cost. A report of the results of the VE review shall be submitted to POLB within a time frame specified by the POLB Contract Representative shall include both a description of possible changes to the design and the life-cycle cost savings of the associated change. VE need not be completed using personnel certified as Value Engineers or Certified Value Specialists, provided a standard professional VE analysis format is followed as defined in the VE Plan.
Value Engineering Plan  
A plan that describes the Consultant’s methods and procedures for conducting structured VE by senior level personnel that are independent of the Consultant’s design team and that include all design disciplines that are required by the Project.

Very Small Business Enterprise (VSBE)  
An SBE that meets the maximum annual gross revenues consistent with the State of California’ Department of General Services’ “micro-business” designation. Refer to POLB web site for full details at www.polb.com/sbe.

Waste Management Plan (WMP)  
A written plan to track the amount of construction and/or demolition debris diverted or disposed during the life of a construction project. This has to be reviewed and approved by the City of Long Beach Department of Planning and Building. See (L.B.M.C. Chapter 18.67).

Wharf Footage Mark (WFM) and Row/Bent Number  
Wharf and Pile location identification number placed on the plan by the designer, based on wharf stationing and pile location, to be installed by the contractor. See Wharf Design Criteria Guide for details. Contact the Design/Structural Group for a plan review.

Work  
Work shall mean those activities undertaken by a Consultant to provide a completed product that fully and completely defines the Project and is the result of furnishing all labor, materials, equipment, and incidentals necessary to the successful completion of the product which are required by or reasonably inferable from the Agreement, including all materials and equipment to be used to provide the product, as well as all other obligations imposed on the Consultant by the Agreement.

Work Breakdown Structure (WBS)  
A grouping of defined project elements, which organizes and defines the scope of work for a project. Each descending level of the WBS represents an increasingly detailed definition of a project element. POLB of Long Beach has a defined generic WBS from which a project-specific WBS shall be developed.
3 Project Administration, Management, and Coordination

A POLB Engineering Bureau Administrative Organization
POLB of Long Beach Engineering Bureau is administratively organized on the basis of Divisions and Sections that are defined by a major discipline of work. Within these Divisions and Sections, individuals have responsibility for the professional management of people, equipment, and facilities. A POLB Engineering Bureau Organization Chart, showing the Divisions, is attached at the end of this section (Figure 3-1).

B POLB Engineering Bureau Project Organization
Some projects undertaken by POLB are managed on a project organization basis. Each project is assigned to a POLB Manager, and POLB Engineering Bureau staff are assigned as required to the project to manage elements of the work or to conduct various portions of work as appropriate to the specific project. An individual’s project-related responsibilities are project dependent and may create a different hierarchy than is apparent in the administrative organization chart. POLB project organization chart shall be defined at the beginning of each project.

C Project Management Plan
Upon request of POLB designated Manager and before initiating Work, the Consultant shall produce and submit a Project Management Plan that shall consist of the following:

1) The intent, goals, and objectives of the Project

2) A description of the Consultant's organization including the relationship with any sub-consultants, and including the identification of all discipline leaders;

3) A description of POLB’s and the Consultant’s responsibilities on the Project;

4) The role of the Consultant's Project Manager;

5) The responsibilities of each discipline leader;

6) The address, telephone numbers, fax numbers, and e-mail addresses for all key team members;

7) A Work Breakdown Structure (WBS), broken down to a level acceptable to the designated Manager, defining the individual responsible for each task;

8) A WBS-based estimate of the Budget and Cash Flow for the Project;

9) A WBS-based cost (money) resource loaded Schedule for the Project defining all significant milestones;
3.0 Project Administration, Management, and Coordination

10) The method to be used by the Consultant for Budget and Schedule control;

11) The method to be used by the Consultant for measuring the actual progress of the Work (e.g. earned value system) in comparison to the schedule and expended budget;

12) The Consultant's Quality Control Plan (including Quality Assurance);

13) The Consultant's Communication Plan;

14) The Consultant's Value Engineering Plan;

15) The Consultant's Waste Management Plan; (See attachments L.B.M.C. Chapter 18.67)

16) A list of Work products to be submitted by the Consultant to POLB (deliverables or submittals) including the date to be submitted and indicating the time allowed for review of each submittal;

17) Project Standards, Assumptions, and Design Criteria for design and drafting.

18) The Consultant’s Risk Management Plan

D Meetings
1) The Consultant's Project Manager shall meet with POLB designated Manager as required to coordinate the progress of the Work and to discuss Project status including: the progress of the Work; the Schedule for the Work; the current cost of the Work; the estimated cost to complete the Work, and critical issues including any anticipated changes to the Scope of Work, Schedule, or Cost Estimate.

2) The Consultant shall be responsible for preparation and distribution of meeting minutes for all Project related meetings attended by the Consultant and shall manage action items in a timely fashion. Responsibility for each action item shall be assigned.

3) POLB has the right to rely on the Consultant and the Consultant's experience to properly estimate, and include in the Consultant's cost proposal for the Work, the number of meetings, the entities with which meetings will be required, and the appropriate level of effort for the successful completion of this Project.

4) Meetings may include, but are not limited to, communication with the following: parties or entities as necessary to research the site conditions or validate design conditions: State or Federal agencies or representatives; various departments of the City of Long Beach, the City of Los Angeles, and the County of Los Angeles; POLB tenants; a POLB related business; adjacent property owners and/or businesses;
community and/or special interest groups; various parties for informational meetings, survey coordination meetings, and base map coordination meetings; terminal security services; utility services, including gas, water, sewer, telephone, data, and electrical services; any of the various railroad companies; railroad operators such as Pacific Harbor Line; and other engineers and contractors working in the project area.

E Monthly Status Report
1) The Consultant's Project Manager shall provide to POLB designated Manager a monthly Status Report, due by the tenth (10th) day of the following month.

F Contract Administration
1) POLB Administrative Support:
   a) Various POLB administrative staff shall manage preparation of a consultant’s Professional Consulting Services contract specifying the Scope of Services; method of payment, including verification of insurance provisions; review of invoices; and processing of amendments.
   
   b) Various POLB administrative staff shall manage preparation of advertisement for construction, addenda preparation and distribution, construction bid opening, verification of bonds and insurance, preparation of award and Notice to Proceed documents, preparation of all change orders, assembly of contract documents including addenda and change order documents, payment of construction contractor payments, and contract closeout.

2) Release of Information:
   a) The Consultant shall give no information concerning the Project to anyone other than to POLB personnel or to a permit agency representative as required by the permit process; or as directed by POLB designated Manager. The Consultant shall not release any information pertinent to the Project for publication, public speeches, or in any other manner without first obtaining a written release from POLB.

3) Access to POLB Property:
   a) Prior to going on POLB property, the Consultant shall coordinate with the appropriate POLB designate Manager, POLB Property Manager, or Terminal Services Representative, as identified by POLB designated Manager.
   
   b) Access to restricted Marine terminals may require a Transportation Workers Identification Credential (TWIC) card. Consultant shall be solely responsible for obtaining and paying for such credential. POLB will not pay for Consultant’s TWIC certification.
4) Out-of-Scope Items:

a) Should the Consultant feel that POLB is requiring the Consultant to provide Work that is not within the Scope of work as defined in the Agreement, the Consultant must notify POLB designated Manager immediately and in writing and describe the work and the additional cost that the Consultant feels is out of scope.

b) It is the Consultant's sole responsibility to assure that no additional services beyond the Scope of Work as defined in the Agreement shall commence, without written authorization of the Director of Program Management or Design for consultant design services contracts or the Director of Construction Management for construction management services contracts.

c) No Work defined in the Scope of Work of the Agreement shall be delayed by the Consultant's request for additional fee for a change or addition in the agreed Scope of Work unless so directed by POLB designated Manager in writing.

d) No work shall be performed by the Consultant beyond the terms of the agreement.

e) Retroactive requests additional fees not previously authorized in writing by POLB shall neither be considered nor approved.
Engineering Bureau Organization Chart Figure 3-1
4 PROJECT FEES AND PAYMENT

A Fees:

1) Labor-Related Costs
   a) Labor-related costs may be handled in either of two ways: using billing rates by labor category; or using direct labor rates times a multiplier. The method utilized will be determined during contract negotiations and recorded into the Contract.
   b) Billing rates shall include direct labor costs (averages or ranges by grade), payroll additives, overhead (including general and administrative expense), and profit. The Consultant shall show POLB designated Manager the basis for calculating the billing rates, i.e., assumed markups for overhead and profit as listed in the Contract rate schedule.
   c) If a multiplier is used, the Consultant shall show POLB designated Manager, if requested, its basis and content, e.g., direct labor costs (averages or ranges by grade), payroll additives, overhead (including general and administrative expense), and profit. The multiplier and basis of calculation shall conform to the methodology specified in the contract.
   d) POLB designated Manager may request the Consultant to provide an independent audit of overhead conducted in accordance with generally accepted accounting practice and Government auditing standards issued by the Comptroller General of the United States. The information provided shall be sufficient for POLB to verify that items included in the overhead rate are not billed as Other Direct Costs (ODC).
   e) Overhead costs shall not be billed to POLB for administrative or support services provided by POLB or others.
   f) Administrative Labor for the preparation of Consultant invoices shall not be billed to POLB.

2) Sub-consultant Markup
   a) POLB recognizes the additional risk and liability borne by the Consultant when accomplishing a portion of the Work through Sub-consultants. In recognition of this risk, POLB will allow the Consultant a markup on Sub-consultant costs. This markup shall not exceed 5%, with the actual markup to be agreed upon...
by POLB and the Consultant based on factors such as the size of Consultant’s contract, type of work to be subcontracted, level of risk to be assumed, amount of subcontracted work relative to full contract value, and actual costs to administer the subcontract.

b) Markup is allowed only on first tier subcontractors.

3) Other Direct Costs (ODCs)
   All allowed ODCs shall be approved by POLB designated Manager and included in the Contract fee schedule of the Agreement. Guidelines for allowed ODCs are as follows:
   a) ODCs shall be reimbursed at cost (0% markup).

   b) For ODCs related to travel, see “Travel Expenses” below.

   c) ODCs shall not include charges for computer use, including: CAD; reproduction; any form of administrative cost; or the cost of telephone or facsimile equipment or use.

   d) If the Consultant has standard rates for ODCs, the Consultant shall show POLB designated Manager the basis for establishing the standard rates.

4) Travel Expenses
   a) Allowable Expenses
      (1) Reimbursement will be made for items of expense which are clearly incident to the business trip. These include travel transportation costs, meals, baggage transfers, business related facsimile and telephone expenses, and parking fees.

      (2) Other expenses such as typing or reproduction services will be reimbursed if clearly shown to be reasonably and properly business related.

   b) Travel from other Offices
(1) If, to complete the Work, the Consultant requires assistance from personnel that work for the Consultant, or are working under Sub-Contract to the Consultant, and are located at other than the office location where the Work is accomplished, there shall be no compensation for travel associated with work done by personnel located away from the worksite location, unless specifically agreed upon by POLB and Consultant during Contract negotiations.

c) Travel by Airplane

(1) If airline or other form of transportation is approved by POLB where various classes of travel are available, only “economy” or “coach” class expenses will be allowed on domestic flights unless approved in advance in writing; for international flights “business” class will be allowed.

(2) If an airline receipt for a higher class ticket is submitted, the reimbursement will not exceed the “coach” or “economy” class rate for domestic flights, or the “business” rate for international flights.

d) Hotel Expenses

(1) In the selection of hotels and hotel rooms, POLB will only pay reasonable costs, considering suitability and convenience to the work at hand.

(2) Employees who share their hotel rooms with one or more members of their family will be reimbursed at the single occupancy rate for that room.

(a) If employees indicate on their expense report that there is no difference in the single and double occupancy rates, it must be supported by a statement from the hotel or another source, such as a convention brochure;

(b) If no such supporting statement is provided, a standard 10% of the double room rate will be reimbursed by the traveler for family members.

(3) Valet and laundry expenses will not be allowed except when warranted by the duration of the trip, traveling conditions, or other special
circumstances. Such expenses will be allowed only when the stay exceeds one week (7 calendar days).

e) Meals

(1) POLB will reimburse project team members for meals only when necessary, project-related, in reasonable amounts, not to exceed $64 a day, and only for the meals of project team members. Maximum gratuity is 15%. An itemized receipt is required.

(2) No reimbursement for alcoholic beverages will be accepted.

f) Mileage Reimbursement Policy

(1) Local mileage charges shall be paid only if prior approval is received from POLB designated Manager and, if approved, shall be equivalent to the City employee reimbursement rate policy reflecting the standard mileage rates for that year.

(2) Mileage may be reimbursed for project specific activities that occur away from the Consultant's place of Project business and to meetings set by POLB designated Manager.

(3) If the primary business location for an individual is in a field office away from the Consultant's primary office location, mileage will not be paid for travel to the field office but may be paid from the field office to meetings set by POLB designated Manager.

g) Exceptions to any of these policies may only be made with prior written approval from POLB designated Manager.

B Payment:
The Consultant shall be paid by POLB for completed Work as follows:

1) POLB shall only pay for work performed unless advance payment is authorized by an agreement and approved by POLB designated Manager (see appendix for standard format).

2) POLB shall only process invoices that conform to POLB standard invoice format.

3) The Consultant's hourly rates, as defined by the Agreement, shall be applicable throughout the term of the Agreement. The rates shown in the Agreement are inclusive of direct salaries, payroll additives, general and special overhead including all benefits, insurance, and inflation for the life of the Project, and fee or profit.
4) For approved multi-year Contracts, the Consultant’s Fee Schedule shall reflect fees for all years of the Contract.

5) The Agreement does not provide any minimum guaranteed amount of payment to the Consultant.

C Invoice:

1) The Consultant shall provide a monthly invoice (only one original required) for the period from the first day of the month through and including the last day of the month. The monthly invoice shall be due by the tenth day of the following month.

2) All expenses for which reimbursement is being claimed shall be supported by proper documentation whenever possible. Paid hotel bills and transportation ticket stubs are required supporting documentation for such expenses.

3) Certified copies of receipts are required for all other expenses whenever possible.

4) Credit card receipts are not acceptable as documentation.

5) Foreign travel receipts must show U.S. dollar amounts or the conversion rates at time of travel.

6) All invoices shall include a summary sheet that follows POLB standard invoice format, and shall include POLB name of the Project, the name of POLB designated Manager, POLB current billing period, the total billings to date, retention to date (if applicable), the total amount authorized for the contract, percent of contract funds expended, percent of work completed as measured by an earned value system supplied by the Consultant and approved by POLB designated Manager, the Work Order number, the Project Detail Codes, subobject code, index code, and the Contract number.

7) Unless project is subject to Federal DBE requirements, POLB form SBE-3P shall be submitted with each monthly invoice to demonstrate satisfactory progress with the Consultant’s SBE/VSBE Commitment Plan. If a project is subject to Federal SBE requirements, the applicable Federal form shall be submitted monthly.

8) Invoices shall be subtotaled by Task Number and Project Detail Code.

9) The Consultant’s invoices shall include copies of Sub-consultant invoices and complete backup for both the Consultant’s invoice and the Sub-consultant’s invoice.

10) Non-labor expenses shall be itemized, totaled separately (for the current design period and total billings to date) and shall be supported by the original bills, invoices, expense accounts, or other supporting data.
11) Backup for invoicing shall consist of itemization of labor by individual, materials, services and expenses broken down by Work Order and Project Detail Code. The Consultant shall make available upon POLB request copies of individual’s time cards and/or other more detailed invoice backup information.

12) Sub-consultant invoices included as part of Consultant’s invoice shall conform to the same requirements, in the same manner, as required of the Consultant.

D Special Deliverables

If specified as a deliverable in the Professional Services Guidelines Checklist, POLB designated Manager will require that the Consultant’s fee proposal include separate line items for each of these deliverables:

1) Submittal of the complete set of As-Bid drawings to POLB in both hard copy and digital format (3 copies) shall be compensable at a rate to be determined by the Chief Harbor Engineer and incorporated into the Agreement.

2) Submittal of the complete set of As-Built drawings to POLB in both hard copy and digital format (2 copies), conforming to POLB’s standards, shall be compensable at a rate to be determined by the Division Director and incorporated into the Agreement.

3) Submittal of the complete project scope in the form of an InRoads Survey FWD field book, InRoads DTM surface, and an InRoads ALG geometry file that are design accurate and matching final hard copy plans. Additionally, a MicroStation DGN file and any source ASCII files should be delivered, including scanned point cloud data if employed. All of this information should be in accordance with POLB’s current CAD Standards Manual and shall be compensable at a rate to be determined by the Chief Harbor Engineer and incorporated into the Agreement. Submittal of the complete set of Conformed Specifications in both hard copy and digital format conforming to POLB’s standards shall be compensable at a rate to be determined by the Chief Harbor Engineer and incorporated into the Agreement. The digital submittal must be in a writeable Microsoft Word format; submittal in the Adobe portable Data Format (PDF) will not be acceptable.

4) Submittal of the complete set of Conformed Specifications in both hard copy and digital format conforming to POLB’s standards shall be compensated at a rate to be determined by the Division Director and incorporated into the Agreement. The digital submittal must be in a writeable Microsoft Word format. A submittal in the Adobe portable Data Format (PDF) will not be acceptable.
5 ENVIRONMENTAL ISSUES

A General

1) Consultants are responsible to have environmental engineering expertise on their teams for all POLB design, design review, and cost estimating projects and/or contracts. This expertise can be provided via a sub-consultant or by the prime consultant. Consultants are responsible to conduct investigation of any soil, groundwater, and demolition materials that will be encountered, managed, or in any other way dealt with in the project scope. Consultants are responsible to design and specify in the contract documents requirements for abatement, handling, and disposition of contaminated or hazardous materials in accordance with local, State, and Federal regulations as well as related POLB standards. Consultants shall not assume that any of these services will be provided by POLB unless specifically instructed by POLB contract manager for the project.

2) The Consultant shall advise POLB concerning all other environmental constraints to the Project design or construction discovered during Project development.

3) The Consultant shall not specify the use of materials that are currently considered hazardous, or contaminants (such as lead-based paint), or which, based on current information, are likely to be so designated in the future.

4) The Consultant shall immediately report the presence of discovered or suspected contaminated or hazardous materials to POLB designated Manager.

B Hazardous Materials

1) Lead-Based Paint
   a) Cal-OSHA does not generally consider intact painted building materials to be hazardous waste and the general practice is to handle and dispose of construction debris as non-hazardous waste provided the paints are securely adhered to substrates following demolition. Any paint surfaces that become removed from the building material substrate must be handled and disposed of as hazardous waste.

2) Asbestos
   a) Asbestos Notification
      (1) Asbestos-containing construction materials (ACCM) have been identified in certain buildings in the Harbor District. California regulations require written notice to contractors/vendors who work in POLB buildings containing ACCM. Such notice is provided to all consultants and
contractors working under contract to POLB. A copy of the Asbestos Notification Letter is available from POLB upon request.
6 SURVEYING AND BASE MAPPING

A. Field surveying shall be provided by POLB, unless stated otherwise.

B. When making survey requests to the Design Management Division Survey and Mapping Section, the following process shall be followed:
   1) Obtain preliminary Base Map from designated Manager by completing having him complete the on-line Design Service Request Form (DSR)
   2) Visit site and visually inspect to confirm completeness of Base Map.
   3) Note gross missing features and features that appear to be improperly located or identified.
   4) Make and report corrections to the location of missing or improperly located features.
   5) Mark specific areas on blue map where high degree, (i.e. 0.01") of accuracy is required.
   6) Mark areas of plot plan needing additional survey.
   7) Return to Surveys and Mapping Section and check meta-data to determine whether accuracy of plotted data meets job requirements.
   8) Through the POLB designated Manager, submit a Request for Surveying and Mapping Services form (attached) with the plot attached at least 2 weeks in advance of needing the survey initiated.
   9) Final Base Map will be provided in digital form in Mirostation (current version at POLB) in current version of POLB Cad Standards at a scale of 1-inch equals forty (40) feet.

C. Contact the POLB designated Manager for the appropriate mapping system.
7 STUDIES

A Study is an investigation that shall result in the acquisition of knowledge through the analysis of a proposed Project or issue. At the completion of the Study, the Consultant shall provide a written report that includes at least the following elements:

A. Executive Summary that includes elements from each major section of the Study Report as defined in B & G.

B. The intent of the study, including, if applicable, a description of alternatives being evaluated;

C. The applicable codes, standards, design criteria, conditions, permits, and/or assumptions;

D. The analysis methodology;

E. The results;

F. An analysis of the results;

G. Conclusion and recommendation; and

H. An appendix including all back-up information.
8 PERMIT PREPARATION ASSISTANCE

A. With respect to permit applications prepared on behalf of POLB, the Consultant shall provide the following activities or deliverables:

1) Preparation of Drawings (generally design Drawings suffice);
2) Preparation or review of text that is descriptive of the Project;
3) Quantities of materials and work elements;
4) Other items as may be required by the permit application requirements, which the Consultant might reasonably be expected to provide (for example, calculations);
5) Attendance at agency meetings;
6) Complete preparation of the permit application;
7) Attendance at permit submittal meeting with the appropriate city(s);
8) Answering of questions posed by the Long Beach Planning and Building Department; the Long Beach Bureau of Engineering, or the Long Beach Public Works Department, or the appropriate City of Los Angeles departments or commissions; and
9) Make corrections or additions to permit application package as required to satisfy the Long Beach Planning and Building Department, the Long Beach Bureau of Engineering, or the Long Beach Public Works Department, or appropriate City of Los Angeles departments or commissions.

B. With respect to either the City of Long Beach or City of Los Angeles “B” or Building Permit, the Consultant's service shall include:

1) Complete preparation of the permit application;
2) Attendance at permit submittal meeting with the appropriate city(s);
3) Answering of questions posed by the Long Beach Planning and Building Department; the Long Beach Bureau of Engineering, or the Long Beach Public Works Department, or the appropriate City of Los Angeles departments or commissions; and
4) Make corrections or additions to permit application package as required to satisfy the Long Beach Planning and Building Department, the Long Beach Bureau of Engineering, or the Long Beach Public Works Department, or appropriate City of Los Angeles departments or commissions.
C. The Consultant shall provide the appropriate number of copies of material produced or compiled by the Consultant for transmittal in support of permit applications.

Note: POLB pays all Project Permit fee (e.g. Plan Check Fees).
9 GENERAL REQUIREMENTS FOR CONSULTING SERVICES

A General

1) The Consultant shall design and provide each design phase or milestone submittal in accordance with this Guideline and the applicable POLB Standards.

2) The Consultant shall be responsible for assuring that the Consultant's Subconsultants follow this Guideline.

3) The Consultant shall perform the Work with the understanding that the Budget and Schedule must be maintained. In the event that it becomes apparent to the Consultant that the Budget or Schedule cannot be met, the Consultant shall notify POLB designated Manager immediately and in writing of the specific areas of variance, amount of variance, and alternative strategies to mitigate the variance.

4) POLB has the right to request from the Consultant, at any time during the progress of the Work, an intermediate Work product demonstrating the actual status of the Work such as a draft report, draft specifications, draft cost estimate, or a progress print or computer file of a single sheet or multiple sheets or the entire Drawing set which represents the Work completed as of the date of the request.

5) Failure to ascertain existing site conditions which were visible or which could have been determined from existing plans on investigation will be considered a design deficiency and the cost of making any necessary design corrections or modifications will be the sole responsibility of the Consultant.

6) Unless otherwise specified, the Consultant will provide all equipment and materials to perform its work.

B Administration

1) The Consultant shall appropriately choose from among the following software, using POLB's current version, to produce any report, spreadsheet, presentation, schedule, PC database, Specification, or Drawing which POLB has requested in computer file format:

   a) Microsoft Word 2007 or later version
   b) Microsoft Excel 2007 or later version
   c) Microsoft PowerPoint 2007 or later version
   d) Microsoft Access 2007 or later version
9.0 General Requirements for Consulting Services

   e) Microsoft Project 2007 or later version
   f) Primavera Project Planner 6.0 or later version
   g) Bentley MicroStation, Map, InterPlot and InRoads V8i Select Series 2

2) For any material so requested, the Consultant will supply the report, spreadsheet, presentation, schedule, PC database, Specification, or Drawing produced during the course of the Work on CD-ROM, DVD or comparable memory storage device as requested by POLB designated Manager.

C Effect of Funding Source
The project funding source effects the consultant selection procedures, consultant contract format, construction bidding procedures, construction specifications, and construction contract format. Most projects in POLB are funded with funds generated by the Harbor Department. These are subject to POLB’s SBE Program. Projects funded by the Federal Highway Administration through Caltrans are subject to the DBE Program. They are exempt from POLB’s SBE Program. See the Caltrans Local Assistance Procedures Manual for a complete description of contract requirements (www.dot.ca.gov). Some Projects funded by the Department of Homeland Security, other federal security agencies, as well as some State and Local Agency Grants from Federal sources, are subject to the DBE Program and exempt from POLB’s SBE Program.

D SBE & VSBE Program Requirements
For projects subject to SBE and VSBE Ordinance requirements, the Consultant shall submit any and all required documentation to support participation of SBE and VSBE firms in the submission of its proposal for professional services; in the absence of sufficient participation to meet POLB goals, it must provide documentation of its good faith effort. Complete SBE/VSBE requirements are included in the request for statement of qualifications, or request for proposals and on POLB’s web site at http://www.polb.com/economics/contractors/sbe/default.asp.

In the execution of its duties the Consultant shall submit invoices to demonstrate subconsultant compliance with the requirements of POLB’s Small Business Enterprise Program. During construction, the Consultant may need to assist POLB in determining SBE and VSBE construction contract goals and analyzing contractor data related to SBE certification or compliance in the performance of its duties. Appropriate use of SBE and VSBE firms identified in contracts and proposals will be confirmed with the processing of invoices by use of the SBE-3P form.

E DBE Requirements
For a project receiving any portion of its funding from the Federal Government, there are special requirements. (see Attachments)
Economy in Design and Construction

1) In the design of all projects, it is POLB's objective to obtain quality facilities that are functionally adequate; economical in design, construction, operation, and maintenance; and of durability consistent with the intended use. Although due consideration shall be given to appearance, structures shall not entail frills and embellishments and shall not be conceived on the basis of unnecessarily complicated and costly construction systems, materials, or equipment.

2) The Consultant shall assure compatibility of the new structure with the architectural character of POLB or terminal. For people-oriented facilities such as a gate house or administration building, the Consultant shall ensure the design is smoothly integrated into the overall terminal design, taking into consideration all engineering disciplines involved, including landscape architecture and interior design. An integrated design achieves harmony of site, landscaping, building design, and functional requirements.

Coordination with Others

1) The Consultant is advised that POLB facilities and terminals are generally in operation during design and construction. The Consultant shall investigate the use of the terminal by the Operator and the Tenant, and provide engineering services and prepare the Construction Documents with appropriate phasing to maintain operations throughout construction with a minimum impact to POLB tenants, other existing construction projects, and to POLB operations.

2) The Consultant shall, by coordination with POLB designated Manager and others, become familiar with other contracts which have been awarded, or are about to be awarded, for other construction work in the same or immediate area or which may otherwise affect the Work. The Consultant shall coordinate the design of the Work required by the Project with the established Schedules for completion and phasing of other identified projects. This coordinated design by the Consultant shall eliminate or reduce interferences that may occur in construction work areas, staging areas, traffic access, truck or train haul routes, parking, utility requirements for construction, or other similar situations or conditions.

Investigation, Verification, and Identification of Existing Conditions

1) Investigation of Documents and Information:
   
a) POLB shall supply base maps available from POLB data sources. It is the Consultant's responsibility to verify the POLB base maps. Single copies of pertinent POLB drawings may be ordered from POLB at no cost.

b) The Consultant shall review POLB files and other information sources to locate, gather, and review previous work and studies that relate to the Project.
9.0 General Requirements for Consulting Services

Site including surveys, geotechnical, soils, utilities (including potholing information, and existing facility drawings. To assist in this research effort, POLB has compiled a POLB document entitled: Existing Site Conditions Research Verification Form found in Attachments.

c) The Consultant shall verify information obtained from existing drawings, including drawings marked "As-Built."

d) The Consultant shall evaluate whether existing survey information is valid for design. If additional survey information is desired, the Consultant shall so indicate and request that the designated Manager fill out a Survey Services Request (SSR) Form sufficient to obtain the desired survey information.

e) The Consultant shall thoroughly research available information and data relative to site conditions so that unexpected interference will not occur during the construction of the facility. In many cases, comparisons between drawings are required.

f) A POLB form entitled Existing Site Conditions Research Verification Form, found in Attachments, shall be filled out and endorsed by the Consultant's Project Engineer and Consultant's Project Manager for inclusion in the Basis of Design Report.

2) Field Investigation of Site:

a) The Consultant shall provide field inspections to discover, verify, and document existing conditions and features that affect the Work and that are visible or accessible from the ground surface, including but not limited to: above and below ground utilities, potholing, ground penetrating radar, 3D imaging pothole mapping, rights-of-way, property boundaries, roadways, railways, easements, facilities, structures, obstructions to construction, drainage from on or off site sources, regulatory boundaries, and local datum.

b) The Consultant shall make such field measurements and investigations as necessary to properly validate drawings or map information.

3) Geotechnical and Soils Investigations:

a) The Consultant shall provide a base map showing the location of drilling and sampling activity including the type of activity, the measurements taken, and the coordinates of the drilling or sampling activity.

Utilities

1) POLB recognizes that POLB designated Manager may be required to become directly involved with the third-party utility coordination effort to help the utility understand
9.0 General Requirements for Consulting Services

POLB’s priorities. However, the Consultant shall provide support to ensure the necessary coordination for the timely relocation or reconstruction of existing utilities or new utility installation by others.

2) The Consultant shall ensure that interferences between existing utilities and any utility requirements of the Project are resolved without loss of function, through coordination with utilities and entities that may have data or information on existing conditions, including potential obstructions. The Consultant shall obtain any required approval, where necessary, to construct adjacent to and/or over/under existing utilities/facilities and coordinate Project design to avoid damages.

3) Where utility relocation or reconstruction will be done by a utility and not by POLB contractor, the Consultant shall coordinate with the utility to develop a schedule such that the construction by the utility will not adversely affect POLB or POLB Contractor. With respect to this provision utilities include, but are not limited to: Southern California Edison; Long Beach Gas and Oil Department; Long Beach Water Department (Water and Sewer); Los Angeles County Sanitation Districts; City of Los Angeles Department of Water and Power; Verizon; Occidental Petroleum Corporation (OXY); Tidelands Oil Production Company (TOPKO). This also includes private oil companies: British Petroleum; Shell; THUMS; PetroDiamond; Aera Energy; ChemOil; Valero Refinery; Tesoro Refinery; Southern California Gas Co.; Equilon; and the Burlington Northern/Santa Fe Railroad; Union Pacific Railroad; Pacific Harbor Lines along with others.

4) The Consultant shall design any utilities or facilities necessary to support the Project to meet POLB’s insurance and Risk Management requirements. POLB designated Manager will coordinate with POLB’s insurer as required.

5) The Consultant shall provide engineering services to identify and coordinate the removal or re-routing of utilities located outside the Project area that are affected by the Project.

6) The Consultant shall investigate, quantify, contact, and verify with the applicable utility that there is sufficient availability of additional utility capacity as may be required for the Project.

7) The Consultant shall maintain a written log of all contacts with utility companies and include such log in the regular Status Report.

J Subsidence

1) POLB is located over the Wilmington Oil Field. Approximately 70,000 barrels of oil are extracted each day. To counteract subsidence and increase oil production, water is injected back into the oil field.
2) The oil operation activities cause constant and significant ground movement, both vertical and horizontal. The impact of this movement must be evaluated for each and every engineering project.

3) Vertical and horizontal datum must be carefully selected. Historical data from drawings, surveys, reports, and the like must be reconciled to the chosen project data. Failure to do so may result in costly changes and delays during construction. Contact POLB's Chief Surveyor for advice on datum selection and reconciliation.

K Codes and Standards

1) The Consultant shall design and conduct Work in compliance with all applicable Federal, State and local laws, codes, and regulations.

2) The Consultant shall design the Work in accordance with current POLB design criteria and current applicable codes, standards, and regulations. It is the Consultant's sole responsibility to determine the applicable and appropriate codes and standards that apply to the Work.

3) The Consultant shall contact applicable government agencies to verify the applicability of codes, standards, and regulations to the Project, and obtain written agreement from such agencies identifying applicable codes prior to start of design. If the Consultant does not have written verification from the applicable and appropriate agencies of the codes and standards that apply to the project, and the agencies subsequently require the use of a different code or standard, the cost of changing the design shall be the sole responsibility of the Consultant.

L Architectural Requirements

1) All buildings designed and constructed for POLB shall conform to POLB's Architectural and Engineering (A & E) Guidelines for Building Design Services (see Attachments). The A & E Guide applies to all building and renovation projects.

2) All building design must also comply with the City of Long Beach Green Building Policy for Municipal Buildings (see Attachments).

M Specifications

POLB utilizes two types of Specifications; a formal spec for projects in excess of $100,000 in estimated cost, and an informal spec for projects less than $100,000 in estimated cost. Formal specs are prepared using Construction Specifications Institute (CSI) based format, and informal projects are normally prepared using a format based on the “Green Book” specifications. At the initiation of the Project, POLB designated Manager will indicate the Specification type for the Project.
N Quality Management/Quality Control/Quality Assurance

Quality Control and Quality Assurance are considered necessary to provide a standard level of professional service, and are considered to be included in the Consultants’ fee schedule. Quality Control and Quality Assurance include as a minimum the following items:

1) The Consultant shall provide POLB with a Quality Management Plan (QMP) including the quality control and quality assurance processes and procedures. Section 2 of the Port Quality Management System (QMS) provides guidelines for the QMP.

2) The Consultant is responsible for Quality Control (QC) and Quality Assurance (QA) of all Work including Work by subconsultants performed under the contract.

3) The Consultant shall perform independent Quality Control Reviews of the Work at each Design Milestone (15%, 50%, 100%, and Final).

4) The Consultants’ independent review shall be conducted by senior level professionals with the appropriate experience for each discipline of work. It is acceptable for the Consultant to provide an independent third party reviewer (subconsultant), under their contract, to perform the QC Reviews but they shall not have other Project-related responsibilities.

5) Results of an independent review shall be documented in accordance with the QMS Section 3 or the Consultants Quality Management Plan and provided to POLB Project Manager.

6) The Consultant shall provide POLB with the quality records, as requested for each discipline of work clearly demonstrating that the applicable QC procedures were conducted prior to the submittal.

7) The Consultants’ QA Manager or Principal in Charge shall verify that the QC processes and procedures are in compliance with the QMP and shall provide a Certification of Compliance Statement with signatures by the QAM or PIC and the Consultants’ Project Manager with each milestone submittal.

8) The Consultant shall provide to POLB Quality Manager or designated Manager with the following items upon request:

   a) The quality records of the internal QC Reviews;
   b) The quality records of the Independent Review;
   c) The original copies of the quality records or a colored scanned copy in the pdf file format;
   d) The resolved Review Comments from the prior Milestone submittal clearly showing the disposition of all comments and;
e) Evidence of the QA inspections and findings, including subconsultants.

9) POLB will conduct an independent (in-house or third party) QA reviews of any or all design submittals. If the result of any review of a design submittal conducted by POLB indicates there are unacceptable issues with quality or completeness, POLB may reject the submittal or require additional submittals and reviews, at the Consultant’s expense, to confirm that POLB’s expectations for quality and completeness are met. Consultant shall also address all comments resulting from such reviews at their own expense.
10 DESIGN SERVICES

POLB divides Design Services into Phases according to the typical way projects proceed. The initial investigation into a potential project is called a Feasibility Study and is intended to determine if the proposed project is feasible based on an overview of existing conditions and the intent of the project. This initial work is intended to find major problems. If the Feasibility Study indicates the proposed project has merit and may achieve the desired intent, a second, more detailed investigation is conducted to investigate more specifically all aspects of the project in a more detailed and comprehensive manner. This second-level investigation is called Pre-Design Services and is intended to provide comprehensive information on constraints and benefits. If the proposed project is acceptable based on the proposed scope, budget, and schedule, final Design is undertaken. Following the final Design, the Consultant's services are required to assist with Bid Final Phase services and Construction Phase Support Services.

A Investigations, Verification, and Identification of Existing Utilities
1) Refer to Section 9-H, Investigations, Verification, and Identification of Existing Conditions and Section 9-I, Utilities.

B General Design Guidelines
1) POLB is committed to sustainable development and the Consultant is directed to incorporate measures that support those principles into the project designs to the maximum extent possible.

2) All buildings constructed by POLB are to be designed to achieve a minimum LEED® rating of Silver. Where feasible and economically achievable, the Consultant, in consultation with POLB designated Manager, should design office-type buildings, administration buildings, fire stations, and others as appropriate, for the Gold LEED® rating.

3) Whenever feasible, the Consultant shall provide for the reasonable reuse of recyclable construction materials within the context of the Project. A Waste Management Plan (WMP) may be required by the City of Long Beach Department of Planning and Building. See L.B.M.C. Chapter 18.97.

4) Whenever possible, the Consultant shall design POLB facilities to allow for future potential modifications.

5) Whenever and wherever possible, the consultant shall design POLB facilities to allow for future deconstruction and re-use of materials rather than conventional demolition.

6) The Consultant shall identify any materials or items that, because of long lead-time for manufacture or delivery, must be pre-ordered to maintain the Project construction Schedule. If pre-ordering is necessary, the Consultant shall prepare a
table listing pre-ordered items, the purchase date, the expected waiting period, and the required delivery date and penalty costs if cancelled. A minimum of eight (8) weeks prior to date of necessary order placement, the Consultant shall provide complete, final Specifications and Drawings appropriate for the separate bidding of pre-order materials in accordance with POLB standards. The Consultant shall assist in filling out forms, providing documentation, answering bid questions, evaluating bids, processing submittals, and other necessary tasks.

7) The Consultant shall identify any erection and/or lifting requirements necessary for the successful construction or completion of the Work and shall provide clear direction and instructions as to the appropriate erection and/or lifting procedure, including location of lifting points and type of lifting device.

8) The Consultant shall identify the Contractor staging area, Contractor work area limits, and Contractor's access and egress routes to the Work area in the Construction Documents. Also, the Consultant shall coordinate Work areas and routes with POLB's tenants and others affected. Construction sequences (Construction Phasing Plan) shall be included in the plans and shall be determined jointly by POLB and the Consultant. It is POLB's responsibility to coordinate with our tenants to ascertain availability of potential construction staging areas.

9) The Consultant shall identify any preliminary design and/or construction using a tunnel or directional drilling, 30-inch diameter or greater in size, and provide to the POLB a tunnel classification from Cal/OSHA prior to bidding (see California Code of Regulations, Title 8, Section 8422. “Tunnel Classifications”).

10) POLB has very limited charter authority for design/build project delivery and limits the use of design/build elements in conventional design/bid/build contracts. Acceptable elements that can be specified as design/build in POLB contracts are limited to the items below.

   a) Shoring
   b) Falsework
   c) Forms
   d) Staylathe
   e) Dewatering
   f) Traffic Plans
   g) Concrete Mixes
   h) Pile Handling Methods
i) Modular buildings
j) Shiploaders
k) Container Cranes

The Consultant shall identify any exceptions to this policy in writing to POLB designated Manager, who may, after consulting with the Director of Construction Management, approve such exceptions.

C Basis of Design Document

1) The Consultant shall provide a Basis of Design document which shall be initiated at the beginning of design, be kept current throughout design, and shall include but not be limited to:
   a) Description of the Project;
   b) Executive Summary;
   c) List of legal, regulatory, and permit requirements;
   d) List of applicable codes and standards to be used in design;
   e) List of design assumptions and criteria;
   f) Definition of the datum used on the Project;
   g) List of other projects at POLB or elsewhere that may affect the Work and a description of the potential interface(s) between such other projects and the Work;
   h) Description of site-related field investigations conducted and research completed, including endorsed Existing Site Conditions Research Verification form, contained in Attachments.
   i) The Work Breakdown Structure (WBS) based Scope of Work
   j) The WBS based cost loaded, Schedule for the Work;
   k) A WBS based Consultant’s opinion of estimated for the Project;
   l) A Construction Packaging Plan establishing composition of Project elements into Construction Bid Packages and defining the relationships between packages and;
   m) A Construction Phasing Plan.
2) The document, in its final form, shall be submitted with the final set of plans and specifications.

D Design Phases

1) POLB generally divides Projects into distinct phases including: Feasibility Study (basis of design); Pre-Design Services; 15% Design Services; 50% Design Services; 100% Design Services; Final Design Services; Bid Phase Support Services; and Construction Support Services. Project phases are further broken down into specific milestones and deliverables.

2) The Consultant’s Work may include a single phase or multiple phases. The progress of Work shall be defined by completion of the contracted phase(s) or milestone(s). The completion of a phase of Work shall be determined by POLB acceptance of the deliverable products and/or services that the Consultant produces and provides POLB as evidence of completion of a phase of Work.

3) At completion of a Design Phase, the Consultant shall provide the products and/or services identified for the applicable design phase.

E Design Review

1) Design reviews are performed at the 15%, 50%, 100% and final design stages. The final design review, also known as the “spec read,” is a detailed, page-by-page review of the final plans and specifications as the last check on the documents before bidding. Any deviation from this schedule must be approved by the Division Director.

2) For each design review submittal, the Consultant shall provide one set of reproducible media hard copy and electronic and the appropriate number of Drawing prints, Specifications, and all other material required by this Guideline or the Contract. Electronic CAD Files of the final drawing set must also be submitted on DVD or other electronic media. The Consultant shall complete a draft of the form: Transmittal of Drawings and Specification for Review and Comment, (see Attachments), to accompany the submittal. The Consultant shall provide POLB designated Manager with sufficient numbers of Drawings and Specifications for Review and Comment forms for distribution of the review sets.

3) POLB will require 10 working days for review of submittal documents at each design review. The Consultant shall continue with design during the 50% and 100% Design reviews.

4) The Consultant shall provide a written response to all review comments within fourteen (14) calendar days of receipt. This comment log, in the form of an
MS-Excel spreadsheet, must show the disposition of all comments and should include, at a minimum, the comment, drawing or specification reference, originator of the comment, and detailed response to the comment. The comment log may also reference highlights or annotations to the original documents (drawing and specifications). The 50% and 100% Design reviews by POLB are not to be acknowledged by the Consultant through re-submittal of a new set of Drawing prints or Specifications. POLB shall make the final decision regarding whether the Consultant shall incorporate such review comments in the Construction Documents.

5) POLB’s Engineering Design Division and Security Division shall review all traffic management design plans and proposed detours.

6) In the case of the 100% Design review submittal, all comments are to be acknowledged by the Consultant after the permit review comments are received from the respective permit or regulatory review agencies. Both POLB and agency comments are then evaluated and incorporated into the Final Design and Construction Documents as determined by the Consultant and POLB. Plan Check comments received directly by the Consultant from the permitting or regulatory agencies shall be provided in the original form by the Consultant to POLB designated Manager.

F Consultant’s Opinion of Probable Construction Costs

1) At the completion of each design phase or milestone, the Consultant shall provide an opinion of the probable construction costs for the Project.

2) At Feasibility Study, Pre-Design, and 15% Design, the Consultant’s opinion of probable construction costs shall contain a reasonable unit-cost breakdown consistent with POLB Work Breakdown Structure.

3) At 50%, 100%, and Final Design, the Consultant’s opinion of probable construction costs shall be consistent with the following:

   a) The Consultant shall provide a list of bid items, quantities, unit prices, and the breakdown of all lump sum items, organized by Technical Specification section and POLB Work Breakdown Structure. Origin of unit prices shall be referenced.

   b) The Consultant shall provide a supplier estimate for all major equipment.

   c) The Consultant shall provide a subtotal for each Technical Specification section and Schedule of Value activity.

   d) The Consultant’s opinion of probable construction costs line items shall identify where measurement and payment of each item is covered within the Technical Specification.
4) At Final Design, the Consultant shall provide both an opinion of probable construction costs and a Bid Estimate.

5) Cost estimates shall be based on the current, local bid climate and conditions.

6) The Consultant’s opinion of probable construction costs shall include appropriate contingency, based roughly upon the risk matrix (see Table 10-1, Contingency-Risk Matrix). Contingencies may be varied with justification, based upon the risk associated with any individual project.

<table>
<thead>
<tr>
<th>Category</th>
<th>Risk</th>
<th>Low</th>
<th>High</th>
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</thead>
<tbody>
<tr>
<td>Project Phase</td>
<td></td>
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<tr>
<td>Concept (Design @ 5 to 15%)</td>
<td>10-20%</td>
<td>20-40%</td>
<td></td>
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<tr>
<td>Design (Design @ 25 to 75%)</td>
<td>5-15%</td>
<td>15-30%</td>
<td></td>
</tr>
<tr>
<td>Construction (Design@ 100% through construction)</td>
<td>3-7%</td>
<td>7-25%</td>
<td></td>
</tr>
</tbody>
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G Feasibility Study
The intent of a Feasibility Study is to reasonably determine, based on existing known information, whether a proposed Project appears feasible from an engineering, economic, environmental, and community perspective. A Feasibility Study shall produce a Feasibility Study Report that includes the following:

1) An Executive Summary that includes elements from each major section of the Report.

2) Layouts: a graphical representation (layout drawing) with a POLB background that depicts each major element of the Project and alternative layouts that might be considered;
3) Project Constraints and Assumptions: a list of Project constraints and assumptions including a discussion of existing conditions;

4) Alternatives: a clear, concise description of each alternative being considered and its relative advantages and disadvantages;

5) Preliminary Schedule: a preliminary Schedule, including Schedules for all alternatives;

6) Budget Estimate: a Budget Estimate, including comparative Budget Estimates for any alternatives; and

7) Conclusions and Recommendations: a presentation of the Study analyses and recommendations. POLB

H Pre-Design Services

The intent of Pre-Design Services is to investigate the Project site and the design alternatives. All existing information concerning the site is accumulated and information that is necessary for design that is not available or needs to be updated is identified. Those design alternatives that meet the intent of the Project are identified, so that one of the alternatives investigated can be chosen prior to the initiation of design. At the completion of Pre-Design Services, all information necessary to initiate design is obtained or identified and the Consultant shall provide POLB with the following products and/or services:

1) A draft Basis of Design document;

2) Alternatives investigation:

If alternatives can be identified, at least two (2), and not more than five (5), alternative concepts shall be developed that satisfy the intent of the Project. Each alternative provided to POLB shall include simple line drawings in plan and elevation, overlaid on POLB facility drawings indicating major elements of the Project including:

a) Location, size, and geometry;

b) Rights-of-way, property or lease lines and easements;

c) Project constraints;

d) Existing utilities and services with those requiring relocation clearly identified;

e) Project-related utilities and services;

f) Access including both ingress and egress;
g) Traffic concerns;

h) Cost Estimate comparison of alternatives; and

i) Comparison of estimated Schedule for alternatives.

3) A Pre-Design Report, including analyses and recommendations to POLB. A presentation by the Consultant of the findings and conclusions may be required.

**I 15% Design Services**

At the completion of 15% Design, the Consultant shall provide POLB the following products and/or services:

1) A draft Basis of Design document, updated to the current design phase;

2) Preliminary architectural or engineering drawings and/or sketches that satisfy the intent of the Project as described in the Scope of Work and which define the Project including plan(s) and elevation(s) of major components, civil site plans, and the structural system. Include one digital copy of all drawings so POLB can verify compliance with POLB as need upon version of the POLB’s CAD Standards;

3) Preliminary Specifications outline as necessary to define the Project;

4) Space usage by general type, size, location, and function using units identifying major dimensions and square footage;

5) Conceptual descriptions and one-line system diagrams defining the types and preliminary sizes of major utility services;

6) Preliminary utility relocation plan;

7) Documentation of site conditions;

8) Preliminary storm water drainage and grading plan;

9) Any temporary service requirements for maintaining POLB tenant operation(s) during construction. An implementation plan shall be drafted describing when and how to initiate and maintain any such temporary service;

10) A presentation of 15% Design Phase analyses and recommendations.

**J 50% Design Services**

At the completion of 50% Design, the Consultant shall provide POLB with the following products and/or services:
1) An updated Basis of Design document to include all design elements required to fully define the design;

2) Drawings and Specifications which include all design elements required to fully define the design, including significant details. Include one digital copy of all Drawings for POLB’s verification of compliance with POLB’s CAD Standards.

3) A list of the submittals designated by the Consultant in the Specifications. The submittal list shall reference: (a) where called for in the Specification; (b) when required from the construction contractor; (c) when final approval is required to meet the overall Project Schedule; and (d) whether the submittal relates to a permit or regulatory requirement or a quality control check.

4) A list of all permits that the Contractor will be required to obtain to complete the construction of the Project.

5) Calculations in separate bound volumes by disciplines including all supporting data, rationale (system and equipment selection, engineering considerations and life cycle cost), and calculations, including, but not limited to:

   a) Civil

      (1) Water

         (a) The water-flow rate required and the sizes, material, and class of all pipes, reservoirs, and pumps for all water systems. Also provide typical pump and system curves.

         (b) If determined by the designated Manager, a hydraulic model of the system shall be generated using POLB’s current model software for the proposed improvements within the surrounding area

         (c) Irrigation piping, pressure, and flows.

      (2) Sewer

         (a) The quantity of sewage and the sizes, material, and class of all pipes, reservoirs, and pumps for all sewer systems to be coordinated. Also provide typical pump and system curves.

         (b) Verification of all design flow and sizing of all Sewage Treatment System units.

   (3) Paving and Grading:

      (a) Paving sections, including concrete runways.
(b) Grading and drainage.

(c) Indication that the site has a balanced cut/fill or the quantity of borrow/disposal.

(d) Retaining wall design to comply with the latest edition of Uniform Building Code (UBC).

(4) Storm Drain

(a) If determined necessary by POLB's Project Manager, a hydrological analysis based on current POLB design criteria may be required for the existing condition, prior to Project, and after Project.

(b) If determined necessary by POLB's Project Manager, a hydraulic analysis based on current POLB design criteria may be required for the existing condition, prior to Project, and after Project.

(c) If determined necessary by POLB's Project Manager and as a result of the hydraulic analysis a pump station is required, Consultant shall prepare all necessary calculations including pump curves, drawings and details.

(5) Rail:

(a) Layouts and sections

(b) Controls.

(6) Gas and Fuel Tanks and Lines

(a) Communications and Signal:

(b) Fire Alarm,

(c) Telephone,

(d) Microwave,

(e) Verification of compatibility of communication and signal systems.

b) Structural

(6) Structural calculations verifying the framing system, and all major structural elements for all loads including wind, seismic, bearing, etc.
c) Mechanical

(1) Building or room heat gain and loss.

(2) Pressure drops for pump and compressor selection.

(3) Duct, equipment and other external losses for fan selection.

(4) Water capacity of pipe and equipment and pressures used for system design and for expansion tank selection.

(5) Expansion and contraction of piping with stresses at loops and anchor points.

(6) Coefficient of Velocity (Cv) value selection for all control valves.

(7) For direct expansion refrigeration systems, information for pressure drops and velocities of gas and liquid (including velocity to return oil for gas and suction risers), at zero degrees F.

(8) Water heaters - capacity and make up requirements.

(9) Heat exchanger - temperature, flow, capacity, and heat rejection rate.

(10) Fluid velocity in pipes and ducts.

e) Electrical

(1) Preliminary connected and demand load tabulations.

(2) Lighting calculations showing design and calculated foot-candles to justify quantity, type, and layout of fixtures.

f) Fire Protection

(1) Total sprinkler system demand based upon discharge density, area of sprinkler operation and outside hose allowances.

(2) Fire pump size and pressure calculation.

(3) Foam application rate.

(4) Rate of application of CO₂ and any other approved cleaning agent.

(5) Smoke control system pressure difference, airflow, and response time.

(6) Fire flows and pressures.
6) Wharf Footage Mark (WFM) and Row/Bent Number to be installed by contractor per plans and specification, if applicable. A Design/Structural Group plan review is required. POLB’s Project Manager will assist in determining this information.

7) The 15% Design comment log with all comments and responses to POLB comments, 15% Design submittal, including highlighted or annotated drawings and specifications, to indicate disposition of comments.

8) A Transmittal for Review and Comment form.

9) Design documents that identify the complete scope of construction activities including recommendations on construction phasing.

10) Specifications/Drawings which describe/show limits of clearance for all construction scaffolding or falsework.

11) Systems required by the Project shown and developed to the 50% level, and complete preliminary sizing for major systems.

12) Preliminary list of construction submittals.

13) Identification of any access space as required for maintenance as well as any clearance space as required to meet code and safety regulations.

14) Drawings shall show critical dimensions and elevations that define the size, shape, and location of all Project elements.

15) A site plan fully developed documenting Project elements such as access routes, operation areas, security gates, fenced construction areas, material storage areas, construction parking, and lay-down areas.

16) POLB50% Specifications submittal shall include, but not be limited to the following:

   a) Bid Proposal, Bud Forms, General Provisions, Special provisions and Technical Specifications

   b) Non Applicable section omitted

   c) Blank spaces where text has not yet been developed

   d) Recommended products, manufacturers, accessories and installation requirements are to be included in the applicable Technical Specifications

   e) Table of Contents

17) List of items to be pre-ordered by POLB (it is POLB’s preference to have the Contractor provide all items whenever possible).
18) A Preliminary Storm Water Pollution Prevention Plan (SWPPP).

19) A presentation of 50% Design analyses and recommendations; Submittal of complete investigation of all engineering parameters of the Work such that the results of the 50% Design fully and completely define the scope, schedule, and Budget for the Work.

K 100% Design Services
At the completion of 100% Design, the Consultant shall provide POLB with the following products and/or services.

1) All information required by earlier design submittals finalized, complete, and re-submitted.

2) An updated, 100% complete Basis of Design Document.

3) 100% complete construction Drawings, and other data required to fully and comprehensively define the elements of the Project (submit electronic files).

4) 100% Compliance with the agreed upon POLB’s CAD Standards for the Project (see POLB CAD Standards Manual).

5) 100% Complete Specifications including (general conditions, special conditions, technical specifications, and notice inviting bids) with all blanks filled in, including dates, (submit as Word Document, Version 2007 or later).

6) A separate electronic file of the Proposal and Bid using Microsoft Excel and prepared in POLB’s format.

7) The 50% Design comment log, with all comments and responses POLB on the 50% Design submittal, including highlighted or annotated drawings and specifications, to indicate disposition of comments.

8) A list of all contractor submittals designated by the Consultant in the Specifications and shall reference:
   a) Where it was called for in the Specification.
   b) When it was required from the construction contractor.
   c) When final approval is required to meet the overall Project Schedule.
   d) Whether the submittal relates to a permit or regulatory requirement or a quality control check.

11) A list of all permits that the Contractor will be required to obtain to complete the construction of the Project.
a) All approved calculations in separate bound volumes by disciplines including all supporting data, rationale (system and equipment selection, engineering considerations and life cycle cost) and calculations.

   (1) Quantity of storm flow, velocities, sizes, material, class and “D” load design.

b) Communications and Signal:

   (1) Fire Alarm.

   (2) Telephone.

   (3) Microwave.

   (4) Verification of compatibility of communication and signal systems.

c) Irrigation System

   (1) Pressure and flow at valve at highest elevation.

   (2) Pressure and flow at valve at lowest elevation.

   (3) Valve with highest gallons per minute (GPM) and gallons per hour (GPH).

   (4) Valve with lowest GPM and GPH.

   (5) Calculation sheet indicating valve sequence number, total GPM/GPH, elevation of valve, water meter, and highest irrigation head or emitter, total friction loss through all irrigation equipment and piping, operating PSI of irrigation head or emitter, and residual PSI.

d) Structural

   (1) Analysis and design of all structural elements for all loads, including wind and seismic.

   (2) Anchorage for Mechanical, Electrical and Non-structural elements.

   (3) One electronic copy of all drawings in the agreed upon POLB’s CAD Standards as issues at the time of the Notice to Proceed.

e) Mechanical

   (1) Room by room heat load calculations.
(2) Final steam, hot water, chilled water, gas, oil, etc., distribution and flow balance.

(3) Updated flow diagram to reflect final loads, equipment capacity and pressure requirements.

(4) Gas and Fuel pump data.

f) Electrical

(1) Load tabulation of connected and demand loads.

(2) Voltage drop calculations for conductors.

(3) Voltage drop calculations for starting large motors.

(4) Short circuit calculations.

(5) Lighting calculations.

(7) Coordinated time-current characteristic curves of protective devices. Final device settings and time-current characteristic curves shall be provided during construction when exact devices are known.

(8) Tension and sag calculations for pole line conductors, messengers, and guys.

g) Fire Protection

(1) Complete hydraulic calculation of sprinkler system to verify adequacy of available water supply.

(2) Fire permit for all building and water service work.

13) Traffic control plans, if applicable.

14) Waste Management Plan (WMP), if applicable.

15) Wharf Footage Mark (WFM) and Row/Bent Number to be installed by contractor per plans and specification, if applicable.

16) A Transmittal for Review and Comment form.

17) Building or “B” Permit Application documents and a Project Location sheet as required for Building Permit application submission.

18) Final plan for temporary utility services during construction.
19) Final list of all items to be pre-ordered by POLB.

20) Final Storm Water Pollution Prevention Plan (SWPPP).

21) Review of the design with the appropriate permit or regulatory officials as may be necessary and response to code review comments; and

22) A presentation of 100% Design. POLB.

The 100% Design Submittal represents the Consultant's completed effort on the Work. There are no outstanding design items or issues at this submittal. POLB will use the 100% Design Submittal for submittal to permit or regulatory agencies.

### Final Design Services

At the completion of Final Design, the Consultant shall provide POLB with the following products and/or services:

1) The 100% Design response comment log, with all comments and responses on the 100% Design submittal, including highlighted or annotated drawings and specifications, to indicate disposition of comments.

2) One set of reproducible original Final Design Drawings incorporating all agency plan-check comments and appropriately stamped by the responsible party for each discipline represented on each Drawing; one copy of the Final Design Drawings, the final stamped and wet signed Basis of Design Report including a final detailed stamped and wet signed Engineer's Opinion of Probable Construction Costs, stamped and wet signed Calculations. Three digital copies of all drawings, As-Bid Drawings in a format acceptable per POLB's CAD Standards Manual, issued in time for use in the Pre-Construction meeting. One electronic copy of all drawings in the agreed upon POLB CAD Standards as issued at the time of the Notice to Proceed The Construction Bid Package which consists of the Final Design Documents after:

   a) The Consultant has reviewed, approved, and stamped the final Specification including all Specifications and Special Conditions by the appropriate responsible party.

   b) The Consultant has provided digital copies of the Conformed Specifications in Microsoft Word (Version 2007 or later) format. Submittals in PDF will not satisfy this requirement.

   c) The Specification Sign-Off Sheet has been properly completed.

   d) The Consultant has compiled all available Project background materials, data, geotechnical or soils information, and documents identified in the Specification.
e) The Consultant has provided the Engineers Opinion of Probable Construction Cost (EOPCC).

f) The Consultant has provided a complete “red lined” file comparing the Final Specifications with the appropriate version of POLB’s Specifications template.

3) The Consultant shall provide, at Final Design, a complete set of DGN files to allow the survey crew to appropriately lay out the consultant’s design for construction, plus:

   a) An ASCII File containing: Point Number, Northing, Easting, Elevation, and Description of all curve Beginnings (BCs), Endings (ECs), Points of Intersection (PIs), as well as all horizontal alignment Angle Points and Structural Points essential for survey lay out. Numbers to be shown to two decimal places.

   b) CAD files conforming to POLB of Long Beach CAD Drafting Standards Manual:

      (1) A 2D or 3D Bentley Microstation V8i Select Series 2 DGN file (using POLB provided Seed File) with the following criteria:

          (a) 1 to 1 ratio in master units.

          (b) Scale 1" = N' (i.e., 1" = 40').

          (c) Origin to be set at 0,0 (2D), or 0,0,0 (3D), no adjustment to origin.

          (d) Datum to be stated.

          (e) Adhere to LBHD drafting standards, as specified in the Design Division CAD Drafting Manual.

M Bid Phase Support Services

During Bid Phase Support, the Consultant shall provide POLB with the following products and/or services:

1) Submit the final construction Bid Estimate one week prior to bid opening.

2) Respond through POLB’s designated Manager to all questions by potential bidders in a timely manner.

3) Maintain and provide POLB with a written log of all questions from, and responses to, potential bidders.

4) Prepare Bid Addenda or Clarification documents and a revised Cost Estimate and/or Bid Estimate, as necessary, at the direction of POLB designated Manager.
5) Bid Clarification shall be prepared by the Consultant with the intent to only restate, in a potentially more understandable manner, but not to modify in any way, the requirements of the Bid Documents.

6) Bid Addenda shall be written in accordance with the following:
   a) Modifications to the Notice Inviting Bids, Technical Specifications, Instructions to Bidders, Special Conditions, and the Bid Forms shall be prepared by the Consultant as requested by POLB’s designated Manager. The intent is that these modifications be incorporated into the original bid documents upon which bidders shall prepare their proposals.
   b) Bid Addenda and Clarifications shall be written in accordance with POLB’s standard format.
   c) Material to be added is indicated by inserting red underline text.
   d) Material to be deleted is indicated by red strike through type.
   e) The location of the changes on each page is also indicated by a vertical bar in the left hand margin, and the addendum number is indicated at the bottom of the page.
   f) The page numbering convention for addendum change shall be:
      (1) The addendum number and date the addendum is issued shall be indicated in the lower right portion of the footer on each page affected by the addendum.
      (2) If a single Specification page is to be replaced with a single page, the replacement page shall have the same page number as the replaced page with the revision number following, for example: Replace Page 16 with the attached Page 16-R1.
      (3) If a single Specification page is to be replaced with more than one page, the replacement pages shall have the same page number as the replaced page followed by a consecutive letter designation for each page, for example: Replace Page 16 with the attached two Pages 16A-R1 and 16B-R1.
      (4) The replacement numbering system for Drawings shall be:
         (a) If a drawing is to be revised, the replacement drawing shall have the area of revision clouded and have a revision symbol made using numerals in an equilateral triangle. Both the triangle, revision numeral, date, by whom, and what the revision changes were shall be included in the top right-hand revision block of the border. The number of the drawing shall not change, for example: Replace
Drawing No. 10-06789-00-C-GP-PP-S-057 with revised Drawing No. 10-06789-00-C-GP-PP-S-057.

(b) If a supplementary sheet is to be added to the drawings then the added drawing shall be appropriately numbered as Sheet 057A of 123, 057B of 123, etc., and Drawing Number HD 10-06789-00-C-GP-PP-S-057A, etc., using the most applicable original sheet number adjacent or preceding.

g) If it is necessary to issue two or more addenda affecting the same page or pages that were revised by a previous addendum, the affected page or pages shall be modified (conformed) to incorporate changes from all previous addenda before indicating the current changes.

h) Text used to describe changes shall be in conformance with the following:

   (1) Replace Page 16 with the attached Page 16-R1.

   (2) Insert the attached Page 21A-R1 following Page 21.

   (3) Replace Drawing No. 6 with the enclosed Drawing No. 6-R1.

7) Attend the pre-bid conference and/or site inspection.

8) If requested by POLB designed Manager, evaluate construction bids with POLB staff.

9) If requested by POLB designed Manager, provide recommendations to POLB staff regarding award of the construction contract.

10) Provide POLB staff with a comparative analysis of the bid tabulation versus the EOPCC.

N Construction Support Services

1) Pre-Construction Support:

   a) Attend pre-construction meetings and be prepared to answer Contractor questions concerning design.

2) Submittal Review Services:

   a) Timely review and approval of submittals and shop drawings.

3) Office Consultation Services:
10.0 Design Services

a) Timely preparation in POLB format of any change order documents including: Request for Proposal, Design, Drawings, Sketches, Cost Estimates, and Supporting Information.

b) Timely response to construction contractor Requests for Clarification (RFC) or Requests for Information (RFI).

c) Timely coordination with regulatory agencies such as the City of Long Beach, the City of Los Angeles, the Army Corps of Engineers, and other agencies as necessary to respond to permit conditions and requirements.

d) Timely response to design issues.

e) Timely review of the Construction Documents to assist in resolution of conflicts raised by the construction contractor. The Consultant shall be responsible for all redesign work necessary for correcting design errors in the Work of the Consultant at no additional cost to POLB.

f) Where redesign changes the data in the InRoads FWD, ALG, DTM, or DGN files provided in Section 10.L 2, new files are to be provided at the time of redesign for inclusion in a Change Order.

g) Timely technical support as requested by POLB in support of the negotiation or evaluation of: contractor's proposals regarding change orders, change order documentation or backup, determination of changed site conditions, providing an acceptable changed design for the changed site condition, and claims.

4) Site Visitation Services:

a) Attend weekly construction coordination meetings if so requested.

b) Timely inspections of specific aspects of the design as requested.

c) Observation of the testing and startup of any Project Systems and verification of the performance of same.

5) Final Inspection Services:

a) Timely final inspection and development of a Punch List to ensure successful completion of all aspects of the Project design.

6) Project Closeout Services:

a) Provide archive quality “As-Built” Drawings of the constructed Project in accordance with POLB Engineering Design Division CAD Standards Manual, including a digital copy of all Drawings.
11 SPECIFICATIONS

The Consultant shall prepare the Specifications using POLB's General Conditions and Special Conditions and develop the Technical Specifications in conformance with the General and Special Conditions.

A. POLB utilizes two types of Specification formats. POLB format, appropriate for the Project, will be determined by POLB designated Manager at the initiation of the Project. The two alternate Specification formats are:

1) Informal Specifications. This Specification format which utilizes Contract General Conditions from the Standard Specifications for Public Works Construction (Greenbook) and from the Guide Specification template can incorporate Special Conditions and Technical Specifications into a single section entitled Special Conditions. In general, this format method relies heavily on the “Greenbook.”

2) Construction Specification Institute (CSI) format Specifications. This format has three distinct sections: General Conditions; Special Conditions, the function of which is only to modify the General Conditions; and Technical Specifications. The Technical Specifications are formatted and based on the CSI format.

B. The Consultant is advised that POLB has two (2) sets of Special Condition used for material and equipment purchases and for construction. There is only one General Condition, which is used for any type of project.

C. The Specification Engineer will assign both a Project Title (same as a Specification Title), and a Specification Number.


E. POLB designated Manager may require the Consultant to prepare the Specification using the format of an alternative appropriate standard specification such as: POLB Standard Specifications format, Standard Specifications for Public Works Construction (SSPWC), Caltrans Standard Specifications, or Construction Specification Institute (CSI) format. The Consultant shall always follow the precedence of documents as described in the General Conditions.

F. The Specifications shall include all applicable divisions. The Consultant shall clearly prepare all divisions. If the Consultant wants to make changes to POLB Guide Specifications template, the Consultant shall submit the marked-up sections to the POLB designated Manager for review.
G. Standard Bid Forms (POLB Guide Specification format) or Divisions 0 and 1 (CSI format) include several final preprinted sections and forms. POLB will answer preparation questions related to these sections, but is not responsible for their preparation.

H. The Consultant is responsible for preparing all portions of the Specification except the General Conditions, which are supplied by POLB. If there are any modifications to the General Conditions, the Consultant shall describe them using a Special Condition specifically stating the changes.

I. The Consultant shall manage and coordinate all activities related to review of the Specification including reproduction, review distribution, compilation of comments, preparation for final typing, proof reading, and preparation for retype, if necessary. POLB resources shall be utilized to accomplish reproduction of the final Specification at POLB cost.

J. Management and cost of the final printing and binding of the Construction Documents, including the Drawings and Specifications, will be the responsibility of POLB.

K. Submittals required by the Specifications will be limited to those items which are necessary to validate conformance with permit requirements or conditions, or as determined by the Consultant to be necessary to ensure quality of construction in conformance with the design.

L. Consultant shall submit copies of the Final Specification both in reproducible, photocopy-ready hard copy, and in electronic format as specified by POLB designated Manager and/or POLB Specifications Engineer.

M. The Consultant shall Stamp and Sign the final record copy of the Specification, including a Stamp by the individual responsible for each professional discipline, consistent with the Drawing Stamps.
12 DRAFTING

A. At issuance of the Notice to Proceed (NTP), the Consultant shall obtain the most recent version of the POLB’s CAD Standards Manual, and shall provide drafting services and drawings consistent with these drafting standards.

B. POLB has the right to rely on the Consultant and the Consultant’s experience to properly estimate, and include in the Consultant’s fee for the Work, the appropriate number of Drawings and the appropriate level of drafting effort required for the successful completion of this Project.

C. POLB will assign a Drawing title and Drawing Identification Number to the Project for tracking in Project Wise.

D. At each submittal prior to Final Design, the Consultant shall identify the submittal level on the Drawings on the outside of, and centered on, the right border line per POLB’s CAD Standards (i.e. 15%, 50%, 100% Submittal). The Final Design shall have the words “FOR CONSTRUCTION” on the outside of, and centered on, the right border using the tag attribute “Submittal Milestone.”

E. All Drawings shall have a scale bar so that scale is verifiable as Drawings are reduced, duplicated, or enlarged.

F. Consultant shall develop and include in each Drawing set a legend of abbreviations, symbols, and line design consistent with POLB drafting standards. This legend shall include information for Drawings prepared by Consultant and Consultant’s subconsultants. Abbreviations shall be only those that occur on the Drawings.

G. Any hatching or shading shall be of a size appropriate to reduction to half-size printing while maintaining clarity and distinctive pattern.

H. All final Drawings shall be properly stamped and signed by the appropriate discipline(s).

I. POLB will provide MicroStation standard configuration files and seed files matching POLB’s current CAD Standards. Consultant may use these files to assist with the adherence of the standards, but additional configuration maybe required by POLB Engineering staff as required.

J. Reuse of existing Drawings in the preparation of Construction Documents is acceptable only if the Drawing clarity is maintained and detail is adequate for scanning by POLB Records Center.

K. The Consultant shall meet with POLB Engineering Design Division to discuss any drafting concerns or issues. Deviation from the CAD

L. Standards Manual shall not occur unless prior authorization is received in writing.
M. The Consultant shall manage and coordinate all activities related to preparation and reproduction of the Drawings, including coordination with all members of the Design Team.

N. The Consultant shall provide POLB with full-size archival Drawings as defined in the CAD Standard Manual.

O. The Consultant shall provide POLB with three (3) copies of the "As-Bid" digital files in MicroStation DGN file format conforming to standards of POLB upon completion of design. Upon acceptance of construction contract provide two (2) copies of the "As-Built" digital files in the same format. The As-Built drawings shall include all external-reference drawings attached to the final drawing files. Drawing file names, layering, colors, and line styles shall correspond to the CAD Standards Manual.

P. Consultant is to supply POLB with MicroStation DGN and InRoads FWD, ALG, and DTM files for individual plan sheets as needed.

Q. When elevations are used in Drawings, a Vertical Datum must be stated on the Project Location and Index sheet using the following format: VERTICAL DATUM: LBHD BM XXXX ELEVATION (XX.XX) FT., ADJUSTED JAN. (YYYY) NGVD 1929 MLLW. Include descriptions of all project benchmarks referenced.

R. When stationing or coordinates are used in the Drawings, a Horizontal Datum and EPOCH (the adjustment and control points) must be stated on the Project Location and Index sheet using the following format:

1) Refer to the designated Manager for the appropriate format.

2) Project Grid established where grid coordinate XX + XXN, XX + XXE = NAD 83, CCS Zone 5, EPOCH XXXX, coordinates of N XXXXXXX.XX, E XXXXXXX.XX and grid bearing of East equals NAD 83 Bearing of ___ degrees ___' ___" ___.; or show all State Plane coordinates in U.S. Survey feet.

S. When stationing or coordinates are used in the Drawings, a Drawing sheet providing survey control must be provided. This Drawing sheet shall show at least two monuments and provide a description, including their character coordinates, in the project datum (if coordinates are used in the Drawings) and their stations and outs (if stations and outs are used in the Drawings). This Drawing sheet shall also restate the horizontal datum in the above format. Additional information may be added to this sheet such as coordinates and stations for points where no monuments exist or future monuments are to be set, equations to other data, curve data, and vertical control.

T. Drawings must reference the survey field book number(s) and page(s) that established both the horizontal and vertical control used in preliminary surveys for the design of the project. While we recommend that only one datum be used in a project, if more than one datum is used this must be clearly stated in the Drawings, and the data must be illustrated.
U. As-built drawings must be submitted in digital form (2 copies) in a POLB-approved version of MicroStation drawing format no later than 90 days after the completion of construction. Consultant must use seed files provided by POLB, based on POLB’s Engineering Design Division CAD Standards.

V. Drawings must reference all surveys used for design.

W. Electronic Stamps and electronic signatures on individual Drawings are required to be accompanied by a letter from the responsible Consultant, certifying that the individual has approved all Drawings on the subject Project upon which his electronic Stamp and electronic signature appear.
13 CONSTRUCTION MANAGEMENT SERVICES

This section applies to consultants who are retained to provide construction management services during the construction phase of a project. The services of these firms are procured and managed by the Construction Management Division.

A Projects Utilizing Primavera Expedition
1) Projects requiring the use of Primavera Expedition will also need to utilize the Construction Management Division Procedures Manual (see Attachments).

B Pre-Construction Services
1) Construction Document Review
   a) Confirm the accuracy and adequacy of the Project Drawings and Specifications for practical and economical construction of the facilities (constructability and bidability). This review will verify whether the documents are complete and conform to industry standard guidelines and requirements.
   b) Confirm that the existing field conditions prior to the start of construction are properly reflected on the Drawings.
   c) Identify actual and potential problems associated with the construction project, and submit written recommendations to POLB.
   d) Provide review comments through computerized database sorted at least by both technical discipline, and by location (sheet number, page number).

2) Pre-Bid, Pre-Construction, and Partnering Assistance
   a) Participate in and give support to POLB at the pre-bid, pre-construction, and partnering sessions.
   b) At the direction of POLB, the Consultant shall arrange for and provide facilities to hold partnering sessions with the construction Contractor.
   c) The Consultant shall identify and hire an experienced and expert Partnering facilitator to organize and conduct the partnering session, if requested to do so by POLB.
   d) The Consultant shall attend the partnering session with the appropriate staff.

C Construction Services
1) Construction Services will commence with the award of the construction Contract. The Construction Services will end up to 60 days after final payment to the
construction Contractors or as directed by POLB. The Consultant will provide the following services:

2) Project Administration

a) Staff:

(1) Coordinate the work of the construction contractor with POLB, utility companies, other affected POLB contractors, City of Long Beach, City of Los Angeles, and other outside parties with construction contract related influence such as terminal operators, tenants, railroads, utilities, oil and gas companies, and agencies such as Caltrans and the County of Los Angeles.

(2) Maintain appropriate hard copy, electronic, and photographic records and files to document the progress of the construction work, the construction work product, changes in the construction work, schedule, or cost, and other events, issues, actions, disputes, or conditions that affect the construction of the Project.

b) POLB-Provided Materials

(1) POLB shall provide the Consultant with approved and conformed Construction Documents to be kept on file by the Consultant, including all referenced Project Reports and environmental documents.

c) Weekly Construction and Progress Meetings

(1) Conduct weekly meetings with the Construction Management Team, the construction contractor’s field superintendents, and POLB to review the status of construction, resolve current issues, follow-up on Requests for Information, review submittal logs, identify potential issues, discuss the quality of the work being provided, coordinate look-ahead activities for the following 2 weeks, and attend to any additional matters.

(2) Conduct coordination meetings as needed, with the construction contractor(s), POLB, the Project Designer, all affected utility companies, other interested regulatory agencies, tenants and other stakeholders when appropriate.

(3) Prepare and distribute minutes of all meetings in standard POLB format by the next working day following the meeting, identifying any and all action items and the party responsible for investigation and recommendation for resolution.

d) Records
(1) Maintain a record copy in POLB approved format of all: Contracts, drawings, specifications, addenda, correspondence, change orders, and other modifications in good order and marked to record all changes made during construction; shop drawings; product data; samples; submittals; substitutions; purchases; applicable handbooks; maintenance and operating manuals and instructions; other related documents; and revisions which are relevant to the Contract work. If the construction Contractor(s) are responsible for providing any portion of these functions, the Consultant shall ensure those functions are being provided appropriately on a weekly-update basis.

(2) Consultant shall, on at least a weekly basis, send all originals of records dealing with Contracts, Amendments, Change Orders, Drawings, Specifications, changes made during construction, handbooks, maintenance, and/or operations manuals, and related documents to POLB Records Center in a format acceptable to the Records Center.

(3) All files, records, and correspondence shall be maintained in the Consultant's field office and transferred to POLB Records Center at the completion of the project.

(4) Maintain records of principal layout lines, locations, key site plans, field survey data, and elevations, provided by a qualified surveyor.

(5) Maintain cost accounting records of progress payments and Time and Material (T & M) estimates for all authorized work including original cash flow projection, cost to date, cost to complete, and anticipated future cash flow.

(6) Maintain a diary to document significant Construction Management decisions and reasons for schedule or cost changes including both under-runs and over-runs.

e) Health and Safety Program

(1) Review with POLB's Safety Manager the safety program developed by the construction contractor(s) for compliance with their Contract and all applicable health and safety standards and regulations, if requested.

(2) Maintain awareness of current standards for health and safety requirements.

(3) Assist POLB's Risk Management Division in monitoring the construction contractors' compliance with the approved Health and Safety Program and documenting any deviations or exceptions from the Contract requirements, if requested.
f) Traffic Control and Public Safety
   
   (1) Review and monitor compliance to all approved traffic control and public safety plans.

   (2) Review and coordinate with POLB Traffic Engineers and Risk Management Division all detour, lane closures, temporary access, signage, delineation, and traffic control plans submitted by Contractors.

   (3) Report all deficiencies to POLB Construction Manager.

   g) Permit Compliance

   (1) Enforce environmental mitigation monitoring requirements of the contract as specified in the project’s Environmental Documents.

   (2) Assure permit compliance throughout the Project with all permit provisions required by outside agencies and POLB, including the Harbor Development Permit.

   h) Construction Operations

   (1) Consultant will not be responsible for construction means, methods, techniques, sequences, and procedures employed by the construction contractor(s) in the performance of the Contract documents. Failure of the construction contractor(s) to perform work in accordance with the Contract documents will not be the responsibility of the Consultant.

   (2) Observe the work performed by the construction contractor(s) and subcontractor(s) and notify POLB, in writing, of deviations from the contract documents.

   (3) Prepare and maintain a daily project log of all events, including manpower, equipment, construction progress, visitors, weather, changed conditions, accidents, and other significant events.

   i) Utilities

   (1) Ensure timely prior notification, coordination, and scheduling by the Contractor for work with utility companies for relocation, abandonment, and upgrade work.

   (2) Ensure all work is scheduled and completed on time.

   (3) Coordinate all work to be performed by utility agencies that is not part of the construction contractors’ responsibilities.
j) Coordination and Cooperation

(1) The Consultant will coordinate with, report to, and ultimately be responsible to the Director of Construction Management in charge of POLB's Construction Management Division. The Consultant will meet with POLB's assigned Construction Manager as necessary or as requested, to discuss and resolve issues, report and forecast progress, and provide briefings on the status of the Project. The Consultant shall coordinate with POLB staff to avoid conflicts between this Project and other Engineering projects or program elements that are occurring concurrently or in sequential phasing.

(2) The Consultant shall facilitate cooperation with other construction projects, public utilities, adjacent businesses and tenants, the general public, and other affected stakeholders.

3) Progress of the Work

a) Master Project Schedule

(1) Prepare and maintain a Master Project Schedule.

(2) Recommend alternatives for maintaining schedule or recovery from schedule delays.

(3) Update the Project Master Schedule as required to show actual versus planned progress. Planned progress will be held constant as the Project Baseline at the 50% complete milestone.

b) Contractor's Construction Schedule Review

(1) Monitor the progress of all construction contractors.

(2) Review construction contractors' schedules for conformity to the specification, logic, task duration, critical path, float time, procurement lead times, submittal review periods, and other key or time sensitive schedule parameters, and prepare written recommendations for actions to deal with deviations from the baseline schedule.

(3) Review sequence and duration of work activities and prepare written solutions to eliminate interferences and prevent delays.

(4) Review construction contractor's procurement plans and schedules both at the beginning and throughout the duration of the Project. Ensure material deliveries are compatible with the Construction Schedule requirements and provide written recommendations for actions to deal with deviations.
(5) Ensure the construction contractor(s) plan and schedule their Work to make most efficient use of time and cost and advise POLB of recommendations to make improvements.

(6) Review actual construction sequence as it occurs and perform “what if” analysis to determine time impacts (or savings) when compared to the sequence of work time shown in the schedule. Recommend remedial action for actual or anticipated schedule delays, budget overruns, and conflicts between construction contractors.

(7) Provide regular status reports including schedule and work progress, variance reports, cash flow curves, and material status reports at intervals specified by POLB’s Construction Manager.

(8) Initiate meetings with contractor(s) to resolve disputes relating to schedule items, work areas, contractor interference, or other construction conflicts. Any deviation from the schedule or work conflicts shall be noted and brought to the attention of POLB Construction Manager.

(9) Crosscheck the construction contractor’s schedules with their monthly construction Contract Progress Payment to verify that no overpayment occurs, and all as-builts are up to date.

c) Course of Action Recommendations

(1) Review and report in writing the adequacy of the construction contractor’s personnel and equipment, availability of necessary materials and supplies, and subcontractors.

(2) Recommend corrective action for actual or anticipated schedule delays, budget overruns, conflicts between construction contractors, or poor work.

d) Monthly Construction Evaluation

(1) Evaluate construction progress, based on percent of actual work completed for each construction activity, on a monthly basis. Discuss the evaluation with the construction contractor(s) and POLB.

(2) Prepare and distribute construction schedule reports that compare the actual construction dates to scheduled construction dates. Describe the construction contractors’ mitigation plan for any delayed work or schedule impacts.

e) Evaluation of Work Completion and Quality of the Project
(1) Evaluate the construction contractors’ completion of the work and, when appropriate, recommend that POLB accept completion of the Project or designated portion thereof. Schedule final inspection based on this evaluation.

(2) Conduct final inspections in conjunction with POLB, create punch list, and assist with securing all required guarantees, operations and maintenance manuals, affidavits, releases, bonds, and waivers.

(3) Report final inspection results and assist POLB post-construction review.

4) Construction Costs

a) Project Cost Master Plan

(1) Recommend alternatives for maintaining budgeted cost.

(2) Maintain an up-to-date cost status of the construction contract and match the anticipated Project cash flow against actual cost of the construction contract, the Consultant contract, and the costs for other construction related activities.

(3) Maintain records, files, and logs of all pending or completed changes to construction contracts or costs, to include but not be limited to change orders, issues, notices of potential claims, disputes, or other sources of controversy.

(4) Incorporate POLB-approved changes as they occur and develop cash flow reports and forecasts as required by POLB.

(5) Notify POLB designated Manager and Construction Manager of all anticipated or known costs that will cause the Project to exceed the budget and authorization.

(6) At the request of POLB Construction Manager, track costs for services provided by POLB’s on-call testing laboratory.

b) Cost Estimating

(1) Provide estimating services for the purpose of verifying and reviewing contractor costs, change orders, and claims.

(2) Prepare and keep current the approved estimate of construction cost.

(3) Review the Schedule of Values and report findings to POLB Construction Manager and Director of Construction Management.
(4) Develop a Project Cash Flow forecast based on a cost-loaded WBS-based schedule.

5) Contract Administration

a) Change Orders

(1) Analyze all change order request proposals.

(2) Provide written recommendations for action including analysis of costs due to compensable delays, impacts to schedule, and alternatives for mitigating delays and impacts.

(3) Assist with negotiating the construction contractors’ change proposals. Keep accurate records on proposals and counter-proposals.

(4) Prepare Change Orders for review and signature by POLB.

(5) Process Change Orders as directed, including cost evaluations and schedule impacts.

(6) Prepare and distribute proposed and executed Change Order Reports with each monthly construction contractor progress payment. List all anticipated and/or approved change orders by number and include a brief description of the change, the established cost, whether lump sum or Time/Material, and the percent of completion of the change.

b) Claims Management

(1) Consultant shall take appropriate actions necessary to prevent or mitigate claims.

(2) Consultant shall bring all notices of potential claim(s) with potential impacts -- cost and/or time -- promptly to the attention of POLB for direction.

(3) Provide recommendations regarding the disposition of claims or actions related to project design or construction that will mitigate the claims.

(4) Maintain a claim file for any issue that will or may have a potential to result in a claim for additional costs. The claim file shall include a chronology of the written correspondence associated with each issue, minutes to all meetings which are called to discuss the issue with the contractor(s), “what if” scenarios, and schedule analysis where appropriate, estimated costs, and written recommendations for settlement of each issue.
c) Progress Payments

(1) Review applications for progress and final payments by construction contractors. Ensure that the amount requested reflects the completion progress of the construction contractors’ work.

(2) Provide written recommendations on progress payment amounts to POLB.

(3) Prepare and issue the Weekly Statement of Calendar Days of the construction contractor, when requested.

(4) When requested, check certified payrolls and monitor compliance with all applicable labor code requirements, as well as affirmative action and wage rate requirements. Review schedule of fees submittal with comparative analysis.

(5) Prepare and distribute Progress Payment Reports to POLB for use in making payments to the construction contractor. The reports will state the total Construction Contract price, approved change order cost, anticipated change order cost, estimated cost at completion, payment to date, current payment requested, retention (if any), and actual amounts owed this period. A portion of this report will be a certificate of payment that will be signed by POLB, the Construction Manager, and the construction contractor.

d) Compliance with Federal DBE Program

(1) For projects receiving any portion of its funding from the federal government, there are special requirements. See Attachments for those requirements.

6) Submittal Review

a) Request for Clarification (RFC)

(1) Consult with POLB if the Contractor requires interpretations of the meaning and intent of the drawings and specifications.

(2) Assist POLB in the resolution of construction problems that may require design changes, modifications, technical interpretations or other assistance, and respond to the contractor.

(3) Assist with the resolution of any questions that may arise, and respond to the contractor.

b) Request for Information (RFI)
(1) Establish and implement procedures to expedite the processing of requests for information and follow-up with responses to the contractor.

c) Shop Drawing Submittal and Review

(1) Establish and implement procedures to expedite the processing of shop drawings, material and equipment sample submittals and follow up.

(2) Distribute shop drawings to POLB and the engineers-of-record and collect review comments. Return comments to contractor.

(3) Review shop drawings for schedule delays and compliance with construction contract documents, and submit written recommendations to POLB Construction Manager.

7) Temporary Facilities and Construction Field Office

a) As requested by POLB, provide temporary office facilities including meeting space and equipment (i.e. utilities, furniture, photocopy, communications, computers, computer software, facsimile machines, etc.) normally and reasonably used for this type of project, or as needed by the Consultant for this work and as required for the Consultant to maintain POLB's Construction Management and inspection staff at or near the construction site.

b) Provide clerical assistance for scanning documents and working with computerized construction management programs.

c) Provide site security for all temporary facilities and the construction field office.

D Construction Inspection Services

1) Technical Inspection and Testing (as requested by POLB Construction Manager in the Professional Services Guidelines Checklist)

a) Construction inspection will be in accordance with the current industry standards. Consultant will be required to furnish inspectors as required by either or both the City of Long Beach and the City of Los Angeles (including non-registered, registered, certified, and/or licensed) to monitor and inspect the methods, workmanship, and materials utilized by the construction contractor(s) to assure compliance with all POLB contract documents and building codes.

b) POLB Inspectors and POLB Field Engineers may be assigned full or part time to the inspection team.
c) Perform field inspection of all contract work as required or appropriate to ensure quality construction.

d) Furnish written activity reports that provide complete and accurate descriptions of the construction work and all pertinent conditions thereof.

e) Provide Long Beach Department of Planning and Building and Los Angeles Department of Building and Safety certified Deputy Inspectors for welding, structural steel, masonry, and concrete.

f) Provide off-site inspection services for manufactured products, fabrication, or construction materials.

g) POLB will supply all materials testing and sampling services on-site and off-site, including source inspections within a 50-mile radius.

h) Monitor and manage the Work performed by independent testing companies.

i) Verify that materials and equipment furnished by the Construction Contractor(s) meet the specifications for the Work.

j) Reject, or alternatively recommend, special inspection or testing of all work not performed in accordance with the provisions of the Contract documents.

k) Coordinate inspections and testing to eliminate conflicts and delays.

l) Review and report to POLB results of laboratory, shop, and mill test reports of materials.

m) Maintain all independent testing records and results.

2) Contractor Quality Review

a) Monitor and record the construction contractors’ work performance in regard to compliance with the Contract document requirements. POLB intends to reject work that does not conform to these requirements.

b) Endeavor to guard POLB against defects, deficiencies, and sub-standard work.

3) Survey

a) Under normal conditions, unless otherwise stated in the specifications, the Consultant will use POLB surveyors. The Consultant may be required to furnish survey crew(s) during construction to perform survey and sounding work as required to construct the Project and/or establish quantities for payment purposes.
E  Post-Construction Phase Services

1) As-Built Plans Preparation

The Consultant shall ensure the following are accomplished:

a) Produce a master, hard copy “red line” set of “as-built” plans as the Project proceeds, and assist the design engineer with preparation of the final Microstation CAD based “As-Built” plans upon completion of construction.

b) Provide hard copy and digital as-built drawings to POLB for incorporation into the File Management System (FMS).

c) Review the completeness and accuracy of the final as-built drawings.

d) Completion, submittal, and resubmitting all required corrections of the as-builts, in both hard copy and digitally, shall be considered a Special Deliverable, after hard copies and digital copies have been received and accepted by the Chief Harbor Engineer.

2) Final Reports

a) Prepare Final Report necessary to close-out the Project. At a minimum, this report will document the final walk through punch list; date and amount of final payment to Contractor; evidence of certification of all lien releases; certification of transfer of title to appropriate agencies; certification of delivery of final “as-built” drawings to POLB; receipt of all warranties, operations manuals, and maintenance manuals; and Board of Harbor Commissioners (BHC) acceptance of the project.

F  Deliverables

1) During the course of construction, Consultants will provide to POLB Director of Construction Management the appropriate number of copies of deliverables developed in accordance with POLB standards, procedures, and guidelines. These deliverables will include reports, calculations, and other documents as noted:

a) Daily reports, extra work diaries, and materials testing reports delivered to POLB daily.

b) Weekly Status Reports prepared by Consultant and delivered to POLB.

c) Construction Contract progress payment quantity documents delivered to POLB on the first working day after the 20th of each month.
d) Final payment quantity documents delivered to POLB no later than 5 working days after acceptance of the completed construction project.

e) Field measurements, test data, maintenance manuals, material and product catalogs, approval of recorded data, and other documents as required by POLB, recorded, maintained, and submitted as directed by POLB.

f) Consultant shall deliver all survey information and as-built drawings to POLB.

g) Consultant shall keep duplicate master copies and a record of all submittals during the course of the Project, including but not limited to requests for information, shop drawings, cost and cash flow analyses, and contractor schedules which shall be delivered to POLB upon receipt.

h) Consultant shall prepare a pictorial history of work progress as directed by POLB.
14 PRE-FABRICATED BUILDING DESIGN

A Port of Long Beach Responsibilities:

1) Determine the Scope-of-Work including a description of the users needs.
   a) Identify building use features and operational requirements including:
      (1) Total square footage required.
      (2) Square footage of all building spaces.
      (3) Ramps and stairways.
      (4) Ingress and egress including handicap access.
      (5) Utility requirements.
      (6) Location of downspouts, overhangs, and gutters.
      (7) Air conditioning and insulation.
      (8) Overhead cranes or other special equipment.
      (9) Restroom, break room, or other personnel requirements.

2) Select a building type and contact pre-fabricated building manufacturers for specifications and design criteria.

3) Identify building use or uses, provide building planning, and specify areas for storage, office space, warehousing and other uses.

4) Conduct a UBC Code review relative to the building type.

5) Prepare and review with POLB and ultimate user, a conceptual building plan and site plot plan design including the following:
   a) Building footprint location on property site plan,
   b) Site grading and drainage design,
   c) Slope protection design as required,
   d) Facility signage design, and
   e) Vehicle and pedestrian circulation, landscaping, and handicap access provisions.

6) Prepare a utility site plan including identification of the source of utilities and location of existing utilities, including:
   a) Obtain permits for all utilities including: water, gas, telephone, electric, sewer, and drainage.
b) Relocation of utility interferences either underground or overhead. POLB shall pot hole underground existing utilities, as needed, to assist in the determination of their location.

c) Location and details for fire hydrants.

7) Design foundation and floor slab including:
   a) Preparing a soils report.
   b) Conducting a code analysis as it pertains to foundation or foundation-related design criteria including: floor loading, handicap access, utility requirements and access, and vehicle access.
   c) Obtaining required foundation permits.
   d) Completing the structural design of the floor slab including slab-to-building connections, anchor bolts, and footing details.
   e) Designing site drainage to provide for building drainage (roof and floor), site catch basins, and floor drains.

8) Conduct a preliminary Plan Check with the City of Long Beach Planning and Building Department to identify general code compliance.

9) Prepare site Drawings including:
   a) Site grading plan,
   b) Site utilities plan,
   c) Dimensioned floor plan,
   d) Roof plan,
   e) Reflected ceiling plan,
   f) Exterior elevations,
   g) Building sections,
   h) Schedules,
   i) Mechanical plan,
   j) Plumbing plan,
   k) Lighting plan, and
   l) Power plan.

10) Prepare pre-fabricated building outline performance specifications including:
    a) Building materials,
    b) Building systems (doors, windows, roof, etc.),
    c) Structural system and criteria,
    d) Plumbing systems and criteria,
14.0 Pre-Fabricated Building Design

e) Mechanical systems and criteria,
f) Electrical systems and criteria,
g) Insulation requirements for roof and walls,
h) Window glazing,
i) Exterior and interior color, and
j) Exterior and interior finishes.

B Consultant and Contractor’s Design-Build Responsibilities:

1) Verify the UBC Code analysis for the building.
2) Develop detailed Design/Build schedule.
3) Conduct a safety plan check.
4) Determine specific building dimensions.
5) Define specific building materials.
6) Building insulation.
7) Design fire protection, including sprinklers.
8) Determine appropriate code requirements for pre-fabricated building including: seismic, fire, NEC, and Uniform Building Code.
10) Provide POLB with a complete set of Construction Documents.
11) Provide POLB with a complete Basis of Design report.
12) Submit Drawings and other required documents, including calculations, to City of Long Beach Planning and Building Department for Plan Check.
13) Develop and submit shop drawings and submittals for POLB review.
14) Obtain all necessary construction permits.
15) Coordinate with the building user and POLB regarding construction phasing requirements and user operations requirements during construction.
16) Provide POLB with complete “As-Built” Drawings and Specifications, in both hardcopy and digital format.
ATTACHMENTS

Application for Emergency Permit

Application for the Right to use Long Beach Harbor Department Property

Architectural & Engineering Guidelines for Building Design Services

Bid Addendum Format – SAMPLE

CAD Standards Manual 1.4

Cash Flow Form – SAMPLE

City of Long Beach Green Building Policy for Municipal Buildings

Construction General Permit Form - Checklist for Notice of Intent

Construction Inspection Checklist Form

Construction Management Division Procedures Manual

Contract for Professional Consultant- SAMPLE

Contract for Engineering Services - SAMPLE

Contract for a Port Funded Project – SAMPLE

Contract for a U.S.DOT Funded Contract - SAMPLE

Demolition Project Procedures

EMS Flyer

EMS Primer for Ports

HDP Application Procedures

LBMC Building Standards Code Title 18

Notice of Intent Form

Notice of Termination Form

Planning Support Services Guidance Manual

POLB Electrical Design Criteria

POLB Railroad Design Criteria
POLB Security Division On-Site Dive Notification

POLB Sustainable Design & Construction Guidelines

POLB Sustainable Landscape Palettes

POLB Wharf Design Criteria

Port-Wide Ground Motion Study

Program Project Budget Approval Policy

Project Status Report – SAMPLE

Project Delivery Manual (PDM)

Project Initiation Form (PIF) adapted for Design

Request for Annual Contract Services

Request for Construction Survey

Request for Survey and Mapping Services

Research Sources for Identification of Existing Site Conditions

Risk Management - Insurance Forms – SAMPLE

SBE & VSBE Form

Sediment Management Handbook for Dredge & Fill Projects

Standards Used in Design

Statement of Interest

Transmittal of Drawings – Specifications

Underground Utilities and Pipelines

Unique Port Standards

Useful Life of Assets