Washington State Department of Transportation

Memorandum

August 18, 2003

TO: Helena Kennedy Smith MS-130

FROM: Maureen Sullivan MS-230
(206) 464-1216

SUBJECT: Y-83

Attached are two or greement Y-8393 to produce the SR 520 engineering to conform to recent changes, i e 8-lane alternative, to write the discipline EIS.

The scope and estim the consultant team, and are approved. The r rocess this task order and return one original t tant.

LOR:lor

Dale,

Per your request.

Enclosed is a copy of the most recent agreement on the SR 520 Bridge Replacement project.

-Kinyan Lui

Washington State Department of Transportation
Douglas B. MacDonald
Secretary of Transportation

Northwest Washington Division
Urban Corridors Office
401 Second Avenue South, Suite 560
Seattle, WA 98104-3850
206-464-1220 / Fax 206-464-1190
TTY: 1-800-833-6388
www.wsdot.wa.gov

August 20, 2003

Mr. Lindsay Yamane
Parametrix, Inc.
5808 Lake Washington Blvd. NE, Suite 200
Kirkland, WA 98033-7750

Re: SR 520, Bridge Replacement and HOV Project
Agreement Y-8393, Task AG
Record Original & Notice to Proceed

Dear Mr. Yamane:

Enclosed for your records is one fully executed original of Task AG for Agreement Y-8393. The Task Start Date is August 18, 2003 and the Task End Date is December 31, 2005. The total amount authorized for this task is $6,508,277.33.

The manager for this task is Ms. Julie Meredith. She may be reached at (206) 464-1187. Original invoices and back up data should be sent to Ms. Meredith at 401 Second Avenue South, Suite 560, Seattle, WA, 98104-3850.

Please call me at (206) 440-1204 if you have any questions.

Sincerely,

Gary Langrock, J.D.
Urban Corridors Office

Enclosures:
cc: J. Meredith, MS 230
G. Davis, MS 95
UCO Consultant Liaison Files
D. Dilley, MS 47323 (with second original)
R. Robinson, MS 47320

Washington State Department of Transportation

Task Order

Agreement No. Y-8393 *(To be filled in by Agreement Manager)*

Task No. AG **Amendment No.** _____ **Work Order No(s).** XL-2071

All terms and conditions of this agreement are in full force and effect for this Task Order document.

Project Information

Project Title SR 520 Bridge Replacement and HOV Project	
State Route No(s). 520	Fed. Aid Project No(s).
Org. Code of Work Order No(s). 589205	Fed. Aid Participating Percentage(s):

Task Manager Information

Task Manager Les Rubstello	Phone (206) 464-1217	Mailstop NB-82/230
Mailing Address 401 2nd Ave S, Suite 560 Seattle, WA 98104		

Consultant

Consultant Parametrix, Inc.	Contact Lindsay Yamane
Address 5808 Lake Washington Blvd. NE Suite 200 Kirkland, WA 98033-7350	Phone (206) 331-1647
	Federal I.D. No. 91-0914810

Scope of Task Order

Provide brief description of work and reference attachments for prime consultant and all subconsultants (to include detailed description of work schedule and estimate).

Report Due Date

Alternative Development and Draft Environmental Impact Statement
Scope and Estimate attached.

Task Schedule and Cost

			New Task		Task Amendment
Pretask Start Date		Pre-Task Amt.	$0.00	Previous Authorized Amt.	
*No payment for pre-task work done **PRIOR** to this date*					
Task Start Date	August 18, 2003	Task Amt.	$6,508,277.33	Task Amendment Amt.	
*No payment for work done **PRIOR** to this date*					
Task End Date	December 31, 2005	Total Task Amt.	$6,508,277.33	Total Amended Task Amt.	
*No payment for work done **AFTER** this date*					

Approval Signatures

****Note: Two original signed Documents are required.****

Lindsay C Yamane
Consultant

H C Smith
Washington State Department of Transportation

Chester O Rubstello
Agreement Manager ***(Signature required for execution of document ONLY for Creative Media Services Agreements)***

Distribution: Originals: ☐ Consultant ☐ Accountant Copies: ☐ File ☐ Task Manager ☐ Consultant Services ☐ Other _____

DOT Form 130-010 EF
Revised 11/99

SR 520 Bridge Replacement and HOV Project
Agreement Y-8393

Task No. AG
Alternatives Development and Draft EIS

Scope of Work

Task No. AG includes those activities and sub-activities necessary to advance the SR 520 Bridge Replacement and HOV Project EIS through completion of the Draft Environmental Impact Statement (DEIS). This task order covers the period starting August 18, 2003, and ending on December 31, 2005, unless modified in writing by the STATE.

GENERAL PROJECT ASSUMPTIONS

Task order duration is from August 18, 2003 through December 31, 2005.

- A project office will not be available at the beginning of this task order. Central files for this work will be maintained and stored at the prime consultant's office. The STATE may provide a project office at a future date for use by CONSULTANT. The STATE shall notify the CONSULTANT in writing a minimum of 30 days in advance of requiring relocation to the STATE's project office. For the purposes of this task order, it is assumed that all work will be performed from the CONSULTANT Team's home offices and any modifications to the task order will be made via the agreement management process.

- Public involvement activities, except for the DEIS Public Hearing Process, will be executed under a separate contract. Support of public involvement activities will be limited to attendance and participation by select staff. Technical materials for display at outreach and facilitation activities will be provided as specified within each activity of this task order.

- Preparation of a "non-traditional" DEIS document has been requested by WSDOT and assumed within this scope of work. It is understood that the characteristics of the "non-traditional" DEIS are not clearly defined and additional scope modifications may be required as further clarity of the format of the document is provided. The scope changes will be addressed via the agreement management process.

Four (4) alternatives with several options will be examined and evaluated within the DEIS. The alternatives include:

1. No Action
2. 4-Lanes (tolled)

3. 6-Lanes (tolled)
4. 8-Lanes (tolled)

The above alternatives all include the accommodation for future HCT. An option to the 4-lane will be without the accommodation. The 6-lane alternative (6 lanes through Montlake and 9 lanes across Portage Bay) will have an option for a scaled-down version of the 6-lane alternative through Montlake to I-5 (4 lanes through Montlake and a 6 lanes across Portage Bay).

Tolling will be part of each build alternative. Each alternative will consider up to two design options for the configuration of toll facilities within the corridor. One option will assume that the technology for fully automated electronic toll collection (ETC) facilities is available and the other option will consider a combination of ETC and manual toll collection facilities sited at a location selected by the STATE.

Up to twenty (20) copies of draft documents will be submitted for agreed deliverables.

Unless otherwise specified within the DEIS work plan, reviews by STATE of draft documents will be completed in two weeks. All comments received from multiple STATE reviewers will be resolved and consolidated into one set of review comments.

Submittal of final documents will consist of one camera-ready original, up to (10) final copies, and the electronic data files for the document in compatible software formats. CONSULTANT will print and distribute up to an additional fifteen (15) copies of final documents for the team and the project central files.

ACTIVITY 1.0—PROJECT MANAGEMENT

1.1—Management and Administration

Objective: To provide day-to-day oversight and continuity in the management and execution of the work in accordance with the provisions of the AGREEMENT. On-going management will include ensuring that the work is completed on time and within the AGREEMENT budget.

Approach: The CONSULTANT is responsible for:

- Assisting in strategic management;
- Attending monthly Agreement Management Meetings scheduled and conducted by the STATE
- Making assignments to team members and contributing agencies;
- Ensuring that work products are developed in a manner that facilitates on-going feedback from participating agencies and interest groups;
- Integrating technical working papers into unified documents and presentations;

- Implementing effective quality assurance/quality control procedures;
- Preparing monthly progress reports and invoices;
- Day-to-day management of project team/subconsultant activities; and,
- Other work activities as necessary to maintain schedule and budget.

The CONSULTANT will provide a progress report describing work performed with monthly invoices. Progress reports will be prepared in a format approved by the STATE. Progress shall be tracked at the sub-activity level, e.g., 2.1, and shall include reports of both the percent spent and the percent of work complete. The report will be reviewed monthly at the Agreement Management Meeting. The CONSULTANT will be responsible for coordinating the activities of subconsultants to ensure completion of the work authorized under this task order. This coordination will include obtaining monthly progress reports and invoices, timely input for meetings, incorporating work into project deliverables and obtaining answers to issues raised by the STATE within the interpretation of the task order scope of work. The CONSULTANT Project Manager shall be the contact for questions and requests by the STATE. Discussions, correspondence, or work requested by others deviating from the negotiated scope of work shall be directed to the STATE for resolution and direction. The CONSULTANT will provide quality assurance and quality control (QA/QC) throughout the life of the AGREEMENT to ensure adequate administration, accounting, budget monitoring, scheduling, communications and planning and engineering procedures leading to the final product.

The CONSULTANT will implement the Agreement Management Plan (including all subsequent revisions and updates) outlined within the Project Management Plan. Monthly Agreement Management meetings will be scheduled in advance in cooperation with the STATE over the duration of this task order. These meetings will provide the venue for the review, negotiation, and approval of requested changes in the scope of work. The STATE will lead and conduct the Agreement Management Meetings addressing revisions to the negotiated scope of work, baseline schedule, and approved project budget.

Deliverables:

- Budget analysis and tracking
- Monthly invoicing and progress reports
- Proposals for changes in scope of work, including budgetary and schedule impacts
- Required contract amendment documentation for approved changes
- Weekly deliverable progress report

1.2—Project Schedule

Objective: To provide a common reference for the project team to work toward project milestones and deliverables.

Approach: The CONSULTANT will develop, update, and manage the project schedule. The schedule will be prepared using Microsoft Project. Activities shall be tracked by the sub-activity. It will show dates of key team meetings, committee meetings, workshops, review periods, and deliverable due dates. In addition, the schedule will show the interrelationship and interdependency of various work activities. The schedule will also identify milestone dates and the duration of report preparation, internal review, STATE review, interagency review, and public review. The duration between draft and final reports will allow adequate time for distribution, review, and incorporation of review comments into the final version of the report. The schedule will then be used as a tool to track the study activities. The project schedule shall be updated monthly. Updates shall reflect the percent complete and schedule adjustments including proposals to mitigate and minimize delays to achieve the original baseline schedule. Any project schedule changes will be reviewed with the STATE for approval prior to finalization. The CONSULTANT will designate a scheduler assigned to this activity.

Deliverables:

- Project schedule with milestones, percent complete for major activities, and interdependencies identified
- Monthly schedule updates reviewed with the STATE for final approval
- 4-Week Look Ahead Schedule provided weekly at EIS Team meetings and bi-weekly at Task Managers meeting

1.3—Update Project Management Plan

Objective: To prepare and distribute updates to the existing Project Management Plan previously prepared by the CONSULTANT for the project.

Approach: Working in close cooperation with STATE, the Project Management Plan (PMP) will be reviewed and revised to reflect changes in vision, schedule, execution and strategy that have occurred over the last 12 months. Emphasis will be placed on an update of the Project Organization, Document Control, and Agreement Management chapters. Draft versions of the proposed revisions will be submitted for review and approval. Final updates will be distributed to all PMP document holders. Up to two updates per chapter are assumed within this task order.

Deliverables: Draft and final versions of updated chapters of the PMP (up to two updates per chapter)

1.4—Partnering Session and EIS Team Project Kickoff Meeting

1.4.1—Partnering Session

Objective: To conduct a working session and a partnering session with representatives of the Project Management Team for the purposes of developing processes for coordinating and reviewing work products and deliverables for the SR 520 Bridge Replacement and

HOV Project.

Approach: An initial working session will be scheduled by the STATE to identify, discuss and define the interdependencies of each defined work activity. The process for reviewing and coordinating work efforts, products and deliverables that affect other work activities will be developed in close cooperation with the involved parties identified by the STATE. The STATE will document the process and monitor implementation and efficiency. A partnering session with key leaders of each team will be scheduled and conducted by the STATE to ensure all parties support and endorse the adopted process.

For budgeting purposes, up to five project management and technical staff will participate in the initial working session. The initial working session is assumed to require 5 hours per person for attendance and travel to and from the meeting location. In addition, it is also assumed that up to five project management and technical staff will participate in the partnering session with members of the Project Management Team. The partnering session is assumed to require 8 hours per person for attendance and travel to and from the meeting location.

1.4.2—Work Plan and EIS Team Project Kickoff Meeting

Objective: To prepare a detailed work plan, coordinated with the baseline project schedule, to guide the CONSULTANT'S activities, and, to conduct a project kickoff meeting with key team members.

Approach: In parallel with the development of the baseline project schedule, a detailed work plan will be prepared. To the extent possible, deliverables will be defined and teams will be identified. The work plan, developed in collaboration with various task and activity leaders, will be reviewed with STATE prior to distribution. For budgeting purposes, it is assumed that two drafts and one final work plan will be developed and that each version will require, on average, 60 hours for preparation.

A 4-hour-long project kickoff meeting will be scheduled and conducted to present the final work plan to the CONSULTANT and STATE teams. The baseline Project Schedule and the updated chapters of the Project Management Plan will also be reviewed and discussed. For budgeting purposes, it is assumed that up to 35 CONSULTANT team members will participate in the Project Kickoff meeting and that each person will require 5 hours to attend and travel to and from the meeting location.

Deliverables: No deliverables are anticipated for this activity.

1.5—Research and Establish SR 520 Corridor Program Project Office

Objective: To work with STATE and commercial real estate agents to identify, plan and establish a project office for the SR 520 Corridor Program.

Approach: The STATE has requested that a project office be established for the SR 520

Corridor Program under this agreement and a potential location has been identified. CONSULTANT will work with STATE and property managers to identify and secure a project office for the sole execution of project delivery activities associated with the SR 520 Corridor Program.

CONSULTANT will work in close cooperation with STATE to develop a space planning program. The program will identify the anticipated staff loading based on known project activities to determine the appropriate space requirements. It is assumed that the project office will be established for a period of not less than 5 years and that staff from CONSULTANT, STATE and other consultant team may co-locate at the SR 520 Corridor Program Office.

Based on the final space planning program, conceptual space plans will be prepared working in cooperation with STATE. CONSULTANT will prepare a list of furniture, computers, and supplies with estimated costs for consideration and approval by the STATE. Upon final approval of the preferred conceptual space plan, a proposal will be prepared and presented to the property managers for consideration and final negotiations.

Assumptions: At this time, a single office location (the Times Square Building, Seattle) is being considered and the costs associated with actual project office selection and establishment cannot be determined at this time. Therefore, this work effort is limited to space planning and proposal development for submission to the commercial real estate agent. Should a lease not be negotiated for this space, revisions to this work activity will be defined and a contract amendment will be negotiated to identify additional project office opportunities, prepare space plans, and develop proposals for submission to the property managers.

Deliverables:

- Various "in-progress" work products such as space planning programs, projected staff loadings, conceptual space layouts, and furniture, equipment and supply lists
- Up to two proposals for submission to the property manager

ACTIVITY 2.0—PROJECT MEETINGS

2.1-Project Management Team Meetings

Objective: To provide coordination of the EIS activities with the STATE management team of the Bridge Replacement and HOV Project.

Approach: Project Management Team meetings with the STATE, SOUND TRANSIT, and the Public Involvement Consultant will be conducted monthly by the STATE. The CONSULTANT's Project Manager will attend up to 30 meetings and provide monthly updates on the DEIS activities. Information will be provided in sufficient detail to allow scheduling of design and public involvement activities to meet the needs of the DEIS schedule. STATE will prepare all agendas and document the discussions in meeting

minutes distributed to the attendees and project files. The CONSULTANT will also receive at these meetings a status of design and public involvement activities that may affect its work. Each meeting will require 4 hours including travel time to and from the meeting location, preparation, and follow-up.

Deliverables: No deliverables are anticipated for this activity.

2.2—EIS Progress Meetings

Objective: To provide routine communication and coordination between the project partners and the CONSULTANT Team.

Approach: EIS Progress Meetings with the STATE and SOUND TRANSIT will be held on a weekly basis to discuss project coordination, schedule, and unresolved issues related to the DEIS. The STATE will be responsible for agendas, location, and summarizing each meeting. The STATE will record action items.

In addition, bi-weekly Environmental Leads Meetings with the STATE and SOUND TRANSIT will also be conducted to coordinate environmental strategies, schedule and resolve issues related to the project. Agendas and meeting notes for the Environmental Leads Meetings will be prepared and provided to the STATE upon request.

Assumptions: For budgeting purposes, it is assumed there will be up to 120 EIS Progress Meetings, which will include 4 CONSULTANT staff for 3 hours per meeting. It is assumed that there will be 60 Environmental Leads Meetings, which will include 3 CONSULTANT staff for 3 hours per meeting. These meeting duration estimates include travel time to and from the specified location. It is assumed that these meetings will be conducted at WSDOT's Urban Corridors Office. It is understood that this activity is estimated to establish a budget allowance, and the number of meetings may change based on project needs. It will be the CONSULTANT's responsibility to manage this activity to ensure this budget allowance is not exceeded.

Deliverables:

- Environmental Leads Meeting agendas and meeting notes upon request

2.3—EIS Team Management and Coordination Meetings

Objective: To conduct internal CONSULTANT team coordination and monitor the progression of the work to achieve the established project delivery schedule.

Approach: The CONSULTANT will conduct various task, discipline and team meetings for the sole purpose of guiding, coordinating, and executing the scope of work with an ultimate goal of achieving the overall project schedule. The following types of meetings and their frequency are anticipated:

- Task Managers Meetings—bi-weekly (62 total, August 18, 2003 through December 31, 2005)
- Engineering Team Meetings—weekly (36 total, August 18, 2003 through December 31, 2004)

Environmental Team Meetings—monthly (6 total, August 18, 2003 through January 31, 2004); bi-weekly (46 total, February 1, 2004 through December 31, 2005)

Participants at each of these meetings will include task managers, activity team leaders and key team members who have responsibility for schedule achievement and project deliverables. The meetings will focus upon review of upcoming project activities, technical activities in progress, project schedule status and discussion of unresolved issues requiring resolution to avoid impacts to project delivery. Significant project issues will be elevated to the weekly EIS Progress Meeting and/or the monthly Project Management Team meeting as necessary.

Assumptions: For budgeting purposes, the following assumptions have been made for each meeting:

- Task Managers Meeting—up to 7 team members for an average of 3 hours each
- Engineering Team Meetings—up to 6 team members for an average of 4 hours each
- Environmental Team Meetings—an average of 8 team members for an average of 4 hours each

These estimates include travel time to and from the specified meeting locations. It is understood that this activity is estimated to establish a budget allowance and the actual number of meetings may change based on project needs. It will be the CONSULTANT's responsibility to manage this activity to ensure this allowance is not exceeded.

Deliverables: No deliverables are anticipated for this activity.

2.4—Technical and Executive Committee Meetings

Objective: To work in cooperation with the STATE and the STATE's public involvement team to identify discussion topics, participate in the meetings, and provide presentation materials for the meetings.

Approach: It is anticipated that the project Executive Committee will meet 8 times and the project Technical Committee will meet 8 times. The focus of each meeting will generally coincide with progress on project technical activities, and be oriented to facilitate discussion on project issues and provide direction for the CONSULTANT team.

Assumptions: For budgeting purposes, it is assumed that Technical Committee meetings will include participation of up to 4 CONSULTANT team members, and that each meeting will be up to 6 hours (including travel time to and from the specified location). Executive Committee meetings will include participation of up to 3 CONSULTANT team members, and that each meeting will be up to 6 hours (including travel time to and

from the specified location). Additionally, up to three CONSULTANT team members will participate in up to two, 2-hour-long working sessions prior to each committee meeting for the purposes of finalizing discussion topics, presentation materials, confirmation of messages, and desired meeting outcomes. One working session will be focused on planning, and the second on presentation "dry-runs".

Deliverables:

- Preparation of four Power-Point presentations, (up to 20 slides per presentation).
- Preparation of display boards, based on tables, charts, and graphics that are part of completed deliverables, will be made available for use at committee meetings. Up to 5 mounted boards will be prepared for each meeting.

2.5—Advisory Committee Meetings and Local Sounding Board Meetings

Objective: To work in cooperation with the STATE and the STATE's public information team to identify discussion topics, participate in the meetings, and provide presentation materials for the meetings.

Approach: It is anticipated that the Advisory Committee will meet 8 times and that the local sounding boards will meet a total of 16 times. The focus of each meeting will generally coincide with progress on project technical activities, and be oriented to facilitate discussion on project issues and provide direction for the CONSULTANT team.

Assumptions: For budgeting purposes, it is assumed that the Advisory Committee meetings will include participation of up to three CONSULTANT team members, and that each meeting will be up to 6 hours (including travel time to and from the specified location). It is assumed that working sessions for the Executive and Technical Committee meetings will also include planning and preparation for the Advisory Committee meetings and that similar materials will be presented at all meetings.

For the local sounding boards, it is assumed that up to four CONSULTANT team members will attend each session and that each session will be up to 6 hours (including travel time to and from the specified location). Additionally, up to three CONSULTANT team members will participate up to two, 2-hour-long working sessions for each sounding board session. Up to five presentation boards developed from "in-progress" work efforts will be prepared for each local sounding board session. Each presentation board will require 8 hours to prepare.

Deliverables:

- Up to 80 mounted boards (5 each for 16 meetings)

2.6—Other Agency, Local Jurisdiction, and Tribal Meetings

Objective: To prepare for and participate in meetings with local jurisdictions, state and federal agencies, and Tribes to discuss details associated with the EIS alternatives, including physical definition, traffic and environmental impacts, project mitigation and enhancements, and general project issues and concerns.

Approach: Project management and technical staff as appropriate will participate in meetings to discuss project definition, issues and concerns with jurisdictional and resource agencies staff and elected officials. The purpose of the meetings will be to respond to questions and work toward agreement and resolution of the definition of the project Preferred Alternative.

Assumptions: For budgeting purposes it is assumed that two project staff will participate in up to 62 meetings with jurisdictional, state and federal agency staff, and Tribes. Each meeting will be assumed to last up to 3 hours (including travel time to and from the specified location). In addition, 4 hours per meeting will be required to develop meeting materials. It is understood that all communication with local jurisdictions within the corridor will be by or through the STATE. It is understood that this activity is estimated to establish a budget allowance, and the number of meetings may change based on project needs. It will be the CONSULTANT's responsibility to manage this activity to ensure this budget allowance is not exceeded.

Deliverables: No deliverables are anticipated for this activity.

2.7—Principals Meetings

Objective: To consult regularly with agency leadership to identify and resolve emerging issues affecting the SR 520 EIS.

Approach: Selected CONSULTANT Principals will participate in leadership meeting with STATE, assumed to occur bi-weekly for the first 6 months, then monthly for the remaining 23 months (35 total) to identify, discuss, and evaluate emerging political, fiscal, economic, and project issues and develop specific strategies to mitigate potential impacts to project delivery. Up to three CONSULTANT Principals will attend each meeting. STATE will schedule, plan, and conduct each meeting, and document decisions and track action items in brief meeting summaries. Meeting summaries will be distributed to the attendees, CONSULTANT's Project Manager, and the project files.

Assumptions: It is anticipated that the Principal's Meeting be conducted at WSDOT's Urban Corridor Office. Each meeting is anticipated to last 4 hours (including travel time to and from the specified location).

Deliverables: No specific deliverables are anticipated for this activity.

ACTIVITY 3.0—PUBLIC OUTREACH SUPPORT

3.1—Public Information Events Planning, Support and Attendance

Objective: To provide project management and technical staff to assist with preparations for and attendance at Public Information events organized by the Public Involvement team.

Approach: Project management and technical staff will attend up to two (2) sets of public information events in three locations (6 total) and provide onsite assistance in conveying information to the public and seeking project input. It is assumed that up to four (4) project management and technical staff will attend each event and that 5 hours per person per event will be required to attend and travel to and from the event location. The actual staff will be selected upon receipt of the event schedule and format from STATE. Each event is assumed to be up to four (4) hours in length. CONSULTANT will assist with the formatting of each set of public information events and the identification of materials for displays. Up to two consultant staff will assist with formatting each set of events at 8 hours each per set. It is assumed that handouts and display boards will be developed from technical materials within completed deliverables approved by STATE for distribution to the public. Each board will require 8 hours to prepare.

Deliverables: Preparation of up to 48 display boards.

3.2—Community Meeting Planning, Support and Attendance

Objective: To provide project management and technical team support and attendance for various project presentations to communities, special interest groups and other non-jurisdictional and non-agency groups.

Approach: Up to three (3) project management and technical staff will participate in up to 40 5-hour-long meetings, including preparation and travel time, with members of community and neighborhood representatives, special interest groups, and other non-jurisdictional and non-agency teams to provide project updates. For budget purposes, up to 8 hours of work to develop new materials is assumed to support each briefing.

Deliverables: No specific deliverables are anticipated for this activity.

3.3—Response to Public Questions and Issues

Objective: To coordinate responses to inquiries from the general public regarding the progress of the project.

Approach: Working in close cooperation with the STATE and the STATE's Public Involvement Team, the CONSULTANT will assist with the development of responses to technical questions arising throughout the duration of this task order. It is anticipated that the STATE or the STATE's Public Involvement Team will receive all inquiries. As appropriate, the development of responses may be requested of the CONSULTANT.

Should the CONSULTANT receive inquiries directly, said inquiries will be immediately forwarded to the STATE with a request for direction. All responses developed by the CONSULTANT will be submitted to the STATE for review, revisions and use in providing various responses. All responses to the public will be provided from the STATE.

For budgeting purposes, it is assumed that, on average, 4 hours per week will be required to prepare and review responses to questions.

Deliverables: CONSULTANT will participate in working sessions and prepare brief draft narrative responses to technical issues.

ACTIVITY 4.0—ALTERNATIVES DEFINITION AND SUPPLEMENTAL ENGINEERING

4.1—Evergreen Point Bridge East Touchdown Value Analysis

Objective: To conduct a value analysis of the constructability of the Evergreen Point Bridge easterly touchdown alignment for the EIS alternatives focused on eliminating or minimizing the encroachment on abutting properties.

Approach: Using updated conceptual engineering drawings reflecting the revisions to the EIS alternatives, a two-day value analysis workshop will be scheduled to evaluate potential revisions to bridge alignment to eliminate or minimize right-of-way acquisition needs. Potential alignment revisions will consider bridge configuration, construction staging, and maintenance of traffic in addition to other critical factors.

The value analysis team will be assembled from recognized senior bridge engineers and contractors with major fixed and floating bridge design and construction expertise who have not been directly involved in the alternatives development to date. A list of recommended candidates and their qualifications will be submitted to the STATE for review and final approval.

The value analysis workshop will require a presentation by the CONSULTANT to orient the value analysis team to the features of the alternatives and constraints of the project. During the workshop, members of the CONSULTANT team will be present to provide additional information, respond to questions, and perform minor supplemental engineering tasks. Upon completion of the workshop, the value analysis team will make a presentation of the findings to key STATE and CONSULTANT team members. The process and findings will be documented in a draft and final technical memorandum prepared by the value analysis team.

Assumptions: It is assumed the value analysis team will include up to six experts from the consulting and construction industry; and, each member will require 30 hours, on average, to participate in the workshop and complete the presentation and documentation

memorandum. Up to four members of the CONSULTANT will be required to attend, brief, and assist the value analysis team and each member will require 20 hours, on average, to support the workshop.

Deliverables:

- Brief presentation with handout materials outlining the process, options considered, and findings of the value analysis workshop
- Draft and final technical memorandum presenting the process, options considered, and findings of the value analysis

4.2—Engineering Refinement of Alternatives

Objective: To develop engineering and environmental refinements to existing SR 520 preliminary design drawings for the EIS alternatives reflecting the changes to the alternatives as defined by the Executive Committee on July 15, 2003, and the results of the travel demand forecasting and the operational analyses.

Assumptions: Capacity improvements for the I-5 Corridor will only be evaluated for the 8-Lane Alternative.

Approach: The alternatives will be revised to reflect the smaller project area and other revisions as defined by the Executive Committee on July 15, 2003. Project limits have generally been defined as I-5 on the west to the Bellevue Way NE IC on the east. Improvements beyond these limits will be evaluated to the extent necessary to ensure satisfactory conformance of the build alternative to existing conditions. In addition, using the findings of the travel demand forecasting and the operational analyses, engineering revisions to affected interchange ramps or mainline sections will be made to reflect the actual operational needs for each alternative. Environmental impacts will be minimized to the extent possible in developing potential engineering refinements.

Engineering refinements and new preliminary plan view designs will be prepared to address local street and intersection improvements required as mitigation of additional traffic impacts. Coordination with the environmental team will be conducted to assist designers in minimizing environmental impacts.

Profiles between the floating bridge and the structure touchdown at MOHAI will be modified to accommodate the outcome of the ongoing stormwater management and water quality studies.

Deliverables:

- Revised preliminary design drawings of the three defined EIS build alternatives including assumed design options
- Updated list of potential design deviations associated with each build alternative

4.3—I-5 Alternative Development

Objective: To develop engineered plans for improvements along I-5 to accommodate the SR 520 8-lane alternative.

Assumptions: The limits of improvements and the number of lanes required have been assumed as follows:

- Improvements extend south on I-5 from SR 520 to the vicinity of the Corson Avenue/Michigan Street exit
- One additional lane in each direction

No changes to the Ship Canal Bridge will be included. STATE will provide aerial photography and elevation data suitable for preliminary design. Geotechnical information will be obtained from readily available WSDOT record drawings and project files.

Approach: A three-step design process will be used for development of alternatives for I-5 modifications. First, line sketches will be developed to determine concepts of how additional lanes will be added and how interchanges will be modified. The line sketches will be presented to the project team where the team will review the concepts and provide comments. A maximum of six concept line sketches will then be drafted over aerial photography to show the footprint of each alternative. Screening of the alternatives will be conducted as part of the travel demand forecasting, operational analyses, and screening-level environmental review. The preferred alternative chosen from the screening will be drafted in MicroStation and horizontal and vertical alignments will be defined using CaiCE software. Plans will be developed at a scale of 1"=100' on 11"x17" drawings. Typical features defined for each alternative will include:

- Lane configuration
- Direct connections for HOV/BRT
- Interchange configuration
- Horizontal and vertical alignment
- Pedestrian and bicycle connectivity
- Potential community enhancement opportunities
- Potential local street modifications required to fully implement the alternative

Deliverables:

- One copy of each I-5 concept on aerial photography (a maximum of six concepts)
- Preliminary plans and profiles of mainline, ramps, and local street modifications of preferred alternative
- List of potential design deviations

4.4—Lid Opportunities and Preliminary Design

4.4.1—I-5 Lidding Opportunities (TASK DELETED)

4.4.2—Preliminary SR 520 Lid Design

Objective: To conduct additional ventilation and engineering studies to determine site-specific lengths of non-ventilated lids at five locations for the 6 and 8-lane alternatives on SR 520.

Approach: Working in close cooperation with the STATE, a methodology will be prepared consisting of iterative ventilation, air quality and engineering analysis to determine the maximum non-ventilated lid lengths. Lid locations will be approved by the STATE prior to beginning analysis. A draft and final methodology will be prepared for review and approval by the STATE. Where applicable, the suggested methodology will include provisions for conceptual designs of transit flyer stops. Upon approval, additional preliminary design studies will be executed to determine the maximum non-ventilated lid lengths at up to five locations.

The air quality analysis would include evaluation of concentrations within the lidded sections of the highway and surrounding the portals. It is assumed that the following activities will be required to determine the appropriate non-ventilated lid lengths:

- Develop an analysis approach methodology report.
- Evaluate the pollutant concentrations inside the tunnel using CFD (computerized fluid dynamics) analysis for typical case examples including up to eighteen (18) computer runs to evaluate the following design variables:
    1. Two computer runs will be used to establish the relationship of grade to the movement of pollutants through the tunnel.
    2. Five computer runs will be used to establish the relationship of tunnel length to the movement of pollutants through the tunnel.
    3. One computer run will be used to test identical tunnels (one run from a previous run) and the anticipated effect of the 6-lane versus 8-lane alternative on length in establishing a ratio between the two alternatives for this study.
    4. Three sites will be modeled with a maximum of 2 computer runs each for testing geographic and wind parameters.
    5. Two runs will be used for the I-5/SR 520 interchange.
    6. One computer run is provided for a typical bus flyer stop.
    7. One additional run as needed.

- Ambient pollutant concentrations near the tunnel portals shall be calculated using U.S. EPA's ISC model and compared to national ambient air quality standards. The analysis shall include determination of emission factors and worst-case typical travel conditions. Constraints from the CFD analysis shall be used as the starting point for the ambient analysis. The analysis shall evaluate up to 2 lid lengths at each of the following locations:

1. SR 520 at Montlake Boulevard I/C
2. SR 520 and I-5 Interchange,
3. And one of the following three locations, based on which is determined to be the worst case:
    - 76th Ave NE Undercrossing Evergreen Point Road
    - 84th Ave NE Undercrossing
    - 92nd Ave NE Undercrossing

- One of the three lids evaluated will also be modeled for the 8-lane alternative to establish the sensitivity to the additional lanes.
- PM_{10} analysis shall be completed at one portal.

For the purposes of this evaluation, it is assumed that the preferred use of the lid surface will be for passive open space and all preliminary sizing of structural members will be based on this assumption. Engineering refinements to freeway and interchange ramp configuration, alignment and profile will be examined if the existing preliminary design is not compatible with the proposed lid facilities.

Deliverables:

- Draft and final lid sizing methodology working paper
- Maximum non-ventilated lid length (within 50 feet) at up to five locations

4.5—I-5 Structures Concept Development

Objective: To provide conceptual design for bridges, tunnels, and lids as proposed for the modifications to I-5. Create a supplement to the Bridge and Structures Working Paper dated August 14, 2002.

Approach: Review WSDOT record drawings for the project area and compare the proposed design with the record drawings. Develop structural design concepts for bridges and tunnels and define retaining wall requirements for the final selected I-5 improvement options associated with the 8-lane alternative. Make recommendations to the design team on the following:

- Replace or modify existing structures
- Girder depths
- Column locations
- Tunnel configuration

Prepare a supplemental working paper to outline the results of the structural analysis for the I-5 modifications.

Assumptions: Bridges and other structures on the SR 520 corridor will not change from the August 14, 2002 Bridge and Structures Working Paper. The 8-lane alternative will be used for this analysis.

Deliverables: Draft and Final versions of a Bridge and Structures supplement for I-5 modifications.

4.6—Stormwater Management Facilities Preliminary Design

Objective: To complete the preliminary design of stormwater management facilities to sufficient level of detail for analysis in the EIS.

Approach: The CONSULTANT will revise the Preliminary Stormwater Management Report dated June 24, 2002, and associated preliminary design drawings. The revised preliminary design drawings will reflect changes in the project limits and roadway design since the Stormwater Management Report was completed and also account for changes in the stormwater facilities preliminary design based on recommendations of the Floating Bridge AKART and Water Quality Study and the West End Bridge Water Quality Study. Stormwater concepts for the preferred I-5 improvements for the 8-lane alternative will be prepared and added to the stormwater report.

Assumptions: Profiles of the I-5/SR 520 interchange and all interchanges east of Lake Washington will not be affected by changes in the Stormwater Management Report

Deliverables: Draft and Final Revised Stormwater Management Report

4.7—Construction Staging and Impacts Assessment

Objective: To create staging and durations for the construction of I-5 modifications and provide an analysis of construction-related activities for each alternative to be evaluated in the EIS.

Approach: The SR 520 Construction Staging and Corridor Sequencing Memorandum dated September 10, 2002 will be revised to reflect the changes in the project limits and alternatives, including the addition of I-5 modifications for the 8-lane alternative. The revisions will include stages required to construct the modifications, assumed techniques, and estimated durations for each stage. Figures will be provided to graphically show the stages.

Assessments will be performed on each alternative to quantify construction activities that require analysis in the EIS. The following items will be estimated for each alternative:

- Staging Areas
- Construction stage durations
- Material quantities
- Material hauling options

- Estimated trips per day

Assumptions: WSDOT will provide the data for all activities related to the floating bridge and transition construction including any off-site impacts related to the construction of the pontoons. WSDOT data and the design team data for the remaining corridor will be used for the evaluation of impacts associated with each EIS alternative.

Deliverables: Draft and Final versions of the Revised SR 520 Construction Staging and Corridor Sequencing Memorandum

4.8—Cost Opinions and CEVP Support

Objective: To prepare new and revise existing cost opinions for each EIS alternative and participate in CEVP workshops. Prepare screening-level cost opinions for I-5 concepts for use in screening the alternatives.

Approach: Screening-level cost opinions for up to six I-5 alternatives will be prepared. The opinions will include estimated right-of-way, mitigation, and capital improvement costs for each alternative for use in screening the alternative.

Cost opinions for each EIS alternative will be updated for two CEVP workshops and will reflect engineering refinements for the existing SR 520 alternatives and will include the selected I-5 improvement associated with the 8-lane alternative. Up to three technical and management staff will attend two 2-day-long CEVP workshops. The CEVP workshops are assumed to occur annually. Cost opinions will be developed and updated using previously agreed unit prices and adopted project cost methodology.

Deliverables:

- Updated cost opinions for each EIS alternative for each CEVP workshop

4.9—Other Special Studies (TASK DELETED)

ACTIVITY 5.0—DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

5.1—Environmental Support and Screening for I-5 Project Alternatives and Other Design Revisions

Objective: To assist the engineers in preparing designs which avoid or minimize environmental impacts, and to prepare screening level environmental review of the maximum 6 concept line sketches prepared for I-5 improvements.

Approach: The environmental team will work closely with the engineering team to support them in their work under Activity 4.2. The GIS database and professional

judgment will be used to give informal environmental assessments of revisions being made to interchange ramps, mainline sections, and local streets and intersections.

The environmental team will also work closely with the engineering team through all three steps of the design process for I-5 alternatives under Activity 4.3. Screening-level environmental review using existing GIS data will be prepared for the concept line sketches (maximum 6).

Deliverables:

- Environmental review section for I-5 Alternatives Screening Report

5.2—Revisions to Previous Environmental Documents

Objective: To revise previous work to include current data and environmental procedures and policies, and expanded I-5/reduced SR 520 project area.

Approach: The project area and alternatives definitions have changed since previous environmental documents were prepared. For the 8-lane alternative, the project area has been expanded to include I-5 from SR 520 south to the vicinity of the Corson Avenue/Michigan Street interchange. The portion of SR 520 eastward from I-405 has been removed from the project. In addition, some of the previous environmental documentation was prepared several years ago and will need to be reviewed and brought up to date prior to completion of the Discipline Reports and DEIS. To reflect the changes in project area and project alternatives, a number of previously prepared environmental documents will be revised. The review and revisions of these documents are discussed more specifically below.

The EIS Methodologies will all be reviewed and revised if necessary to comply with the updated WSDOT Environmental Procedures Manual scheduled for public release in September 2003.

The EIS Work Plan prepared in accordance with Section 410.14 of the WSDOT Environmental Procedures Manual will be updated to include the new alternatives, revised project area, a revised project schedule, and current plan to prepare Discipline Reports for all resources.

The Affected Environment sections prepared in fall 2002 will be:

a) expanded to cover the larger I-5 project area;
b) revised to delete discussion of the eastern segment and other areas no longer in the project;
c) expanded and revised to become sections for Discipline Reports (for those Affected Environment sections which were written as DEIS sections); and
d) revised to respond to comments from STATE review of the Affected Environment sections written under Work Element 16 of Work Order #6.

Review and revision of the Affected Environment sections prepared under this activity will be performed as part of the Discipline Report review and revision cycle described elsewhere in this scope of work.

A field survey will be completed to determine whether there have been any land use changes that should be reflected in the Affected Environment sections prepared in Fall 2002. Maps will be prepared to illustrate the Affected Environment section for each resource.

The two Navigation Studies previously prepared for the Trans-Lake Washington Project will be combined and updated to include recent boating traffic data for the west and east high-rises of the floating bridge, and the bridge openings. This revised Affected Environment section for navigation will be used to prepare the Navigation Discipline Report.

GIS data for the expanded I-5 area will be acquired, and maps of the project area revised to reflect both the additions and deletions in project area. All existing GIS data for the project will be refreshed to ensure current data, and existing conditions data acquired in fall 2002 will be entered into the GIS database.

The Draft Purpose and Need for Action chapter will be revised to respond to STATE comments on the draft prepared under Work Order #6, as well as to changes to the project.

The Draft Alternatives Chapter will be revised to respond to STATE comments on the draft prepared under Work Order #6, as well as to reflect changes to the project.

The Draft Public and Agency Coordination section will be revised to respond to STATE comments on the draft prepared under Work Order #6 and to incorporate all additional public and agency coordination between the time the draft was written and publication of the DEIS.

Assumption: Because the extent and whereabouts of the I-5 segment of the 8-lane alternative are not yet know, it is impossible to accurately estimate the amount of time that will be required to prepare the Affected Environment sections for the I-5 segment. This scope has been estimated with a general assumption of 40 hours of work for each element; change management may be needed to revise the estimate after the I-5 segment is selected.

Deliverables:

- Draft and Final Revised EIS Methodologies
- Draft and Final Revised EIS Work Plan
- Revised Draft Affected Environment sections for inclusion in Discipline Reports
- Draft Navigation Affected Environment

- Revised GIS database including all information from Affected Environment data collection
- Draft and Final Purpose and Need DEIS chapter
- Draft and Final Alternatives DEIS chapter
- Draft and Final Public and Agency Coordination DEIS appendix

5.3—Discipline Reports

Objective: To prepare Discipline Reports for all resources as the basis for the DEIS.

Approach: Discipline Reports will be prepared for all resources and will contain all the technical details; the more summary and focused EIS will be written from the Discipline Reports. Though the format will be consistent for each report, some will be shorter and less detailed than others, and include appendices with the raw data on which the analyses is based; these Discipline Reports are asterisked in the deliverables list below The Cultural Resources Discipline Report will be used for Section 106 consultation with the State Historic Preservation Office (SHPO). The Discipline Reports will be prepared per the Trans-Lake Washington Methodology Reports dated June 10, 2002 and as revised under Activity 5.2. The Affected Environment sections prepared under Activity 5.2 will be used as the Affected Environment section in each Discipline Report. Maps will be prepared to illustrate the Environmental Consequences section of each resource.

One two-hour meeting for each Methodology will be held with WSDOT and SOUND TRANSIT while each Discipline Report is being written to preview any issues and try to resolve them before the Discipline Report is completed.

Two review cycles and three versions of the Reports are assumed. The comments on the draft Discipline Reports will be compiled by the STATE and consolidated into a single document for each Report, and reviewed with CONSULTANT in an interactive workshop to speed resolution of any issues. CONSULTANT will review, discuss with the STATE, and revise the Reports as agreed by the STATE.

Assumption: For budgeting purposes for preparation of the Discipline Reports, we are assuming there will be no changes in the Methodologies that will require additional effort beyond what is expected under the current Methodologies. If there are changes in the Methodologies that will require additional effort, that additional effort will need to be dealt with through change management.

On average, a two-hour workshop with STATE and SOUND TRANSIT is assumed for each of the two review cycles for each methodology report. For the Visual Quality Discipline Report, it is assumed that 10 photo simulations will be prepared.

Deliverables:

For each of the reports listed below, the following drafts will be prepared: 1) STATE/ST preliminary review draft; 2) FHWA and cooperating agencies review draft; and 3) Final

draft for issuance with DEIS.

- Noise Discipline Report
- Ecosystems Discipline Report
- Cultural Resources Discipline Report
- Transportation Discipline Report (prepared under separate task order)
- Visual Quality Discipline Report
- Water Resources Discipline Report
- Air Quality Discipline Report*
- Energy Discipline Report*
- Geology and Soils Discipline Report*
- Hazardous Materials Discipline Report*
- Land Use and Economics Discipline Report*
- Navigation Discipline Report*
- Public Services and Utilities Discipline Report*
- Recreation Discipline Report*
- Relocations Discipline Report*
- Social Discipline Report*
- Indirect and Cumulative Impacts Discipline Report

5.4—Environmental Justice Analysis

Objective: To prepare an Environmental Justice Evaluation to include as an Appendix to the DEIS.

Approach: The Environmental Justice Appendix to the DEIS will be prepared according to the methodology described in the Environmental Justice Methodology Report (6/10/02) and as revised under Activity 5.2. The guiding plans and policies, data sources, coordination with agencies, coordination with consultant team and STATE, study area, environmental consequences analysis methodology, and mitigation measure methodology for each discipline are described in detail in that Report. Maps will be prepared to illustrate the environmental justice analysis. The Environmental Justice Affected Environment section that has been written under Work Element 16 of Work Order #6 will be revised per comments from STATE and included in the Environmental Justice Appendix. The Environmental Justice Appendix will go through the same three review cycles as the DEIS.

Deliverables:

- STATE and ST preliminary review draft - Environmental Justice Appendix to PDEIS
- FHWA and cooperating agencies Review Draft – Environmental Justice Appendix to DEIS
- Final Review Draft
- Camera-ready Environmental Justice Appendix to DEIS

5.5—Section 4(f) and Section 6(f) Resources Evaluation

Objective: To prepare a draft Section 4(f)/Section 6(f) Evaluation to include as an Appendix to the DEIS.

Approach: The Draft Section 4(f)/Section 6(f) Evaluation will be an Appendix to the DEIS. It will be prepared according to the methodology described in the Section 4(f)/Section 6(f) Resource Evaluation Methodology Report (6/10/02) and as revised under Activity 5.2. The guiding plans and policies, data sources, coordination with agencies, coordination with consultant team and STATE, study area, environmental consequences analysis methodology, and mitigation measure methodology for each discipline are described in detail in that Report. Maps will be prepared to illustrate the Section 4(f)/ Section 6(f) Evaluation. The Evaluation will go through the same three review cycles as the DEIS.

Deliverables:

- STATE and ST preliminary review draft - Draft Section 4(f)/Section 6(f) Evaluation
- FHWA and Cooperating Agency Review Draft – Draft Section 4(f)/Section 6(f) Evaluation Appendix to PDEIS
- Final Review Draft – Draft Section 4(f)/Section 6(f) Evaluation Appendix to DEIS
- Camera-ready Draft Section 4(f)/Section 6(f) Evaluation Appendix to DEIS

5.6—Ship Canal Bridge Noise Modeling and Support

The purpose of the Ship Canal Bridge noise study is to provide a detailed noise impact and mitigation analysis and provide WSDOT and the community with effective traffic noise abatement measures. The area of analysis includes residential land uses along both sides of I-5 between the SR 520 interchange and NE 45th Avenue. Currently, there is a draft noise mitigation report for the Ship Canal Bridge, completed in November 2002. The current report will require several revisions including additional noise modeling and research of potential noise mitigation measures. Identified work activities for completing the project are described in the following sections.

5.6.1—Ship Canal Bridge Noise Mitigation Alternatives

Objective: To provide WSDOT and the local community with mitigation options for reducing the direct and reflected noise from the I-5 express lanes.

Direct and reflected noise coming from the structure currently results in high noise levels for many residents located in the Harvard-Roanoke, Eastlake and Northlake neighborhoods. Directly related noise is primarily an issue at the northern and southern ends of the structure, while the reflected noise is an issue in those areas where the express lanes are decked underneath the I-5 main line. The analysis area is from E Hamlin Street on the southern end of the structure, to approximately NE 43rd Street on the north end of the structure.

In addition to noise sensitive land uses in the immediate project study area, there are also several noise sensitive land uses located closer to the SR 520 interchange that currently exceed the WSDOT traffic noise impact criteria. The mitigation measures presented are designed to be integrated with any potential mitigation measures that may be part of the SR 520 Bridge Replacement and HOV Project. By selecting the study area to approach the SR 520 Interchange, merging the SR 520 Project noise mitigation measures with those proposed for the Ship Canal Bridge should not result in any significant overlapping of analysis or modifications to the either project.

Approach: Because the traffic noise from the bridge is both directly radiated from the express lanes and reflected off the bottom deck of the I-5 mainlines, a more detailed and complicated analysis is required. The following steps outline the methods used to project noise levels from the bridge and evaluate potential noise mitigation measures.

- Measure Existing Noise Levels: Existing noise levels were measured at 18 locations along both sides of the bridge. The locations were selected to represent groups of receivers that would be expected to have the same general noise levels as the monitoring locations. Noise monitoring included short-term, long-term and detailed frequency analysis.

- Model Noise Levels: The modeling of noise levels related to the Ship Canal Bridge project required a slightly different method than would be performed from normal at-grade or elevated highways because of the reflection of noise off the upper deck of the I-5 mainline. A two step analysis method was necessary because potential mitigation may included stopping the directly radiated noise with barriers, and reducing the reflected noise using an absorption material (such as panels or other methods) on the bottom or upper sides of the upper I-5 mainline deck. This step is include in the draft report and will be revised based on WSDOT comments.

- Mitigation Analysis: Using the models, data, and information from the first two steps, a mitigation analysis will be completed. Current models used in the draft report are constructed; however the models will require revisions based on the mitigation measures under investigation and comments from WSDOT.

A technical mitigation report summarizing the findings of the noise study will be compiled. The contents will include land use in the area, existing noise conditions, methods of analysis, projected noise levels and noise impacts. The report will include maps of the highway, surrounding areas and land uses. Noise monitoring and modeling locations will be shown on detailed vicinity maps at an appropriate scale. Comparative tables will be prepared to aid in the understanding of project noise levels. Detailed information on any and all investigated noise mitigation measures will be presented, including projected noise level reduction at each receiver location, estimated costs of materials, mitigation construction and instillation costs, and cost per receiver break down in accordance with WSDOT standards. Three copies of the report will be submitted for

the review. Based on the comments, the report will be revised and three final copies (or changed pages) will be delivered.

The mitigation measures that are deemed reasonable and feasible under WSDOT criteria will be recommended in order of effectiveness, cost, and any other relevant factors, such as constructability. Based on the technical report, meetings with WSDOT and the local communities, a final mitigation methodology will be recommended for construction under WSDOT Type II retrofit projects.

Deliverables: Draft and Final Noise Technical Reports

5.6.2—Literature Review of Proprietary Acoustical Noise Abatement Alternatives

Objective: To provide WSDOT with detailed information on manufacturers of materials and products that could be used on the Ship Canal Bridge Noise Mitigation Project.

Approach: By contacting vendors, manufactures and other state agencies, CONSULTANT will compile a detailed selection of potential noise mitigation options that could be included as noise mitigation on the Ship Canal Bridge.

A technical report summarizing potential noise mitigation options will be compiled. The contents will include material brochures (from manufacturers), tables summarizing differences in product performance, cost (based on the need of the Bridge) and an overall performance versus cost rating system. In addition, details on product installation procedures, product maintenance, and longevity of the products effectiveness at reducing noise will be included. Similar installations of each product and the effectiveness will also be included along with product references and any testimonials that may aid in final product selection.

Deliverables: Draft and Final Noise Mitigation Materials Reports

5.7—Prepare Preliminary Draft Environmental Impact Statement (PDEIS) and DEIS

Objective: To prepare a NEPA/SEPA PDEIS for review and comment by the lead and cooperating agencies and a DEIS for release to the public.

Approach: The Preliminary Draft of the EIS will be prepared under this Work Element and will contain all the elements of an EIS as listed in Exhibit 411-10 of the WSDOT Environmental Procedures Manual. The format and table of contents for the Draft EIS will be approved in advance by the STATE. A single author will be responsible for writing the EIS, unless otherwise approved in advance by the STATE. The EIS will be written, illustrated and designed for easy readability by decision-makers and citizens, and will include heavy reliance on graphics to tell the story, and layout using desktop publishing. It will focus on the key issues and environmental consequences of each alternative and strive to be as short and succinct as possible. The more detailed Discipline

Reports will be incorporated by reference and will be available for permitting agencies and others who may want more detail.

Chapter 1 – Purpose and Need for the Project, and Chapter 2 –Alternatives – are being prepared under 5.2. Chapter 3 – Affected Environment and Environmental Consequences – will be a summary/compilation of the Discipline Reports prepared under 5.3. A concise summary and environmental matrix will be prepared for inclusion in the DEIS, and for distribution as an informational brochure.

The PDEIS will go through three rounds of review: 1) Preliminary draft for STATE and ST review; 2) revised draft for FHWA and cooperating agencies review; and 3) final review draft for STATE, ST and FHWA review. The co-lead and cooperating agency comments on the draft sections will be compiled by the STATE and consolidated into a single document. It is assumed that the first version of the PDEIS will not be prepared using desktop publishing methods so that revisions can be made efficiently. After the text revisions from the first review cycle are made, the PDEIS will be transferred to desktop publishing It is assumed that the camera-ready copy will not go through another formal review cycle, but that the final revisions will be shared with the STATE as they are being made.

A Notice of Availability will be prepared for publication in the Federal Register, the SEPA register, and local newspapers. The STATE will be responsible for coordinating publication of the notice in the Federal and SEPA Registers. CONSULTANT will place the legal notice in the local newspapers. It is assumed that the Public Involvement consultant will be responsible for all other publicity about the DEIS and the DEIS Public Hearings.

It is assumed that STATE will prepare CDs of the DEIS and appendices for public distribution. CONSULTANT will design the CD label(s).

Deliverables:

- Format/mock layout of DEIS
- STATE and ST Preliminary Review Draft – DEIS
- FHWA and Cooperating Agencies Review Draft – DEIS
- 1 Camera-ready DEIS and 1 CD for duplication
- Draft and Final Notice of Availability of the DEIS
- CD label design

5.8—NEPA/SEPA DEIS Public Hearings

Objective: To conduct three public hearings to receive comments on the Draft EIS.

Approach: A series of three public hearings will be held to obtain comments on the DEIS from the public, agencies, and tribes in accordance with NEPA, SEPA, and WSDOT Environmental Procedures Manual requirements. The hearings will be held in

conjunction with a public information event with individual stations corresponding to key issues from the DEIS. Attendees will also be given the opportunity to comment individually to a court reporter. An experienced EIS Public Hearing Examiner, approved by the STATE, will be retained to conduct the public hearings.

CONSULTANT will be responsible for planning the stations and preparing display boards (up to 24) and fact sheets and handout materials. All fact sheets and handouts will be reviewed by the STATE prior to printing. One or more members of the CONSULTANT team will staff each station. CONSULTANT will also be responsible for retaining a court reporter and hearing examiner. A summary of both the oral and written comments received at the public hearings will be compiled. A transcript of oral testimony will be prepared by the court reporter.

It is assumed that the STATE's Public Involvement Consultant will be responsible for obtaining the meeting facilities, preparing and placing publicity about the DEIS hearing, providing name tags, sign in sheets, directional signage, and refreshments, arranging set-up and take-down of the hearings, and assisting the STATE in obtaining media coverage.

Deliverables:

- 3 DEIS Public Hearings
- Preparation of fact sheets and other handouts
- 300 copies of fact sheets, other handouts, and response forms
- Up to 24 display boards
- Summary of public comments
- Transcript of oral testimony

5.9—Coordination with SR 520/West Lake Sammamish Parkway to SR 202 Project

Objective: To transfer all pertinent Affected Environment data and text related to the area east of West Lake Sammamish Parkway.

Approach: If requested by WSDOT, CONSULTANT will provide electronic files excerpted from the Affected Environment sections prepared under Work Order #6, as well as all GIS data for the area east of West Lake Sammamish Parkway that was collected under previous assignments. No new work will be done.

In addition, up to four 4-hour-long coordination meetings with the SR 520/West Lake Sammamish Parkway to SR 202 Project team is assumed. Each meeting will be attended by up to three (3) project management and technical staff from SR 520 EIS Team.

Deliverables:

- GIS data
- Excerpts from Affected Environment sections for area east of West Lake Sammamish Parkway

5.10 – Concurrence Points

Objective: To accomplish resigning of Concurrence Point 2 and signing of Concurrence Point 3 under the Signatory Agency Committee Agreement to Integrate Aquatic Resources Permit Requirements Into the National Environmental Policy Act and the State Environmental Policy Act.

Approach: Using the Signatory Agency Committee (SAC) Agreement as the guide, CONSULTANT will prepare the necessary paperwork for STATE to re-circulate Concurrence Point 2 (Project alternatives to be evaluated in the DEIS) to the agencies based on the revised alternatives. Concurrence Point 3 (Preferred Alternative/LEDPA and detailed mitigation plan) will be prepared towards the end of preparation of the DEIS, or after the release of the DEIS, depending on direction from STATE.

Assumptions: It is assumed that all necessary discussion with the agencies to obtain concurrence will be done at the Technical Committee Meetings or in separate agency meetings included under Activity 2.6.

Deliverables:

- Concurrence Point 2 paperwork
- Concurrence Point 3 paperwork

Four Lane Alternative: Full Funding
Highway General Planning Level Capital Cost Opinion

Segments		
1	I-5 Interchange	$44,000,000
2	Portage Bay	$116,000,000
3	Montlake Interchange	$103,000,000
5	Floating Bridge and Approaches	$668,000,000
6	Points Segment	$94,000,000
	Subtotal: SR 520 Corridor (Rounded)	**$1,025,000,000**
	TDM	$165,000,000
	Toll Facilities	$6,000,000
	P&R Upgrades	$0
	Environmental Mitigation	$33,000,000
	Preliminary Engineering	$37,000,000
	Total: SR 520 Corridor in 2004 Dollars (Rounded)	**$1,266,000,000**

This planning-level cost estimate is intended only for the comparison of different alternatives based on information available at the time of preparation. Because of the preliminary nature of this estimate, final project costs will vary from those shown and will depend on actual costs for labor, construction equipment, disposal, and materials as well as surface and subsurface conditions, regulatory constraints and approach to corridor mitigation, labor productivity, competitive market conditions, final project scope, schedule, and other factors. Cost opinions developed here do not contain sufficient accuracy to support the development of program budgets.

Four Lane Alternative: Full Funding
Highway General Planning Level Capital Cost Opinion

Roadway Improvements				
	Preliminary Engineering		$30,000,000	
1	I-5 Interchange Improvements		$44,000,000	
2	New Portage Bay Bridge		$116,000,000	
3	Montlake Interchange Improvements		$82,000,000	1
3	Montlake Local Street		$10,000,000	
5	New Approach Structures		$299,000,000	
5	New Floating Bridge		$369,000,000	
6	Mainline Improvements through Eastside Communities		$94,000,000	
	Environmental Mitigation		$33,000,000	
	Subtotal: Four Lane Highway (Rounded)	**$**	**1,077,000,000**	

Transit General Planning Level Capital Cost Opinion[1]

	HOV Access/Flyerstop Transit Costs			
3	Montlake Flyerstop ramp		$11,000,000	2
	P&R Upgrades		$0	
	Subtotal: Four Lane Transit (Rounded)	**$**	**11,000,000**	

Total: Six Lane Alternative (Rounded)	**$**	**1,088,000,000**

Note:

1. Shared Transit cost such as direct access ramps for busses and flyerstops are broken out of the highway costs to help clarify the total transit costs.
2. The Montlake Flyerstop is show with the Shared Transit here to help clarify the total transit cost.

This planning-level cost estimate is intended only for the comparison of different alternatives based on information available at the time of preparation. Because of the preliminary nature of this estimate, final project costs will vary from those shown and will depend on actual costs for labor, construction equipment, disposal, and materials as well as surface and subsurface conditions, regulatory constraints and approach to corridor mitigation, labor productivity, competitive market conditions, final project scope, schedule, and other factors. Cost opinions developed here do not contain sufficient accuracy to support the development of program budgets.

4 Lane Alternative: Full Funding

SR	520		**Posted Speed:**		
Project Title:	I-5 Interchange Improvements				
Subject Section:	**MP**		**to**	**MP**	
Length of Subject Section:		0	**Miles**		
Number of Lanes:	**No - Build**	0	**Build**	4	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	1	0.18		U	
Freeway Lane Addition	3	0.74		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.755		U	
	Structure Width	cture Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	70	460	$120	U	$3,864,000
New Bridge (Freeway Ramp)	32	515	$130	U	$2,142,400
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	32200	SF	$120		$3,864,000
New Bridge (Freeway Ramp)	16500	SF	$130		$2,145,000
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	0	SF	$150		$0
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	24,000	SF	$20		$480,000
Walls Low End	0	SF	$40		$0
Mid Range	49,277	SF	$60		$2,956,600
High End	0	SF	$120		$0
Noise	2,300	LF	$275		$632,500
Guardrail (# of Anchors in Other)	2000	LF	$15	8	$34,400
Concrete Barrier	3,422	LF	$30		$102,700
Signals	1	EA	$125,000	INT	$125,000
Signals	0	EA	$250,000	IC	$0
Illumination	0	IC	$100,000	IC	$0

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: I-5 Interchange Improvements
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

Illumination		1	INT	$25,000	INT	$25,000
Illumination		7	EA	$8,000		$56,000
Signing/Striping		20600	LF	$18		$370,800
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		20600	LF	$70		$1,442,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	9800	LF	$78		$764,400
	Stormwater	1	LS	$350,407		$350,400
Earthwork	Misc Earthwork	20700	LF	$10		$207,000
	Fill	6,984	CY	$15		$104,800
	Cut and Waste	8,210	CY	$18		$147,800
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		2	Mile	$5,000		$10,000
ITS		1	ump Sur	$6,000,000		$6,000,000
Traffic Control (10% of Total)				10%		$1,981,800
Construction Staging (15% of Total)				15%		$2,972,800
Removal Items (5% of Total)				5%		$966,900
Mobilization @ 8%				8%		$2,059,200
Misc Allowance @ 5%				5%		$1,390,000
Right of Way		18,400	SF	$175	W	$3,220,000
Preliminary Engineering @ 15%				15%		$4,378,400
Construction Engineering @ 10%				10%		$2,918,900
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$2,568,600
Escalation from 7/2003 to 3/2004				3.51%		$1,369,634
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$44,000,000**

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: New Portage Bay Bridge
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	0	0.00			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	0	0			
	Structure Width	cture Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	126.2045061	2885	$150	U	$54,615,000
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		364100	SF	$150		$54,615,000
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		150,800	SF	$40		$6,032,000
Walls	Low End	0	SF	$60		$0
	Mid Range	0	SF	$60		$0
	High End	0	SF	$120		$0
	Noise	5,770	LF	$275		$1,586,800
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		0	LF	$30		$0
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	IC	$100,000	IC	$0

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: New Portage Bay Bridge
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

Illumination		0	INT	$25,000	INT	$0
Illumination		0	EA	$8,000		$0
Signing/Striping		0	LF	$18		$0
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		0	LF	$70		$0
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	2900	LF	$110		$319,000
	Stormwater	1	LS	$324,246		$324,200
Earthwork	Misc Earthwork	0	LF	$10		$0
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		1	ump Sur	$1,000,000		$1,000,000
Traffic Control (3.5% of Total)				3.5%		$2,236,300
Construction Staging (10% of Total)				10%		$6,389,400
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$5,801,600
Misc Allowance @ 5%				5%		$3,916,100
Right of Way		46,500	SF	$175	W	$8,137,500
Preliminary Engineering @ 8%				8%		$6,579,000
Construction Engineering @ 10%				10%		$8,223,800
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$7,236,900
Escalation from 7/2003 to 3/2004				3.51%		$3,656,938
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$116,000,000**

4 Lane Alternative: Full Funding

SR	520		**Posted Speed:**		
Project Title:	Montlake Interchange Improvements				
Subject Section:	**MP**		**to**	**MP**	
Length of Subject Section:		0	**Miles**		
Number of Lanes:	**No - Build**	4	**Build**	8	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	6	0.09		U	
Freeway Ramp Addition	2	0.97		U	
Freeway Lane Addition	4	0.35		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	1.17		U	
	Structure Width	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	115	234	$120	U	$3,229,200
New Bridge (Pedstrian Bridge)	18	514	$125	U	$1,156,500
New Bridge (Freeway Ramp)	30	0	$130	U	$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	27000	SF	$120		$3,240,000
New Bridge (Pedstrian Bridge)	9300	SF	$125		$1,162,500
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	0	SF	$150		$0
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	24,600	SF	$20		$492,000
Cut and Cover Tunnel w/ no ventilation	2,550	SF	$270		$688,500
Walls Low End	0	SF	$40		$0
Mid Range	43,485	SF	$60		$2,609,100
High End	0	SF	$120		$0
Noise	3,350	LF	$275		$921,300
Guardrail (# of Anchors in Other)	3000	LF	$15	12	$51,600
Concrete Barrier	12,501	LF	$30		$375,000

4 Lane Alternative: Full Funding

SR	520		**Posted Speed:**		
Project Title:	Montlake Interchange Improvements				
Subject Section:	**MP**		**to**	**MP**	
Length of Subject Section:		0	**Miles**		
Number of Lanes:	**No - Build**	4	**Build**	8	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou					R

Signals		2	EA	$125,000	INT	$250,000
Signals		0	EA	$250,000	IC	$0
Illumination		6	INT	$25,000	INT	$150,000
Illumination		0	IC	$100,000	IC	$0
Illumination		4	EA	$8,000		$32,000
Signing/Striping		29800	LF	$18		$536,400
Sidewalks, Curb, & Gutter		3,750	LF	$30		$112,500
Surface/Paving (PCC)		29800	LF	$70		$2,086,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	15900	LF	$78		$1,240,200
	Stormwater	1	LS	$696,716		$696,700
Earthwork	Misc Earthwork	46500	LF	$10		$465,000
	Fill	15,001	CY	$15		$225,000
	Cut and Waste	54,889	CY	$18		$988,000
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		3	Mile	$5,000		$15,000
Aestitic Treatment		1	ump Sur	$1,200,000		$1,200,000
ITS		1	ump Sur	$15,000,000		$15,000,000
Traffic Control (3.5% of Total)				3.5%		$1,138,800
Construction Staging (10% of Total)				10%		$3,253,700
Removal Items (5% of Total)				5%		$1,567,800
Mobilization @ 8%				8%		$3,079,800
Misc Allownace @ 5%				5%		$2,078,800
Right of Way		260,200	SF	$70	W	$18,214,000
Right of Way (MOAHI)		22,500	SF	$300		$6,750,000
Preliminary Engineering @ 8%				8%		$3,492,500
Construction Engineering @ 10%				10%		$4,365,600
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$3,841,700
Escalation from 7/2003 to 3/2004				3.51%		$1,786,889
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$82,000,000**

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Montlake Flyerstop ramp
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 4 **Build** 8
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	2	0.25		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.25		U	
	Structure Width	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	0	SF	$150		$0
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	0	SF	$20		$0
Flyerstop Structure	1	LS	$4,000,000		$4,000,000
Walls Low End	0	SF	$40		$0
Mid Range	0	SF	$60		$0
High End	0	SF	$120		$0
Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)	0	LF	$15	0	$0
Concrete Barrier	1,450	LF	$30		$43,500
Signals	0	EA	$125,000	INT	$0
Signals	0	EA	$250,000	IC	$0

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Montlake Flyerstop ramp
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 4 **Build** 8
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		3	EA	$8,000		$24,000
Signing/Striping		4000	LF	$18		$72,000
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		4000	LF	$70		$280,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	2700	LF	$78		$210,600
	Stormwater	0	LS			$0
Earthwork	Misc Earthwork	5300	LF	$10		$53,000
	Fill	0	CY	$15		$0
	Cut and Waste	37,889	CY	$18		$682,000
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
ITS		0	ump Sur	$0		$0
Traffic Control (10% of Total)				10%		$537,000
Construction Staging (10% of Total)				10%		$537,000
Removal Items (5% of Total)				5%		$268,500
Mobilization @ 8%				8%		$537,000
Misc Allowance @ 5%				5%		$362,500
Right of Way		0	SF	$175	W	$0
Preliminary Engineering @ 15%				15%		$1,141,800
Construction Engineering @ 10%				10%		$761,200
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$669,900
Escalation from 7/2003 to 3/2004				3.51%		$357,181
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$11,000,000**

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: New Approach Structures
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	2	0.05		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.05		U	
	Structure Width	cture Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Pedestrian over lake)	0	0	$130		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	100	9413	$150	U	$141,195,000
East Side Transition Span	130	285	$175	U	$6,483,800
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Pedestrian over lake)	0	SF	$130		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	941300	SF	$150		$141,195,000
East Side Transition Span	37100	SF	$250		$9,275,000
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	695,000	SF	$40		$27,800,000
Walls Low End	0	SF	$60		$0
Mid Range	0	SF	$60		$0
High End	0	SF	$120		$0
Noise	11,650	LF	$275		$3,203,800
Guardrail (# of Anchors in Other)	2000	LF	$15	8	$34,400
Concrete Barrier	540	LF	$30		$16,200
Signals	0	EA	$125,000	INT	$0

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: New Approach Structures
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

Signals		0	EA	$250,000	IC	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	EA	$8,000		$0
Signing/Striping		39700	LF	$18		$714,600
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		39700	LF	$70		$2,779,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	0	LF	$110		$0
	Stormwater	1	LS	$1,015,281		$1,015,300
Earthwork	Misc Earthwork	20300	LF	$10		$203,000
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (3.5% of Total)				3.5%		$6,535,900
Construction Staging (4% of Total)				4%		$7,469,700
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$16,059,800
Misc Allownance @ 5%				5%		$10,840,300
Right of Way		0	SF	$70	P	$0
Preliminary Engineering @ 8%				8%		$18,211,800
Construction Engineering @ 10%				10%		$22,764,700
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$20,032,900
Escalation from 7/2003 to 3/2004				3.51%		$10,122,993
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$299,000,000**

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: New Floating Bridge
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	0	0			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	0	0			
	Structure Width	cture Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	102	7597	$315	U	$244,091,600
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	0	SF	$150		$0
New Lake Bridge (Floating Portion)	774900	SF	$315		$244,093,500
Bridge Removal	1	ump Sur	$20,000,000		$20,000,000
Walls Low End	0	SF	$60		$0
Mid Range	0	SF	$60		$0
High End	0	SF	$120		$0
Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	0	LF	$30		$0
Signals	0	EA	$125,000	INT	$0
Signals	0	EA	$250,000	IC	$0
Illumination	0	IC	$100,000	IC	$0

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: New Floating Bridge
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

Illumination		0	INT	$25,000	INT	$0
Illumination		0	EA	$8,000		$0
Signing/Striping		0	LF	$18		$0
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		0	LF	$70		$0
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	7600	LF	$125		$950,000
	Stormwater	0	LS	$0		$0
Earthwork	Misc Earthwork	0	LF	$10		$0
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (0.5% of Total)				0.5%		$1,327,800
Construction Staging (0% of Total)				0%		$0
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$21,351,100
Misc Allowance @ 0%				0%		$0
Right of Way		0	SF	$0		$0
Preliminary Engineering @ 5%				5%		$14,412,000
Construction Engineering @ 10%				10%		$28,824,000
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$25,365,100
Escalation from 7/2003 to 3/2004				3.51%		$12,514,173
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$369,000,000**

4 Lane Alternative: Full Funding

SR	520		**Posted Speed:**		
Project Title:	Mainline Improvements through Eastside Communities				
Subject Section:	**MP**		**to**	**MP**	
Length of Subject Section:		0	**Miles**		
Number of Lanes:	**No - Build**	0	**Build**	4	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou		R			

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	2	0.0947		U	
Freeway Ramp Addition	1	2.04		U	
Freeway Lane Addition	5	2.38		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	2.20		U	
	Structure Width	cture Le	Cost per SF		
New Bridge (Pedestrian)	20	690	$125	U	$1,725,000
New Bridge (Arterial Roadway)	50	575	$120	U	$3,450,000
New Bridge (Freeway Ramp)	40	45	$130	U	$234,000
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$350		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		13800	SF	$125		$1,725,000
New Bridge (Arterial Roadway)		28800	SF	$120		$3,456,000
New Bridge (Freeway Ramp)		1800	SF	$130		$234,000
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$350		$0
Bridge Removal		13,100	SF	$20		$262,000
Flyerstops (Roadside)		4	EA	$250,000		$1,000,000
Walls	Retaining	0	SF	$60		$0
	Mid Range	145,910	SF	$60		$8,754,600
	High End	0	SF	$120		$0
	Noise	21,400	LF	$275		$5,885,000
Guardrail (# of Anchors in Other)		3000	LF	$15	12	$51,600
Concrete Barrier		31,952	LF	$30		$958,600
Signals		2	EA	$125,000	INT	$250,000
Signals		0	EA	$250,000	IC	$0

4 Lane Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Mainline Improvements through Eastside Communities
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

Illumination		0	IC	$100,000	IC	$0
Illumination		2	INT	$25,000	INT	$50,000
Illumination		22	EA	$8,000		$176,000
Signing/Striping		91400	LF	$18		$1,645,200
Sidewalks, Curb, & Gutter		10350	LF	$30		$310,500
Surface/Paving (PCC)		91400	LF	$70		$6,398,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	38700	LF	$78		$3,018,600
	Stormwater	1	LS	$2,293,753		$2,293,800
Earthwork	Misc Earthwork	107000	LF	$10		$1,070,000
	Fill	48,698	CY	$15		$730,500
	Cut and Waste	64,262	CY	$18		$1,156,700
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	39	Acre	$6,000	X	$234,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		7	Mile	$5,000		$35,000
Aestitic Treatment		1	ump Sur	$3,500,000		$3,500,000
ITS		1	ump Sur	$3,000,000		$3,000,000
Traffic Control (6% of Total)				6%		$2,771,700
Construction Staging (8% of Total)				8%		$3,695,600
Removal Items (5% of Total)				5%		$2,246,700
Mobilization @ 8%				8%		$4,392,700
Misc Allowance @ 5%				5%		$2,965,100
Right of Way		50,000	SF	$175	W	$8,750,000
		55,800	SF	$70	P	$3,906,000
Preliminary Engineering @ 8%				8%		$4,981,400
Construction Engineering @ 10%				10%		$6,226,700
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$5,479,500
Escalation from 7/2003 to 3/2004				3.51%		$2,578,983
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$94,000,000**

Four Lane Alternative: Phase 1
Highway General Planning Level Capital Cost Opinion

Segments		
1	I-5 Interchange	$0
2	Portage Bay	$0
3	Montlake Interchange	$5,000,000
5	Floating Bridge and Approaches	$663,000,000
6	Points Segment	$33,000,000
	Subtotal: SR 520 Corridor (Rounded)	**$701,000,000**
	TDM	$165,000,000
	Toll Facilities	$6,000,000
	P&R Upgrades	$0
	Environmental Mitigation	$21,000,000
	Preliminary Engineering	$37,000,000
	Total: SR 520 Corridor in 2004 Dollars (Rounded)	**$930,000,000**

This planning-level cost estimate is intended only for the comparison of different alternatives based on information available at the time of preparation. Because of the preliminary nature of this estimate, final project costs will vary from those shown and will depend on actual costs for labor, construction equipment, disposal, and materials as well as surface and subsurface conditions, regulatory constraints and approach to corridor mitigation, labor productivity, competitive market conditions, final project scope, schedule, and other factors. Cost opinions developed here do not contain sufficient accuracy to support the development of program budgets.

Phase 1 Scope Items:

- o I-5, Portage Bay Bridge and Bellevue Way are not included in Phase.
- o Montlake segment only includes the westside tie for the Approach structure at Parks Ave in Montlake.
- o The Montlake flyerstop and braided HOV ramps are not includes in Phase 1.
- o The Points segment includes full build out to station 270+00 just prior to 84th Ave. This includes the Evergreen Point flyerstop.

Possible Additive Costs:	**Added Cost to Above**
o Full Points segemnt build	$61,000,000
o Build north half of Portage Bay Bridge	$84,000,000
o Extend EB HOV Lane to 108th	$18,000,000

Four Lane Alternative: Phase 1
Highway General Planning Level Capital Cost Opinion

Roadway Improvements			
	Preliminary Engineering		$30,000,000
1	I-5 Interchange Improvements		$0
2	New Portage Bay Bridge		$0
3	Montlake Interchange Improvements		$5,000,000 [1]
3	Montlake Local Street		$0
5	New Approach Structures		$294,000,000
5	New Floating Bridge		$369,000,000
6	Mainline Improvements through Eastside Communities		$33,000,000
	Environmental Mitigation		$21,000,000
	Subtotal: Four Lane Highway (Rounded)	**$**	**752,000,000**

Transit General Planning Level Capital Cost Opinion[1]

	HOV Access/Flyerstop Transit Costs		
3	Montlake Flyerstop ramp		$0 [2]
	P&R Upgrades		$0
	Subtotal: Four Lane Transit (Rounded)	**$**	**-**

Total: Six Lane Alternative (Rounded)	**$**	**752,000,000**

Note:

1. Shared Transit cost such as direct access ramps for busses and flyerstops are broken out of the highway costs to help clarify the total transit costs.
2. The Montlake Flyerstop is show with the Shared Transit here to help clarify the total transit cost.

This planning-level cost estimate is intended only for the comparison of different alternatives based on information available at the time of preparation. Because of the preliminary nature of this estimate, final project costs will vary from those shown and will depend on actual costs for labor, construction equipment, disposal, and materials as well as surface and subsurface conditions, regulatory constraints and approach to corridor mitigation, labor productivity, competitive market conditions, final project scope, schedule, and other factors. Cost opinions developed here do not contain sufficient accuracy to support the development of program budgets.

4 Lane Alternative: Full Funding

SR	520		Posted Speed:		
Project Title:	I-5 Interchange Improvements				
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	0	Build	4	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	1	0.18		U	
Freeway Lane Addition	3	0.74		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.755		U	
	Structure Width	ture Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	70	460	$120	U	$3,864,000
New Bridge (Freeway Ramp)	32	515	$130	U	$2,142,400
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		32200	SF	$120		$3,864,000
New Bridge (Freeway Ramp)		16500	SF	$130		$2,145,000
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		24,000	SF	$20		$480,000
Walls	Low End	0	SF	$40		$0
	Mid Range	49,277	SF	$60		$2,956,600
	High End	0	SF	$120		$0
	Noise	2,300	LF	$275		$632,500
Guardrail (# of Anchors in Other)		2000	LF	$15	8	$34,400
Concrete Barrier		3,422	LF	$30		$102,700
Signals		1	EA	$125,000	INT	$125,000
Signals		0	EA	$250,000	IC	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		1	INT	$25,000	INT	$25,000
Illumination		7	EA	$8,000		$56,000
Signing/Striping		20600	LF	$18		$370,800
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		20600	LF	$70		$1,442,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	9800	LF	$78		$764,400
	Stormwater	1	LS	$350,407		$350,400
Earthwork	Misc Earthwork	20700	LF	$10		$207,000
	Fill	6,984	CY	$15		$104,800
	Cut and Waste	8,210	CY	$18		$147,800
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		2	Mile	$5,000		$10,000
ITS		1	ump Sur	$6,000,000		$6,000,000
Traffic Control (10% of Total)				10%		$1,981,800
Construction Staging (15% of Total)				15%		$2,972,800
Removal Items (5% of Total)				5%		$966,900
Mobilization @ 8%				8%		$2,059,200
Misc Allowance @ 5%				5%		$1,390,000
Right of Way		18,400	SF	$175	W	$3,220,000
Preliminary Engineering @ 15%				15%		$4,378,400
Construction Engineering @ 10%				10%		$2,918,900
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$2,568,600
Escalation from 7/2003 to 3/2004				3.51%		$1,369,634
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$44,000,000

4 Lane Alternative: Full Funding

SR	520		Posted Speed:		
Project Title:	New Portage Bay Bridge				
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	0	Build	4	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	0	0.00			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	0	0			
	Structure Width	ture Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	126	2885	$150	U	$54,615,000
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		364100	SF	$150		$54,615,000
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		150,800	SF	$40		$6,032,000
Walls	Low End	0	SF	$60		$0
	Mid Range	0	SF	$60		$0
	High End	0	SF	$120		$0
	Noise	5,770	LF	$275		$1,586,800
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		0	LF	$30		$0
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	EA	$8,000		$0
Signing/Striping		0	LF	$18		$0
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		0	LF	$70		$0
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	2900	LF	$110		$319,000
	Stormwater	1	LS	$324,246		$324,200
Earthwork	Misc Earthwork	0	LF	$10		$0
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		1	ump Sur	$1,000,000		$1,000,000
Traffic Control (3.5% of Total)				3.5%		$2,236,300
Construction Staging (10% of Total)				10%		$6,389,400
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$5,801,600
Misc Allowance @ 5%				5%		$3,916,100
Right of Way		46,500	SF	$175	W	$8,137,500
Preliminary Engineering @ 8%				8%		$6,579,000
Construction Engineering @ 10%				10%		$8,223,800
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$7,236,900
Escalation from 7/2003 to 3/2004				3.51%		$3,656,938
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$116,000,000

4 Lane Alternative: Phasing Options

SR 520 Posted Speed:
Project Title: North side of Portage Bay Bridge Phasing Option
Subject Section: MP to MP
Length of Subject Section: 0 Miles
Number of Lanes: No - Build 0 Build 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	4	0.1283		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.1046		U	
	Structure Width	ture Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	78	2885	$150	U	$33,685,500
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		224600	SF	$150		$33,690,000
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		150,800	SF	$40		$6,032,000
Walls	Low End	0	SF	$60		$0
	Mid Range	4,275	SF	$60		$256,500
	High End	0	SF	$120		$0
	Noise	5,770	LF	$275		$1,586,800
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		1,105	LF	$30		$33,200
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	EA	$8,000		$0
Signing/Striping		14900	LF	$18		$268,200
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		14900	LF	$70		$1,043,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	4300	LF	$110		$473,000
	Stormwater	1	LS	$226,972		$227,000
Earthwork	Misc Earthwork	3900	LF	$10		$39,000
	Fill	2,178	CY	$15		$32,700
	Cut and Waste	1,481	CY	$18		$26,700
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
ITS		1	ump Sur	$1,000,000		$1,000,000
Traffic Control (3.5% of Total)				3.5%		$1,565,600
Construction Staging (10% of Total)				10%		$4,473,000
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$4,061,500
Misc Allowance @ 5%				5%		$2,741,500
Right of Way		46,500	SF	$175	W	$8,137,500
Preliminary Engineering @ 8%				8%		$4,605,800
Construction Engineering @ 10%				10%		$5,757,200
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$5,066,300
Escalation from 7/2003 to 3/2004				3.51%		$2,560,105
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$84,000,000

4 Lane Alternative: Full Funding

SR	520		Posted Speed:		
Project Title:	Montlake Interchange Improvements				
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	4	Build	8	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	6	0.09		U	
Freeway Ramp Addition	2	0.97		U	
Freeway Lane Addition	4	0.35		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	1.17		U	
	Structure Width	ture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	115	234	$120	U	$3,229,200
New Bridge (Pedstrian Bridge)	18	514	$125	U	$1,156,500
New Bridge (Freeway Ramp)	30	0	$130	U	$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		27000	SF	$120		$3,240,000
New Bridge (Pedstrian Bridge)		9300	SF	$125		$1,162,500
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		24,600	SF	$20		$492,000
Cut and Cover Tunnel w/ no ventilation		2,550	SF	$270		$688,500
Walls	Low End	0	SF	$40		$0
	Mid Range	43,485	SF	$60		$2,609,100
	High End	0	SF	$120		$0
	Noise	3,350	LF	$275		$921,300
Guardrail (# of Anchors in Other)		3000	LF	$15	12	$51,600
Concrete Barrier		12,501	LF	$30		$375,000
Signals		2	EA	$125,000	INT	$250,000
Signals		0	EA	$250,000	IC	$0
Illumination		6	INT	$25,000	INT	$150,000
Illumination		0	IC	$100,000	IC	$0
Illumination		4	EA	$8,000		$32,000
Signing/Striping		29800	LF	$18		$536,400
Sidewalks, Curb, & Gutter		3,750	LF	$30		$112,500
Surface/Paving (PCC)		29800	LF	$70		$2,086,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	15900	LF	$78		$1,240,200
	Stormwater	1	LS	$696,716		$696,700
Earthwork	Misc Earthwork	46500	LF	$10		$465,000
	Fill	15,001	CY	$15		$225,000
	Cut and Waste	54,389	CY	$18		$688,000
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		3	Mile	$5,000		$15,000
Aestitic Treatment		1	ump Sur	$1,200,000		$1,200,000
ITS		1	ump Sur	$15,000,000		$15,000,000
Traffic Control (3.5% of Total)				3.5%		$1,138,800
Construction Staging (10% of Total)				10%		$3,253,700
Removal Items (5% of Total)				5%		$1,567,800
Mobilization @ 8%				8%		$3,079,800
Misc Allownace @ 5%				5%		$2,078,800
Right of Way		260,200	SF	$70	W	$18,214,000
Right of Way (MOAH!)		22,500	SF	$300		$6,750,000
Preliminary Engineering @ 8%				8%		$5,492,500
Construction Engineering @ 10%				10%		$4,365,600
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$3,841,700
Escalation from 7/2003 to 3/2004				3.51%		$1,786,889
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$82,000,000

4 Lane Alternative: Full Funding

SR	520		Posted Speed:		
Project Title:	Montlake Flyerstop ramp				
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	4	Build	8	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	2	0.25		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.25		U	
	Structure Width	ture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		0	SF	$20		$0
Flyerstop Structure		1	LS	$4,000,000		$4,000,000
Walls	Low End	0	SF	$40		$0
	Mid Range	0	SF	$60		$0
	High End	0	SF	$120		$0
	Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)		0	LF	$15	0	$0
Concrete Barrier		1,450	LF	$30		$43,500
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		3	EA	$8,000		$24,000
Signing/Striping		4000	LF	$18		$72,000
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		4000	LF	$70		$280,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	2700	LF	$78		$210,600
	Stormwater	0	LS			$0
Earthwork	Misc Earthwork	5300	LF	$10		$53,000
	Fill	0	CY	$15		$0
	Cut and Waste	37,889	CY	$18		$682,000
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
ITS		0	ump Sur	$0		$0
Traffic Control (10% of Total)				10%		$537,000
Construction Staging (10% of Total)				10%		$537,000
Removal Items (5% of Total)				5%		$268,500
Mobilization @ 8%				8%		$537,000
Misc Allowance @ 5%				5%		$362,500
Right of Way		0	SF	$175	W	$0
Preliminary Engineering @ 15%				15%		$1,141,800
Construction Engineering @ 10%				10%		$761,200
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$669,900
Escalation from 7/2003 to 3/2004				3.51%		$357,181
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$11,000,000

4 Lane Alternative: Phasing Options

SR	520		Posted Speed:		
Project Title:	Montlake Interchange Improvements: Phase 1				
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	4	Build	8	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou		R			

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	4	0.14		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.2841		U	
	Structure Width	ucture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Pedstrian Bridge)	0	0	$125		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					$0

**Enter R for Rural, U for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Pedstrian Bridge)		0	SF	$125		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		0	SF	$20		$0
Cut and Cover Tunnel w/ no ventilation		0	SF	$270		$0
Walls	Low End	0	SF	$40		$0
	Mid Range	450	SF	$60		$27,000
	High End	0	SF	$120		$0
	Noise	1,500	LF	$275		$412,500
Guardrail (# of Anchors in Other)		0	LF	$15	0	$0
Concrete Barrier		3,000	LF	$30		$90,000
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		2	EA	$8,000		$16,000
Signing/Striping		4500	LF	$18		$81,000
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		4500	LF	$70		$315,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	1500	LF	$78		$117,000
	Stormwater	1	LS	$0		$0
Earthwork	Misc Earthwork	6000	LF	$10		$60,000
	Fill	4,444	CY	$15		$66,700
	Cut and Waste	7,407	CY	$18		$133,300
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
Aestitic Treatment		1	ump Sur	$240,000		$240,000
ITS		1	ump Sur	$1,500,000		$1,500,000
Traffic Control (3.5% of Total)				3.5%		$107,200
Construction Staging (10% of Total)				10%		$306,400
Removal Items (5% of Total)				5%		$153,200
Mobilization @ 8%				8%		$290,400
Misc Allownace @ 5%				5%		$196,000
Right of Way		0	SF	$70	W	$0
Right of Way (MOAHI)		0	SF	$300		$0
Preliminary Engineering @ 8%				8%		$329,900
Construction Engineering @ 10%				10%		$411,700
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$362,300
Escalation from 7/2003 to 3/2004				3.51%		$183,062
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$5,000,000

4 Lane Alternative: Phasing Options

SR	520		Posted Speed:		
Project Title:	New Approach Structures				
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	0	Build	4	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainous					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	2	0.05		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.05		U	
	Structure Width	cture Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Pedestrian over lake)	0	0	$130		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	100	9413	$150	U	$141,195,000
Transition Span	130	285	$175	U	$6,483,800
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:							
		Quantity	Unit	Unit Cost	Other	Cost	
New Bridge (2-lane O'xing)		0	SF	$120		$0	
New Bridge (Pedestrian over lake)		0	SF	$130		$0	
New Bridge (Freeway Ramp)		0	SF	$130		$0	
New Bridge (Freeway Mainline)		0	SF	$120		$0	
Bridge Widening (Frwy Mainline)		0	SF	$200		$0	
New Lake Bridge (Fixed Portion)		941300	SF	$150		$141,195,000	
Transition Span		37100	SF	$175		$6,492,500	
New Lake Bridge (Floating Portion)		0	SF	$315		$0	
Bridge Removal		695,000	SF	$40		$27,800,000	
Walls	Low End	0	SF	$60		$0	
	Mid Range	0	SF	$60		$0	
	High End	0	SF	$120		$0	
	Noise	11,650	LF	$275		$3,203,800	
Guardrail (# of Anchors in Other)		2000	LF	$15	8	$34,400	
Concrete Barrier		540	LF	$30		$16,200	
Signals		0	EA	$125,000	INT	$0	
Signals		0	EA	$250,000	IC	$0	
Illumination		0	IC	$100,000	IC	$0	
Illumination		0	INT	$25,000	INT	$0	
Illumination		0	EA	$8,000		$0	
Signing/Striping		39700	LF	$18		$714,600	
Sidewalks, Curb, & Gutter		0	LF	$30		$0	
Surface/Paving (PCC)		39700	LF	$70		$2,779,000	
Drainage	Ditch	0	LF	$15		$0	
	Enclosed System	0	LF	$110		$0	
	Stormwater	1	LS	$1,015,281		$1,015,300	
Earthwork	Misc Earthwork	20300	LF	$10		$203,000	
	Fill	0	CY	$15		$0	
	Cut and Waste	0	CY	$18		$0	
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0	
	Light Woods	0	Acre	$6,000		$0	
	Heavy Forest	0	Acre	$10,000		$0	
Wetland Mitigation (Not Included)		0	Acre	$0		$0	
Roadside Development		1	Mile	$5,000		$5,000	
ITS		1	ump Sur	$500,000		$500,000	$183,958,800
Traffic Control (3.5% of Total)				3.5%		$6,438,600	
Construction Staging (4% of Total)				4%		$7,358,400	
Removal Items (0% of Total)				0%		$0	
Mobilization @ 8%				8%		$15,820,500	
Misc Allownance @ 5%				5%		$10,678,800	
Right of Way		0	SF	$70	P	$0	
Preliminary Engineering @ 8%				8%		$17,940,400	
Construction Engineering @ 10%				10%		$22,425,500	
Change Orders @ 0%				0%		$0	
Sales Tax @ 8.8%				8.80%		$19,734,400	
Escalation from 7/2003 to 3/2004				3.51%		$9,972,160	
Scope Contingency @ 0%				0%		$0	
DETAILED COST ESTIMATE USED FOR B/C						$294,000,000	$294,327,560

4 Lane Alternative: Phasing Options

SR	520		Posted Speed:		
Project Title:	New Floating Bridge				
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	0	Build	4	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	0	0			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	0	0			
	Structure Width	ructure Le	Cost per SF		
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	102	7597	$315	U	$244,091,600
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		774900	SF	$315		$244,093,500
Bridge Removal		1	ump Sur	$20,000,000		$20,000,000
Walls	Low End	0	SF	$60		$0
	Mid Range	0	SF	$60		$0
	High End	0	SF	$120		$0
	Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		0	LF	$30		$0
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	EA	$8,000		$0
Signing/Striping		0	LF	$18		$0
Sidewalks, Curb, & Gutter		0	LF	$30		$0
Surface/Paving (PCC)		0	LF	$70		$0
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	7600	LF	$125		$950,000
	Stormwater	0	LS	$0		$0
Earthwork	Misc Earthwork	0	LF	$10		$0
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (0.5% of Total)				0.5%		$1,327,800
Construction Staging (0% of Total)				0%		$0
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$21,351,100
Misc Allowance @ 0%				0%		$0
Right of Way		0	SF	$0		$0
Preliminary Engineering @ 5%				5%		$14,412,000
Construction Engineering @ 10%				10%		$28,824,000
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$25,365,100
Escalation from 7/2003 to 3/2004				3.51%		$12,514,173
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$369,000,000

4 Lane Alternative: Full Funding

SR 520 Posted Speed:
Project Title: Mainline Improvements through Eastside Communities
Subject Section: MP to MP
Length of Subject Section: 0 Miles
Number of Lanes: No - Build 0 Build 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	1	2.04		U	
Freeway Lane Addition	5	2.38		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	2.20		U	
	Structure Width	ucture Le	Cost per SF		
New Bridge (Pedestrian)	20	690	$125	U	$1,725,000
New Bridge (Arterial Roadway)	50	575	$120	U	$3,450,000
New Bridge (Freeway Ramp)	40	45	$130	U	$234,000
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$350		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

**Enter R for Rural, U for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		13800	SF	$125		$1,725,000
New Bridge (Arterial Roadway)		28800	SF	$120		$3,456,000
New Bridge (Freeway Ramp)		1800	SF	$130		$234,000
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$350		$0
Bridge Removal		13,100	SF	$20		$262,000
Flyerstops (Roadside)		4	EA	$250,000		$1,000,000
Walls	Retaining	0	SF	$60		$0
	Mid Range	145,910	SF	$60		$8,754,600
	High End	0	SF	$120		$0
	Noise	21,400	LF	$275		$5,885,000
Guardrail (# of Anchors in Other)		3000	LF	$15	12	$51,600
Concrete Barrier		31,952	LF	$30		$958,600
Signals		2	EA	$125,000	INT	$250,000
Signals		0	EA	$250,000	IC	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		2	INT	$25,000	INT	$50,000
Illumination		21	EA	$8,000		$168,000
Signing/Striping		90400	LF	$18		$1,627,200
Sidewalks, Curb, & Gutter		9350	LF	$30		$280,500
Surface/Paving (PCC)		90400	LF	$70		$6,328,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	37700	LF	$78		$2,940,600
	Stormwater	1	LS	$2,293,753		$2,293,800
Earthwork	Misc Earthwork	106000	LF	$10		$1,060,000
	Fill	48,698	CY	$15		$730,500
	Cut and Waste	64,262	CY	$18		$1,156,700
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	39	Acre	$6,000	X	$234,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		7	Mile	$5,000		$35,000
Aestitic Treatment		1	ump Sur	$3,500,000		$3,500,000
ITS		1	ump Sur	$3,000,000		$3,000,000
Traffic Control (6% of Total)				6%		$2,758,900
Construction Staging (8% of Total)				8%		$3,678,500
Removal Items (5% of Total)				5%		$2,236,000
Mobilization @ 8%				8%		$4,372,400
Misc Allowance @ 5%				5%		$2,951,300
Right of Way		50,000	SF	$175	W	$8,750,000
		55,800	SF	$70	P	$3,906,000
Preliminary Engineering @ 8%				8%		$4,956,300
Construction Engineering @ 10%				10%		$6,197,800
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$5,454,100
Escalation from 7/2003 to 3/2004				3.51%		$2,566,144
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$94,000,000

4 Lane Alternative: Phasing Options

SR	520		Posted Speed:		
Project Title:		Mainline Improvements through Eastside Communities: Ph			
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	0	Build	4	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountainou				R	

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	2	0.0189			
Freeway Ramp Addition	0	0		U	
Freeway Lane Addition	5	0.6989		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.5144		U	
	Structure Width	cture Le	Cost per SF		
New Bridge (Pedestrian)	20	450	$125	U	$1,125,000
New Bridge (Arterial Roadway)	50	185	$120	U	$1,110,000
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$350		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		9000	SF	$125		$1,125,000
New Bridge (Arterial Roadway)		9300	SF	$120		$1,116,000
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$350		$0
Bridge Removal		5,000	SF	$20		$100,000
Flyerstops (Roadside)		2	EA	$250,000		$500,000
Walls	Retaining	0	SF	$60		$0
	Mid Range	50,900	SF	$60		$3,054,000
	High End	0	SF	$120		$0
	Noise	5,000	LF	$275		$1,375,000
Guardrail (# of Anchors in Other)		2000	LF	$15	8	$34,400
Concrete Barrier		8,290	LF	$30		$248,700
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		7	EA	$8,000		$56,000
Signing/Striping		24000	LF	$18		$432,000
Sidewalks, Curb, & Gutter		3000	LF	$30		$90,000
Surface/Paving (PCC)		24000	LF	$70		$1,680,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	8400	LF	$78		$655,200
	Stormwater	1	LS	$688,126		$688,100
Earthwork	Misc Earthwork	30000	LF	$10		$300,000
	Fill	2,667	CY	$15		$40,000
	Cut and Waste	20,489	CY	$18		$368,800
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	11	Acre	$6,000	X	$66,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		2	Mile	$5,000		$10,000
Aestitic Treatment		1	ump Sur	$1,050,000		$1,050,000
ITS		1	ump Sur	$900,000		$900,000
Traffic Control (6% of Total)				6%		$833,400
Construction Staging (8% of Total)				8%		$1,111,100
Removal Items (5% of Total)				5%		$664,500
Mobilization @ 8%				8%		$1,319,900
Misc Allowance @ 5%				5%		$890,900
Right of Way		50,000	SF	$175	W	$8,750,000
		0	SF	$70	P	$0
Preliminary Engineering @ 8%				8%		$1,406,700
Construction Engineering @ 10%				10%		$1,870,900
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.80%		$1,646,400
Escalation from 7/2003 to 3/2004				3.51%		$753,360
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$33,000,000

4 Lane Alternative: Phasing Options

SR	520		Posted Speed:		
Project Title:	Extend EB HOV Lane through 108th				
Subject Section:	MP		to	MP	
Length of Subject Section:		0	Miles		
Number of Lanes:	No - Build	5	Build	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	2	0.1837		U	
Freeway Ramp Addition	0	0			
Freeway Lane Addition	1	1.69		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	1	1.7657		U	
	Structure Width	cture Le	Cost per SF		Cost
New Bridge (Pedestrian)	0	0	$125		$0
New Bridge (Arterial Roadway)	58	425	$120	U	$2,970,000
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		0	SF	$125		$0
New Bridge (Arterial Roadway)		24800	SF	$120		$2,976,000
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		14,700	SF	$20		$294,000
Cut and Cover non ventilated		0	SF	$270		$0
Non Ventilated Lid		0	SF	$150		$0
Walls	Low End	0	SF	$40		$0
	Mid Range	33,000	SF	$60		$1,980,000
	High End	0	SF	$120		$0
	Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		8,923	LF	$30		$267,700
Signals		2	EA	$125,000	INT	$250,000
Signals		0	EA	$250,000	IC	$0
Illumination		2	INT	$25,000	INT	$50,000
Illumination		0	IC	$100,000	IC	$0
Illumination		0	EA	$8,000		$0
Signing/Striping		16000	LF	$18		$288,000
Sidewalks, Curb, & Gutter		3,340	LF	$40		$133,600
Surface/Paving (PCC)		16000	LF	$70		$1,120,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	11400	LF	$78		$889,200
	Stormwater	1	ump Sur	$0		$0
Earthwork	Misc Earthwork	25,100	LF	$10		$251,000
	Fill	14,667	CY	$15		$220,000
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	8	Acre	$6,000	x	$48,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		3	Mile	$5,000		$15,000
Aestetic Treatment		0	ump Sur	$0		$0
ITS		0	ump Sur	$0		$0
Traffic Control (10% of Total)				10%		$880,000
Construction Staging (15% of Total)				15%		$1,320,000
Removal Items (5% of Total)				5%		$425,300
Mobilization @ 8%				8%		$914,000
Misc Allowance @ 5%				5%		$617,000
Right of Way		0	SF	$70		$0
Right of Way (New Align @ L Wash)		0	SF	$175		$0
Preliminary Engineering @ 12%				12%		$1,554,700
Construction Engineering @ 10%				10%		$1,295,600
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$1,140,100
Escalation from 7/2003 to 3/2004				3.51%		$594,299
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$18,000,000

Six Lane Alternative: Full Funding
Highway General Planning Level Capital Cost Opinion

Segments		
1	I-5 Interchange	$79,000,000
2	Portage Bay	$150,000,000
3	Montlake Interchange	$171,000,000
4	Floating Bridge and Approaches	$873,000,000
5	Points Segment	$214,000,000
6	Bellevue Way Interchange	$78,000,000
	Subtotal: SR 520 Corridor (Rounded)	**$1,565,000,000**
	TDM	$142,000,000
	Toll Facilities	$10,000,000
	BRT Bus Purchase	$0
	P&R Upgrades	$0
	Evironmental Mitigation	$66,000,000
	Preliminary Engineering to ROD	$37,000,000
	Total: SR 520 Corridor in 2004 Dollars (Rounded)	**$1,820,000,000**

This planning-level cost estimate is intended only for the comparison of different alternatives based on information available at the time of preparation. Because of the preliminary nature of this estimate, final project costs will vary from those shown and will depend on actual costs for labor, construction equipment, disposal, and materials as well as surface and subsurface conditions, regulatory constraints and approach to corridor mitigation, labor productivity, competitive market conditions, final project scope, schedule, and other factors. Cost opinions developed here do not contain sufficient accuracy to support the development of program budgets.

Six Lane Alternative: Full Funding
Highway General Planning Level Capital Cost Opinion

Segment #	Work Items	Cost	
	Preliminary Engineering to ROD	$37,000,000	
1	I-5 Interchange Improvements	$79,000,000	5
2	Portage Bay Bridge	$150,000,000	
3	Montlake Interchange Improvements	$122,000,000	1,2,5
3	Montlake Local Street Enhancements	$5,000,000	
4	Approach Spans and Lake Washington Ramps	$369,000,000	
4	New Floating Bridge	$504,000,000	
5	Mainline Improvements through Eastside Communities	$183,000,000	3,5
5	Points Local Street Enhancement	$2,000,000	
6	Bellevue Way I/C Improvements	$76,000,000	
6	Bellevue Way Local Street Enhancements	$2,000,000	
	Environmental Mitigation	$66,000,000	
	Subtotal: Six Lane Modified Alternative Highway (Ro	**$ 1,595,000,000**	

Transit General Planning Level Capital Cost Opinion[1]

	HOV Access/Flyerstop Transit Costs		
3	Montlake Flyerstop Ramp	$44,000,000	2
5	Eastside Flyerstops through Points	$29,000,000	3
	P&R Upgrades	$0	
	Subtotal: Six Lane Modified Alternative Transit (Rou	**$ 73,000,000**	

Total: Six Lane Modified Alternative (Rounded)	**$**	**1,668,000,000**

Note:

1. Shared Transit cost such as direct access ramps for busses and flyerstops are broken out of the highway costs to help clarify the total transit costs.
2. The Montlake Flyerstop is shown with the Shared Transit here to help clarify the total transit cost.
3. Points Community Flyerstops are shown with Shared Transit here to help clarify the total transit cost.
5. Lid Costs are included at I-5, Montlake, and three lids through the Point Communities.
6. Scope Contingency is not included in these costs.

This planning-level cost estimate is intended only for the comparison of different alternatives based on information available at the time of preparation. Because of the preliminary nature of this estimate, final project costs will vary from those shown and will depend on actual costs for labor, construction equipment, disposal, and materials as well as surface and subsurface conditions, regulatory constraints and approach to corridor mitigation, labor productivity, competitive market conditions, final project scope, schedule, and other factors. Cost opinions developed here do not contain sufficient accuracy to support the development of program budgets.

Six Lane Modified Alternative: Full Funding

SR	520			Posted Spe	60	
Project Title:		I-5 Interchange Improvements				
Subject Section:		MP		to	MP	
Length of Subject Section:			0	Miles		
Number of Lanes:		No - Build	4	Build	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain						R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	1	0.5		U	
Freeway Lane Addition	7	0.6		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	4	0.4		U	
	Structure Width	Structure Len	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	30	510	$130	U	$1,989,000
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0

*Structure costs include Signing/Striping, Paving, and Concrete Barrier

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		15300	SF	$130		$1,989,000
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		24,000	SF	$20		$480,000
Non Ventilated Lid Structure		121,900	SF	$150		$18,285,000
Cut & Cover under I-5 to SR 520		10,444	SF	$385		$4,020,900
Reversible Ramp Barrier and indicator		1	EA	$100,000		$100,000
Walls	Low End	0	SF	$40		$0
	Mid Range	37,495	SF	$60		$2,249,700
	High End	0	SF	$120		$0
	Noise	1,300	LF	$275		$357,500
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		7,193	LF	$30		$215,900
Signals		1	EA	$125,000	INT	$125,000
Signals		0	EA	$250,000	IC	$0
Illumination		1	INT	$25,000	INT	$25,000
Illumination		1	IC	$100,000	IC	$100,000
Illumination		5	EA	$8,000		$40,000
Signing/Striping		29000	LF	$18		$522,000
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		29000	LF	$70		$2,030,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	9000	LF	$78		$702,000
	Stormwater	1	ump Sur	$350,407		$350,400
Earthwork	Misc Earthwork	35100	LF	$10		$351,000
	Fill	32,146	CY	$15		$482,200
	Cut and Waste	24,122	CY	$18		$434,200
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		2	Mile	$5,000		$10,000
ITS		1	ump Sur	$6,000,000		$6,000,000
Traffic Control (10% of Total)				10%		$3,888,700
Construction Staging (15% of Total)				15%		$5,833,100
Removal Items (5% of Total)				5%		$1,920,400
Mobilization @ 8%				8%		$4,042,300
Misc Allowance @ 5%				5%		$2,728,600
Right of Way		0	SF	$175	W	$0
Preliminary Engineering @ 15%				15%		$8,595,000
Construction Engineering @ 10%				10%		$5,730,000
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$5,042,400
Escalation from 7/2003 to 3/2004				3.51%		$2,688,680
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$79,000,000

Six Lane Modified Alternative: Full Funding

SR	520			Posted Speed:		
Project Title:		Portage Bay Bridge				
Subject Section:		MP		to	MP	
Length of Subject Section:			0	Miles		
Number of Lanes:		No - Build	0	Build	4	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountaino						R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	0	0			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	0	0			
	Structure Width	ucture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	175	2898	$150	U	$76,072,500
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

*Enter **R** for Rural, **U** for Urban*

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		507200	SF	$150		$76,080,000
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		150,800	SF	$40		$6,032,000
Walls	Low End	0	SF	$40		$0
	Mid Range	0	SF	$60		$0
	High End	0	SF	$120		$0
	Noise	5,850	LF	$275		$1,608,800
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		0	LF	$30		$0
Signals		0	EA	$125,000		$0
Signals		0	EA	$250,000		$0
Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Signing/Striping		0	LF	$18		$0
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		0	LF	$70		$0
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	2900	LF	$110		$319,000
	Stormwater	1	ump Sur	$406,436		$406,400
Earthwork	Misc Earthwork	14600	LF	$10		$146,000
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		1	ump Sur	$1,000,000		$1,000,000
Traffic Control (3.5% of Total)				3.5%		$2,996,300
Construction Staging (10% of Total)				10%		$8,560,900
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$7,773,300
Misc Allowance @ 5%				5%		$5,247,000
Right of Way		30,300	SF	$175	W	$5,302,500
Preliminary Engineering @ 8%				8%		$8,815,000
Construction Engineering @ 10%				10%		$11,018,700
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$9,696,400
Escalation from 7/2003 to 3/2004				3.51%		$4,899,785
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$150,000,000**

Six Lane Modified Alternative: Full Funding

SR	520			Posted Speed:		
Project Title:		Montlake Interchange Improvements				
Subject Section:		MP		to	MP	
Length of Subject Section:			0	Miles		
Number of Lanes:		No - Build	4	Build	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain						R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	4	0.1979		U	
Freeway Ramp Addition	2	0.8955		U	
Freeway Lane Addition	6	0.3366		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	4	0.3771		U	
	Structure Wid	ucture Le	Cost per SF		Cost
New Bridge (Pedestrian)	20	525	$125	U	$1,312,500
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter R for Rural, U for Urban

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		10500	SF	$125		$1,312,500
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		24,600	SF	$20		$492,000
Non Ventilated Lid Structure		115,200	SF	$150		$17,280,000
Cut and Cover non ventilated		3,300	SF	$270		$891,000
Walls	Low End	0	SF	$40		$0
	Mid Range	49,048	SF	$60		$2,942,900
	High End	0	SF	$120		$0
	Noise	1,750	LF	$275		$481,300
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		6,165	LF	$30		$185,000
Signals		3	EA	$125,000	INT	$375,000
Signals		1	EA	$250,000	IC	$250,000
Illumination		3	INT	$25,000	INT	$75,000
Illumination		1	IC	$100,000	IC	$100,000
Illumination		5	EA	$8,000		$40,000
Signing/Striping		29400	LF	$18		$529,200
Sidewalks, Curb, & Gutter		5,950	LF	$40		$238,000
Surface/Paving (PCC)		29400	LF	$70		$2,058,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	15700	LF	$78		$1,224,600
	Stormwater	1	ump Sur	$820,920		$820,900
Earthwork	Misc Earthwork	34000	LF	$10		$340,000
	Fill	24,120	CY	$15		$361,800
	Cut and Waste	88,522	CY	$18		$1,593,400
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		3	Mile	$5,000		$15,000
Aestitic Treatment		1	ump Sur	$1,200,000		$1,200,000
ITS		1	ump Sur	$15,000,000		$15,000,000
Traffic Control (3.5% of Total)				3.5%		$1,673,800
Construction Staging (10% of Total)				10%		$4,782,300
Removal Items (5% of Total)				5%		$2,366,500
Mobilization @ 8%				8%		$4,531,600
Misc Allownace @ 5%				5%		$3,058,900
Right of Way		192,100	SF	$70		$13,447,000
Right of Way		102,000	SF	$175		$17,850,000
Right of Way (MOAHI)		22,500	SF	$300		$6,750,000
Preliminary Engineering @ 8%				8%		$5,188,900
Construction Engineering @ 10%				10%		$6,423,600
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$5,652,800
Escalation from 7/2003 to 3/2004				3.51%		$2,856,441
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$122,000,000

Six Lane Modified Alternative: Full Funding

SR	520			Posted Speed:	
Project Title:		Montlake Flyerstop Ramp			
Subject Section:		MP		to	MP
Length of Subject Section:			0	Miles	
Number of Lanes:		No - Build	0	Build	2
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain					R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	2	0.1243			
Freeway Lane Addition	2	0.33		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.399		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	30	4275	$150	U	$19,237,500
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

*Enter **R** for Rural, **U** for Urban*

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		128300	SF	$150		$19,245,000
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		0	SF	$20		$0
Flyerstops under Lid Structure		1	LS	$3,000,000		$3,000,000
Walls	Low End	0	SF	$40		$0
	Mid Range	200	SF	$60		$12,000
	High End	0	SF	$120		$0
	Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		4,303	LF	$30		$129,100
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		3	EA	$8,000		$24,000
Signing/Striping		15500	LF	$18		$279,000
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		15500	LF	$70		$1,085,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	7800	LF	$78		$608,400
	Stormwater	0	Lump Sum			$0
Earthwork	Misc Earthwork	11600	LF	$10		$116,000
	Fill	5,106	CY	$15		$76,600
	Cut and Waste	20,935	CY	$18		$376,800
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		0	Lump Sur	$0		$0
Traffic Control (3.5% of Total)				3.5%		$873,900
Construction Staging (10% of Total)				10%		$2,496,900
Removal Items (5% of Total)				5%		$1,248,500
Mobilization @ 8%				8%		$2,367,100
Misc Allowance @ 5%				5%		$1,597,800
Right of Way			SF	$175	W	$0
Preliminary Engineering @ 8%				8%		$2,684,300
Construction Engineering @ 10%				10%		$3,355,300
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$2,952,700
Escalation from 7/2003 to 3/2004				3.51%		$1,492,047
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$44,000,000

Six Lane Modified Alternative: Full Funding

SR	520			Posted Speed:		
Project Title:		Approach Spans and Lake Washington Ramps				
Subject Section:		MP		to	MP	
Length of Subject Section:			0	Miles		
Number of Lanes:		No - Build	0	Build	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountaino						R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	2	0.16402		U	
Freeway Lane Addition	0	0			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.16402		U	
	Structure Wid	ucture Le	Cost per SF		Cost
New Bridge (Pedstrian over Lake)	0	0	$130		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	160	7403	$150	U	$177,672,000
New Lake Bridge (Fixed Portion)	155	280	$175	U	$7,595,000
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

**Enter R for Rural, U for Urban*

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedstrian over Lake)		0	SF	$130		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		1,184,500	SF	$150		$177,675,000
New Lake Bridge (Fixed Portion)		43,400	SF	$175		$7,595,000
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		695,000	SF	$40		$27,800,000
Walls	Low End	0	SF	$40		$0
	Mid Range	22,300	SF	$60		$1,338,000
	High End	0	SF	$120		$0
	Noise	11,950	LF	$275		$3,286,300
Guardrail (# of Anchors in Other)		2000	LF	$15	8	$34,400
Concrete Barrier		1,030	LF	$30		$30,900
Signals		0	EA	$125,000		$0
Signals		0	EA	$250,000		$0
Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Signing/Striping		48700	LF	$18		$876,600
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		48700	LF	$70		$3,409,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	9700	LF	$110		$1,067,000
	Stormwater	1	Lump Sur	$2,073,681		$2,073,700
Earthwork	Misc Earthwork	29800	LF	$10		$298,000
	Fill	9,843	CY	$15		$147,600
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		2	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
ITS		1	Lump Sur	$500,000		$500,000
Traffic Control (3.5% of Total)				3.5%		$7,914,800
Construction Staging (4% of Total)				4%		$9,045,500
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$19,447,700
Misc Allowance @ 5%				5%		$13,127,200
Right of Way		96,000	SF	$70		$6,720,000
Preliminary Engineering @ 8%				8%		$22,053,700
Construction Engineering @ 10%				10%		$27,567,200
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$24,259,100
Escalation from 7/2003 to 3/2004				3.51%		$12,258,552

Six Lane Modified Alternative: Full Funding						
SR	520			Posted Speed:		
Project Title:		Approach Spans and Lake Washington Ramps				
Subject Section:		MP		to	MP	
Length of Subject Section:			0	Miles		
Number of Lanes:		No - Build	0	Build	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountaino						R
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$369,000,000

Six Lane Modified Alternative: Full Funding

SR	520			**Posted Speed:**		
Project Title:		New Floating Bridge				
Subject Section:		**MP**		**to**	**MP**	
Length of Subject Section:			0	**Miles**		
Number of Lanes:		**No - Build**	0	**Build**	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountaino						R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	0	0			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	0	0			
	Structure Widt	ucture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	143	7563	$315	U	$340,675,300
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

*Enter **R** for Rural, **U** for Urban*

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		1081600	SF	$315		$340,704,000
Bridge Removal		1	LS	$20,000,000		$20,000,000
Walls	Low End	0	SF	$40		$0
	Mid Range	0	SF	$60		$0
	High End	0	SF	$120		$0
	Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		0	LF	$30		$0
Signals		0	EA	$125,000		$0
Signals		0	EA	$250,000		$0
Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Signing/Striping		0	LF	$18		$0
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		0	LF	$70		$0
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	7600	LF	$125		$950,000
	Stormwater	0	ump Sur	$0		$0
Earthwork	Misc Earthwork	0	LF	$10		$0
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (0.5% of Total)				0.5%		$1,810,900
Construction Staging (0% of Total)				0%		$0
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$29,118,600
Misc Allowance @ 0%				0%		$0
Right of Way		0	SF	$0	0	$0
Preliminary Engineering @ 5%				5%		$19,655,000
Construction Engineering @ 10%				10%		$39,310,100
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$34,592,900
Escalation from 7/2003 to 3/2004				3.51%		$17,066,806
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$504,000,000

Six Lane Modified Alternative: Full Funding

SR	520			Posted Speed:		
Project Title:		Mainline Improvements through Eastside Communities				
Subject Section:		MP		to	MP	
Length of Subject Section:			0	Miles		
Number of Lanes:		No - Build	5	Build	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain						R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	1	0.536		U	
Freeway Ramp Addition	2	0.6964		U	
Freeway Lane Addition	6	1.4921		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	4	0.9405		U	
	Structure Width	cture Le	Cost per SF		Cost
New Bridge (Pedestrian)	20	620	$125	U	$1,550,000
New Bridge (Arterial Roadway)	60	62	$120	U	$446,400
New Bridge (Freeway Ramp)	40	40	$130	U	$208,000
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

*Enter **R** for Rural, **U** for Urban*

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		12400	SF	$125		$1,550,000
New Bridge (Arterial Roadway)		3800	SF	$120		$456,000
New Bridge (Freeway Ramp)		1600	SF	$130		$208,000
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		13,100	SF	$20		$262,000
Cut and Cover non ventilated		0	SF	$270		$0
Non Ventilated Lid		281,300	SF	$150		$42,195,000
Walls	Low End	0	SF	$40		$0
	Mid Range	101,846	SF	$60		$6,110,800
	High End	0	SF	$120		$0
	Noise	13,200	LF	$275		$3,630,000
Guardrail (# of Anchors in Other)		3000	LF	$15	12	$51,600
Concrete Barrier		19,074	LF	$30		$572,200
Signals		4	EA	$125,000	INT	$500,000
Signals		0	EA	$250,000	IC	$0
Illumination		4	INT	$25,000	INT	$100,000
Illumination		0	IC	$100,000	IC	$0
Illumination		18	EA	$8,000		$144,000
Signing/Striping		68200	LF	$18		$1,227,600
Sidewalks, Curb, & Gutter		14,080	LF	$40		$563,200
Surface/Paving (PCC)		68200	LF	$70		$4,774,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	27600	LF	$78		$2,152,800
	Stormwater	1	ump Sur	$4,098,967		$4,099,000
Earthwork	Misc Earthwork	87,400	LF	$10		$874,000
	Fill	14,378	CY	$15		$215,700
	Cut and Waste	107,172	CY	$18		$1,929,100
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	30	Acre	$6,000	x	$180,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		5	Mile	$5,000		$25,000
Aestetic Treatment		1	ump Sur	$3,500,000		$3,500,000
ITS		1	ump Sur	$5,000,000		$5,000,000
Traffic Control (10% of Total)				10%		$8,032,000
Construction Staging (15% of Total)				15%		$12,048,000
Removal Items (5% of Total)				5%		$4,002,900
Mobilization @ 8%				8%		$8,352,200
Misc Allowance @ 5%				5%		$5,637,800
Right of Way		0	SF	$70		$0
Right of Way (New Align @ L Wash)		131,400	SF	$175		$22,995,000
Preliminary Engineering @ 12%				12%		$14,207,600
Construction Engineering @ 10%				10%		$11,839,300
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$10,418,600
Escalation from 7/2003 to 3/2004				3.51%		$5,430,766
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$183,000,000

Six Lane Modified Alternative: Full Funding

SR	520			**Posted Speed:**		
Project Title:		Eastside Flyerstops through Points				
Subject Section:		**MP**		**to**	**MP**	
Length of Subject Section:			0	**Miles**		
Number of Lanes:		**No - Build**	0	**Build**	2	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain						R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	2	0.9495		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.559		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	30	1067	$150	U	$4,801,500
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		32100	SF	$150		$4,815,000
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		0	SF	$20		$0
Flyerstops under Lid Structure		2	ump Sur	$3,000,000		$6,000,000
Walls	Low End	0	SF	$40		$0
	Mid Range	0	SF	$60		$0
	High End	0	SF	$120		$0
	Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		5,167	LF	$30		$155,000
Signals		0	EA	$125,000	INT	$0
Signals		0	EA	$250,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		9	EA	$8,000		$72,000
Signing/Striping		15200	LF	$18		$273,600
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		15200	LF	$70		$1,064,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	11100	LF	$78		$865,800
	Stormwater	0	ump Sum			$0
Earthwork	Misc Earthwork	18,500	LF	$10		$185,000
	Fill	2,711	CY	$15		$40,700
	Cut and Waste	22,704	CY	$18		$408,700
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		2	Mile	$5,000		$10,000
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (10% of Total)				10%		$1,440,700
Construction Staging (15% of Total)				15%		$2,161,100
Removal Items (5% of Total)				5%		$720,400
Mobilization @ 8%				8%		$1,498,300
Misc Allowance @ 5%				5%		$1,011,400
Right of Way			SF	$70	P	$0
Preliminary Engineering @ 12%				12%		$2,548,700
Construction Engineering @ 10%				10%		$2,123,900
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$1,869,000
Escalation from 7/2003 to 3/2004				3.51%		$974,244
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$29,000,000

Six Lane Modified Alternative: Full Funding

SR	520			Posted Speed:		
Project Title:		Bellevue Way I/C Improvements				
Subject Section:		MP		to	MP	
Length of Subject Section:			0	Miles		
Number of Lanes:		No - Build	5	Build	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain						R

General per Mile Quantities:

	# of Lanes	Mile		R/U*	
Arterial Lane Addition	4	0.0852		U	
Freeway Ramp Addition	2	1.4593		U	
Freeway Lane Addition	6	0.8203		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	1.9792		U	
	Structure Wid	icture Le	Cost per SF		Cost
New Bridge (Pedestrian)	0	0	$125		$0
New Bridge (Arterial Roadway)	95	250	$120	U	$2,850,000
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	12	370	$200	U	$888,000
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0

Enter R for Rural, U for Urban

Detailed Planning Cost Estimate:

		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		0	SF	$125		$0
New Bridge (Arterial Roadway)		23800	SF	$120		$2,856,000
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		4500	SF	$200		$900,000
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		10,200	SF	$20		$204,000
Walls	Low End	0	SF	$40		$0
	Mid Range	112,256	SF	$60		$6,735,400
	High End	0	SF	$120		$0
	Noise	5,650	LF	$275		$1,553,800
	Other	1	ump Sur	$800,000		$800,000
Liquefaction Mitigation		1	ump Sur	$4,000,000		$4,000,000
Guardrail (# of Anchors in Other)		2000	LF	$15	8	$34,400
Concrete Barrier		17,110	LF	$30		$513,300
Signals		0	EA	$125,000	INT	$0
Signals		1	EA	$250,000	IC	$250,000
Illumination		0	INT	$25,000	INT	$0
Illumination		1	IC	$100,000	IC	$100,000
Illumination		8	EA	$8,000		$64,000
Signing/Striping		54300	LF	$18		$977,400
Sidewalks, Curb, & Gutter		1,700	LF	$40		$68,000
Surface/Paving (PCC)		54300	LF	$70		$3,801,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	10860	LF	$78		$847,100
	Stormwater	1	ump Sur	$304,849		$304,800
Earthwork	Misc Earthwork	54300	LF	$10		$543,000
	Fill	50,052	CY	$15		$750,800
	Cut and Waste	84,648	CY	$18		$1,523,700
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	24	Acre	$6,000	x	$144,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		5	Mile	$5,000		$25,000
Aesthetic Treatment		1	ump Sur	$1,200,000		$1,200,000
ITS		1	ump Sur	$8,000,000		$8,000,000
Traffic Control (6% of Total)				6%		$2,171,700
Construction Staging (8% of Total)				8%		$2,895,700
Removal Items (5% of Total)				5%		$1,799,800
Mobilization @ 8%				8%		$3,445,000
Misc Allowance @ 5%				5%		$2,153,100
Right of Way		75,000	SF	$175	W	$13,125,000
Preliminary Engineering @ 6%				6%		$2,619,600
Construction Engineering @ 10%				10%		$4,866,100
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$4,282,200
Escalation from 7/2003 to 3/2004				3.51%		$2,129,716
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						$76,000,000

Six Lane Alternative: Phase 1
Highway General Planning Level Capital Cost Opinion

Segments		
1	I-5 Interchange	$0
2	Portage Bay	$0
3	Montlake Interchange	$6,000,000
4	Floating Bridge and Approaches	$873,000,000
5	Points Segment	$95,500,000
6	Bellevue Way Interchange	$0
	Subtotal: SR 520 Corridor (Rounded)	**$975,000,000**
	TDM	$142,000,000
	Toll Facilities	$10,000,000
	BRT Bus Purchase	$0
	P&R Upgrades	$0
	Evironmental Mitigation	$34,000,000
	Preliminary Engineering to ROD	$37,000,000
	Total: SR 520 Corridor in 2004 Dollars (Rounded)	**$1,198,000,000**

This planning-level cost estimate is intended only for the comparison of different alternatives based on information available at the time of preparation. Because of the preliminary nature of this estimate, final project costs will vary from those shown and will depend on actual costs for labor, construction equipment, disposal, and materials as well as surface and subsurface conditions, regulatory constraints and approach to corridor mitigation, labor productivity, competitive market conditions, final project scope, schedule, and other factors. Cost opinions developed here do not contain sufficient accuracy to support the development of program budgets.

Phase 1 Scope Items:

- I-5, Portage Bay Bridge and Bellevue Way are not included in Phase.
- Montlake segment only includes the westside tie for the Approach structure at Parks Ave in Montlake.
- The Montlake flyerstop and braided HOV ramps are not includes in Phase 1.
- The Points segment includes full build out to station 270+00 just prior to 84th Ave. This includes the Evergreen Point Lid and flyerstop.

Possible Additive Costs:	**Added Cost to Above**
o Full Points and Bellevue Way build out with lids	$197,000,000
o Full Points and Bellevue Way build out with out lids at 84th and 92nd	$146,000,000
o Build north half of Portage Bay Bridge	$89,000,000
o Extend EB HOV Lane to 108th	$20,000,000

Six Lane Alternative: Phase 1
Highway General Planning Level Capital Cost Opinion

Segment #	Work Items	Cost	
	Preliminary Engineering to ROD	$37,000,000	
1	I-5 Interchange Improvements	$0	5
2	Portage Bay Bridge	$0	
3	Montlake Interchange Improvements Improvements	$6,000,000	1,2,5
3	Montlake Local Street Enhancements	$0	
4	Approach Spans and Lake Washington Ramps	$369,000,000	
4	New Floating Bridge	$504,000,000	
5	Mainline Improvements through Eastside Communities	$75,000,000	3,5
5	Points Local Street Enhancement	$500,000	
6	Bellevue Way I/C Improvements	$0	
6	Bellevue Way Local Street Enhancements	$0	
	Environmental Mitigation	$34,000,000	
	Subtotal: Six Lane Modified Alternative Highway (Rc	**$ 1,026,000,000**	

Transit General Planning Level Capital Cost Opinion[1]

	HOV Access/Flyerstop Transit Costs		
3	Montlake Flyerstop Ramp	$0	2
5	Eastside Flyerstops through Points	$20,000,000	3
	P&R Upgrades	$0	
	Subtotal: Six Lane Modified Alternative Transit (Rou	**$ 20,000,000**	

Total: Six Lane Modified Alternative (Rounded)	**$**	**1,046,000,000**

Note:

1. Shared Transit cost such as direct access ramps for busses and flyerstops are broken out of the highway costs to help clarify the total transit costs.
2. The Montlake Flyerstop is shown with the Shared Transit here to help clarify the total transit cost.
3. Points Community Flyerstops are shown with Shared Transit here to help clarify the total transit cost.
5. Lid Costs are included at Evergreen Point Road on the Eastside.
6. Scope Contingency is not included in these costs.

This planning-level cost estimate is intended only for the comparison of different alternatives based on information available at the time of preparation. Because of the preliminary nature of this estimate, final project costs will vary from those shown and will depend on actual costs for labor, construction equipment, disposal, and materials as well as surface and subsurface conditions, regulatory constraints and approach to corridor mitigation, labor productivity, competitive market conditions, final project scope, schedule, and other factors. Cost opinions developed here do not contain sufficient accuracy to support the development of program budgets.

Six Lane Modified Alternative: Full Funding

SR	520		**Posted Spe**	60	
Project Title:	I-5 Interchange Improvements				
Subject Section:	**MP**		**to**	**MP**	
Length of Subject Section:		0	**Miles**		
Number of Lanes:	**No - Build**	4	**Build**	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	1	0.5		U	
Freeway Lane Addition	7	0.6		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	4	0.4		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	30	510	$130	U	$1,989,000
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
*Structure costs include Signing/Striping, Paving, and Concrete Barrier					

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	15300	SF	$130		$1,989,000
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	0	SF	$150		$0
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	24,000	SF	$20		$480,000
Non Ventilated Lid Structure	121,900	SF	$150		$18,285,000
Cut & Cover under I-5 to SR 520	10,444	SF	$385		$4,020,900
Reversible Ramp Barrier and indicator	1	EA	$100,000		$100,000
Walls Low End	0	SF	$40		$0
Mid Range	37,495	SF	$60		$2,249,700
High End	0	SF	$120		$0
Noise	1,300	LF	$275		$357,500
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	7,198	LF	$30		$215,900

Six Lane Modified Alternative: Full Funding

SR	520		**Posted Spe**	60	
Project Title:	I-5 Interchange Improvements				
Subject Section:	**MP**		**to**	**MP**	
Length of Subject Section:		0	**Miles**		
Number of Lanes:	**No - Build**	4	**Build**	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain					R

Signals		1	EA	$125,000	INT	$125,000
Signals		0	EA	$250,000	IC	$0
Illumination		1	INT	$25,000	INT	$25,000
Illumination		1	IC	$100,000	IC	$100,000
Illumination		5	EA	$8,000		$40,000
Signing/Striping		29000	LF	$18		$522,000
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		29000	LF	$70		$2,030,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	9000	LF	$78		$702,000
	Stormwater	1	ump Sur	$350,407		$350,400
Earthwork	Misc Earthwork	35100	LF	$10		$351,000
	Fill	32,146	CY	$15		$482,200
	Cut and Waste	24,122	CY	$18		$434,200
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		2	Mile	$5,000		$10,000
ITS		1	ump Sur	$6,000,000		$6,000,000
Traffic Control (10% of Total)				10%		$3,888,700
Construction Staging (15% of Total)				15%		$5,833,100
Removal Items (5% of Total)				5%		$1,920,400
Mobilization @ 8%				8%		$4,042,300
Misc Allowance @ 5%				5%		$2,728,600
Right of Way		0	SF	$175	W	$0
Preliminary Engineering @ 15%				15%		$8,595,000
Construction Engineering @ 10%				10%		$5,730,000
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$5,042,400
Escalation from 7/2003 to 3/2004				3.51%		$2,688,680
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$79,000,000**

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Portage Bay Bridge
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	0	0			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	0	0			
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	175	2898	$150	U	$76,072,500
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	507200	SF	$150		$76,080,000
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	150,800	SF	$40		$6,032,000
Walls Low End	0	SF	$40		$0
Mid Range	0	SF	$60		$0
High End	0	SF	$120		$0
Noise	5,850	LF	$275		$1,608,800
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	0	LF	$30		$0
Signals	0	EA	$125,000		$0
Signals	0	EA	$250,000		$0
Illumination	0	EA	$8,000		$0

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Portage Bay Bridge
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Signing/Striping		0	LF	$18		$0
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		0	LF	$70		$0
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	2900	LF	$110		$319,000
	Stormwater	1	ump Sur	$406,436		$406,400
Earthwork	Misc Earthwork	14600	LF	$10		$146,000
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		1	ump Sur	$1,000,000		$1,000,000
Traffic Control (3.5% of Total)				3.5%		$2,996,300
Construction Staging (10% of Total)				10%		$8,560,900
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$7,773,300
Misc Allowance @ 5%				5%		$5,247,000
Right of Way		30,300	SF	$175	W	$5,302,500
Preliminary Engineering @ 8%				8%		$8,815,000
Construction Engineering @ 10%				10%		$11,018,700
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$9,696,400
Escalation from 7/2003 to 3/2004				3.51%		$4,899,785
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$150,000,000**

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: North side of Portage Bay Bridge Phasing Option
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	4	0.1572		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.1572		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	88	2910	$150	U	$38,412,000
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	256100	SF	$150		$38,415,000
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	150,800	SF	$40		$6,032,000
Walls Low End	0	SF	$40		$0
Mid Range	0	SF	$60		$0
High End	0	SF	$120		$0
Noise	5,850	LF	$275		$1,608,800
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	1,660	LF	$30		$49,800
Signals	0	EA	$125,000		$0
Signals	0	EA	$250,000		$0
Illumination	0	EA	$8,000		$0

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: North side of Portage Bay Bridge Phasing Option
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 4
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Signing/Striping		15800	LF	$18		$284,400
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		15800	LF	$70		$1,106,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	4600	LF	$110		$506,000
	Stormwater	1	ump Sur	$284,505		$284,500
Earthwork	Misc Earthwork	12400	LF	$10		$124,000
	Fill	2,356	CY	$15		$35,300
	Cut and Waste	6,667	CY	$18		$120,000
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		2	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
ITS		1	ump Sur	$1,000,000		$1,000,000
Traffic Control (3.5% of Total)				3.5%		$1,735,600
Construction Staging (10% of Total)				10%		$4,958,800
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$4,502,600
Misc Allowance @ 5%				5%		$3,039,300
Right of Way		30,300	SF	$175	W	$5,302,500
Preliminary Engineering @ 8%				8%		$5,105,900
Construction Engineering @ 10%				10%		$6,382,400
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$5,616,500
Escalation from 7/2003 to 3/2004				3.51%		$2,838,131
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$89,000,000**

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Montlake Interchange Improvements Improvements
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 4 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	4	0.1979		U	
Freeway Ramp Addition	2	0.8955		U	
Freeway Lane Addition	6	0.3366		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	4	0.3771		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (Pedestrian)	20	525	$125	U	$1,312,500
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)	10500	SF	$125		$1,312,500
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	0	SF	$150		$0
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	24,600	SF	$20		$492,000
Non Ventilated Lid Structure	115,200	SF	$150		$17,280,000
Cut and Cover non ventilated	3,300	SF	$270		$891,000
Walls Low End	0	SF	$40		$0
Mid Range	49,048	SF	$60		$2,942,900
High End	0	SF	$120		$0
Noise	1,750	LF	$275		$481,300
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	6,165	LF	$30		$185,000
Signals	3	EA	$125,000	INT	$375,000

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Montlake Interchange Improvements Improvements
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 4 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Signals		1	EA	$250,000	IC	$250,000
Illumination		3	INT	$25,000	INT	$75,000
Illumination		1	IC	$100,000	IC	$100,000
Illumination		5	EA	$8,000		$40,000
Signing/Striping		29400	LF	$18		$529,200
Sidewalks, Curb, & Gutter		5,950	LF	$40		$238,000
Surface/Paving (PCC)		29400	LF	$70		$2,058,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	15700	LF	$78		$1,224,600
	Stormwater	1	Lump Sur	$820,920		$820,900
Earthwork	Misc Earthwork	34000	LF	$10		$340,000
	Fill	24,120	CY	$15		$361,800
	Cut and Waste	88,522	CY	$18		$1,593,400
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		3	Mile	$5,000		$15,000
Aestitic Treatment		1	Lump Sur	$1,200,000		$1,200,000
ITS		1	Lump Sur	$15,000,000		$15,000,000
Traffic Control (3.5% of Total)				3.5%		$1,673,800
Construction Staging (10% of Total)				10%		$4,782,300
Removal Items (5% of Total)				5%		$2,366,500
Mobilization @ 8%				8%		$4,531,600
Misc Allownace @ 5%				5%		$3,058,900
Right of Way		192,100	SF	$70		$13,447,000
Right of Way		102,000	SF	$175		$17,850,000
Right of Way (MOAHI)		22,500	SF	$300		$6,750,000
Preliminary Engineering @ 8%				8%		$5,138,900
Construction Engineering @ 10%				10%		$6,423,600
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$5,652,800
Escalation from 7/2003 to 3/2004				3.51%		$2,856,441
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$122,000,000**

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Montlake Flyerstop Ramp
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 2
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	2	0.1243			
Freeway Lane Addition	2	0.33		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.399		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	30	4275	$150	U	$19,237,500
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	128300	SF	$150		$19,245,000
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	0	SF	$20		$0
Flyerstops under Lid Structure	1	LS	$3,000,000		$3,000,000
Walls Low End	0	SF	$40		$0
Mid Range	200	SF	$60		$12,000
High End	0	SF	$120		$0
Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	4,303	LF	$30		$129,100
Signals	0	EA	$125,000	INT	$0
Signals	0	EA	$250,000	IC	$0

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Montlake Flyerstop Ramp
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 2
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		3	EA	$8,000		$24,000
Signing/Striping		15500	LF	$18		$279,000
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		15500	LF	$70		$1,085,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	7800	LF	$78		$608,400
	Stormwater	0	ump Sum			$0
Earthwork	Misc Earthwork	11600	LF	$10		$116,000
	Fill	5,106	CY	$15		$76,600
	Cut and Waste	20,935	CY	$18		$376,800
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		0	ump Sur	$0		$0
Traffic Control (3.5% of Total)				3.5%		$873,900
Construction Staging (10% of Total)				10%		$2,496,900
Removal Items (5% of Total)				5%		$1,248,500
Mobilization @ 8%				8%		$2,367,100
Misc Allowance @ 5%				5%		$1,597,800
Right of Way			SF	$175	W	$0
Preliminary Engineering @ 8%				8%		$2,684,300
Construction Engineering @ 10%				10%		$3,355,300
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$2,952,700
Escalation from 7/2003 to 3/2004				3.51%		$1,492,047
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$44,000,000**

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Montlake Interchange Improvements for Phase 1
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 4 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	2	0		U	
Freeway Lane Addition	6	0.1283		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	4	0.0642		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (Pedestrian)	0	0	$125		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		0	SF	$125		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		0	SF	$20		$0
Non Ventilated Lid Structure		0	SF	$150		$0
Cut and Cover non ventilated		0	SF	$270		$0
Walls	Low End	0	SF	$40		$0
	Mid Range	4,080	SF	$60		$244,800
	High End	0	SF	$120		$0
	Noise	1,400	LF	$275		$385,000
Guardrail (# of Anchors in Other)		0	LF	$15	0	$0
Concrete Barrier		1,065	LF	$30		$32,000
Signals		0	EA	$125,000	INT	$0

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Montlake Interchange Improvements for Phase 1
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 4 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Signals		0	EA	$250,000	IC	$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		2	EA	$8,000		$16,000
Signing/Striping		4800	LF	$18		$86,400
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		4800	LF	$70		$336,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	1400	LF	$78		$109,200
	Stormwater	1	Lump Sur	$0		$0
Earthwork	Misc Earthwork	5500	LF	$10		$55,000
	Fill	12,711	CY	$15		$190,700
	Cut and Waste	10,222	CY	$18		$184,000
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
Aestitic Treatment		1	Lump Sur	$240,000		$240,000
ITS		1	Lump Sur	$1,500,000		$1,500,000
Traffic Control (3.5% of Total)				3.5%		$118,400
Construction Staging (10% of Total)				10%		$338,400
Removal Items (5% of Total)				5%		$169,200
Mobilization @ 8%				8%		$320,800
Misc Allownace @ 5%				5%		$216,500
Right of Way		0	SF	$70		$0
Right of Way		0	SF	$175		$0
Right of Way (MOAHI)		0	SF	$300		$0
Preliminary Engineering @ 8%				8%		$363,800
Construction Engineering @ 10%				10%		$454,700
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$400,200
Escalation from 7/2003 to 3/2004				3.51%		$202,213
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$6,000,000**

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Approach Spans and Lake Washington Ramps
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	2	0.164		U	
Freeway Lane Addition	0	0			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.164		U	
	Structure Widh	cture Le	Cost per SF		Cost
New Bridge (Pedstrian over Lake)	0	0	$130		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	160	7403	$150	U	$177,672,000
New Lake Bridge (Fixed Portion)	155	280	$175	U	$7,595,000
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedstrian over Lake)	0	SF	$130		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	1,184,500	SF	$150		$177,675,000
New Lake Bridge (Fixed Portion)	43,400	SF	$175		$7,595,000
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	695,000	SF	$40		$27,800,000
Walls Low End	0	SF	$40		$0
Mid Range	22,300	SF	$60		$1,338,000
High End	0	SF	$120		$0
Noise	11,950	LF	$275		$3,286,300
Guardrail (# of Anchors in Other)	2000	LF	$15	8	$34,400
Concrete Barrier	1,030	LF	$30		$30,900
Signals	0	EA	$125,000		$0

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Approach Spans and Lake Washington Ramps
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Signals		0	EA	$250,000		$0
Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Signing/Striping		48700	LF	$18		$876,600
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		48700	LF	$70		$3,409,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	9700	LF	$110		$1,067,000
	Stormwater	1	ump Sur	$2,073,681		$2,073,700
Earthwork	Misc Earthwork	29800	LF	$10		$298,000
	Fill	9,843	CY	$15		$147,600
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		2	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (3.5% of Total)				3.5%		$7,914,800
Construction Staging (4% of Total)				4%		$9,045,500
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$19,447,700
Misc Allowance @ 5%				5%		$13,127,200
Right of Way		96,000	SF	$70		$6,720,000
Preliminary Engineering @ 8%				8%		$22,053,700
Construction Engineering @ 10%				10%		$27,567,200
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$24,259,100
Escalation from 7/2003 to 3/2004				3.51%		$12,258,552
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$369,000,000**

Six Lane Alternative: Phasing Option

SR	520		**Posted Speed:**		
Project Title:	New Floating Bridge				
Subject Section:	**MP**		**to**	**MP**	
Length of Subject Section:		0	**Miles**		
Number of Lanes:	**No - Build**	0	**Build**	6	
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain					R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	0	0			
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	0	0			
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	143	7563	$315	U	$340,675,300
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)		0	SF	$120		$0
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		1081600	SF	$315		$340,704,000
Bridge Removal		1	LS	$20,000,000		$20,000,000
Walls	Low End	0	SF	$40		$0
	Mid Range	0	SF	$60		$0
	High End	0	SF	$120		$0
	Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		0	LF	$30		$0
Signals		0	EA	$125,000		$0
Signals		0	EA	$250,000		$0
Illumination		0	EA	$8,000		$0

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: New Floating Bridge
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Illumination		0	EA	$8,000		$0
Illumination		0	EA	$8,000		$0
Signing/Striping		0	LF	$18		$0
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		0	LF	$70		$0
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	7600	LF	$125		$950,000
	Stormwater	0	ump Sur	$0		$0
Earthwork	Misc Earthwork	0	LF	$10		$0
	Fill	0	CY	$15		$0
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		0	Mile	$5,000		$0
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (0.5% of Total)				0.5%		$1,810,900
Construction Staging (0% of Total)				0%		$0
Removal Items (0% of Total)				0%		$0
Mobilization @ 8%				8%		$29,118,600
Misc Allowance @ 0%				0%		$0
Right of Way		0	SF	$0	0	$0
Preliminary Engineering @ 5%				5%		$19,655,000
Construction Engineering @ 10%				10%		$39,310,100
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$34,592,900
Escalation from 7/2003 to 3/2004				3.51%		$17,066,806
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$504,000,000**

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Mainline Improvements through Eastside Communities
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 5 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	1	0.536		U	
Freeway Ramp Addition	2	0.6964		U	
Freeway Lane Addition	6	1.4921		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	4	0.9405		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (Pedestrian)	20	620	$125	U	$1,550,000
New Bridge (Arterial Roadway)	60	62	$120	U	$446,400
New Bridge (Freeway Ramp)	40	40	$130	U	$208,000
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		12400	SF	$125		$1,550,000
New Bridge (Arterial Roadway)		3800	SF	$120		$456,000
New Bridge (Freeway Ramp)		1600	SF	$130		$208,000
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		13,100	SF	$20		$262,000
Cut and Cover non ventilated		0	SF	$270		$0
Non Ventilated Lid		281,300	SF	$150		$42,195,000
Walls	Low End	0	SF	$40		$0
	Mid Range	101,846	SF	$60		$6,110,800
	High End	0	SF	$120		$0
	Noise	13,200	LF	$275		$3,630,000
Guardrail (# of Anchors in Other)		3000	LF	$15	12	$51,600
Concrete Barrier		19,074	LF	$30		$572,200
Signals		4	EA	$125,000	INT	$500,000

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Mainline Improvements through Eastside Communities
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 5 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Signals		0	EA	$250,000	IC	$0
Illumination		4	INT	$25,000	INT	$100,000
Illumination		0	IC	$100,000	IC	$0
Illumination		18	EA	$8,000		$144,000
Signing/Striping		68200	LF	$18		$1,227,600
Sidewalks, Curb, & Gutter		14,080	LF	$40		$563,200
Surface/Paving (PCC)		68200	LF	$70		$4,774,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	27600	LF	$78		$2,152,800
	Stormwater	1	ump Sur	$4,098,967		$4,099,000
Earthwork	Misc Earthwork	87,400	LF	$10		$874,000
	Fill	14,378	CY	$15		$215,700
	Cut and Waste	107,172	CY	$18		$1,929,100
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	30	Acre	$6,000	x	$180,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		5	Mile	$5,000		$25,000
Aestetic Treatment		1	ump Sur	$3,500,000		$3,500,000
ITS		1	ump Sur	$5,000,000		$5,000,000
Traffic Control (10% of Total)				10%		$8,032,000
Construction Staging (15% of Total)				15%		$12,048,000
Removal Items (5% of Total)				5%		$4,002,900
Mobilization @ 8%				8%		$8,352,200
Misc Allowance @ 5%				5%		$5,637,800
Right of Way		0	SF	$70		$0
Right of Way (New Align @ L Wash)		131,400	SF	$175		$22,995,000
Preliminary Engineering @ 12%				12%		$14,207,100
Construction Engineering @ 10%				10%		$11,839,300
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$10,418,600
Escalation from 7/2003 to 3/2004				3.51%		$5,430,766
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$183,000,000**

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Eastside Flyerstops through Points
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 2
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	2	0.9495		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.559		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	30	1067	$150	U	$4,801,500
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	32100	SF	$150		$4,815,000
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	0	SF	$20		$0
Flyerstops under Lid Structure	2	ump Sur	$3,000,000		$6,000,000
Walls Low End	0	SF	$40		$0
Mid Range	0	SF	$60		$0
High End	0	SF	$120		$0
Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	5,167	LF	$30		$155,000
Signals	0	EA	$125,000		$0
Signals	0	EA	$250,000		$0

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Eastside Flyerstops through Points
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 2
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		9	EA	$8,000		$72,000
Signing/Striping		15200	LF	$18		$273,600
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		15200	LF	$70		$1,064,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	11100	LF	$78		$865,800
	Stormwater	0	ump Sum			$0
Earthwork	Misc Earthwork	18,500	LF	$10		$185,000
	Fill	2,711	CY	$15		$40,700
	Cut and Waste	22,704	CY	$18		$408,700
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		2	Mile	$5,000		$10,000
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (10% of Total)				10%		$1,440,700
Construction Staging (15% of Total)				15%		$2,161,100
Removal Items (5% of Total)				5%		$720,400
Mobilization @ 8%				8%		$1,498,300
Misc Allowance @ 5%				5%		$1,011,400
Right of Way			SF	$70	P	$0
Preliminary Engineering @ 12%				12%		$2,548,700
Construction Engineering @ 10%				10%		$2,123,900
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$1,869,000
Escalation from 7/2003 to 3/2004				3.51%		$974,244
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$29,000,000**

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Mainline Improvements through Eastside Communities
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 5 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	1	0.1534		U	
Freeway Ramp Addition	0	0			
Freeway Lane Addition	6	0.5492		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.5492		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (Pedestrian)	20	450	$125	U	$1,125,000
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:						
		Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)		9000	SF	$125		$1,125,000
New Bridge (Arterial Roadway)		0	SF	$120		$0
New Bridge (Freeway Ramp)		0	SF	$130		$0
New Bridge (Freeway Mainline)		0	SF	$120		$0
Bridge Widening (Frwy Mainline)		0	SF	$200		$0
New Lake Bridge (Fixed Portion)		0	SF	$150		$0
New Lake Bridge (Floating Portion)		0	SF	$315		$0
Bridge Removal		5,000	SF	$20		$100,000
Cut and Cover non ventilated		0	SF	$270		$0
Non Ventilated Lid		93,100	SF	$150		$13,965,000
Walls	Low End	0	SF	$40		$0
	Mid Range	30,040	SF	$60		$1,802,400
	High End	0	SF	$120		$0
	Noise	5,000	LF	$275		$1,375,000
Guardrail (# of Anchors in Other)		1000	LF	$15	4	$17,200
Concrete Barrier		4,995	LF	$30		$149,900
Signals		0	EA	$125,000		$0

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Mainline Improvements through Eastside Communities
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 5 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Signals		0	EA	$250,000		$0
Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		7	EA	$8,000		$56,000
Signing/Striping		21600	LF	$18		$388,800
Sidewalks, Curb, & Gutter		4,710	LF	$40		$188,400
Surface/Paving (PCC)		21600	LF	$70		$1,512,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	7200	LF	$78		$561,600
	Stormwater	1	ump Sur	$1,229,690		$1,229,700
Earthwork	Misc Earthwork	25,700	LF	$10		$257,000
	Fill	6,267	CY	$15		$94,000
	Cut and Waste	24,689	CY	$18		$444,400
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	10	Acre	$6,000	x	$60,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		2	Mile	$5,000		$10,000
Aestetic Treatment		1	ump Sur	$1,050,000		$1,050,000
ITS		1	ump Sur	$1,500,000		$1,500,000
Traffic Control (10% of Total)				10%		$2,588,600
Construction Staging (15% of Total)				15%		$3,883,000
Removal Items (5% of Total)				5%		$1,289,300
Mobilization @ 8%				8%		$2,691,800
Misc Allowance @ 5%				5%		$1,817,000
Right of Way		0	SF	$70		$0
Right of Way (New Align @ L Wash)		131,400	SF	$175		$22,995,000
Preliminary Engineering @ 12%				12%		$4,578,700
Construction Engineering @ 10%				10%		$3,815,600
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$3,357,700
Escalation from 7/2003 to 3/2004				3.51%		$1,750,245
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$75,000,000**

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Eastside Flyerstops through Points: Phase 1
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 2
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:	# of Lanes	Mile		R/U*	
Arterial Lane Addition	0	0			
Freeway Ramp Addition	0	0			
Freeway Lane Addition	2	0.3551		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	0.2711		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (2-lane O'xing)	0	0	$120		$0
New Bridge (Arterial Roadway)	0	0	$120		$0
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	30	1067	$150	U	$4,801,500
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (2-lane O'xing)	0	SF	$120		$0
New Bridge (Arterial Roadway)	0	SF	$120		$0
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	32100	SF	$150		$4,815,000
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	0	SF	$20		$0
Flyerstops under Lid Structure	1	ump Sur	$3,000,000		$3,000,000
Walls Low End	0	SF	$40		$0
Mid Range	0	SF	$60		$0
High End	0	SF	$120		$0
Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	1,680	LF	$30		$50,400
Signals	0	EA	$125,000		$0
Signals	0	EA	$250,000		$0

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Eastside Flyerstops through Points: Phase 1
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 0 **Build** 2
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Illumination		0	INT	$25,000	INT	$0
Illumination		0	IC	$100,000	IC	$0
Illumination		4	EA	$8,000		$32,000
Signing/Striping		7400	LF	$18		$133,200
Sidewalks, Curb, & Gutter		0	LF	$40		$0
Surface/Paving (PCC)		7400	LF	$70		$518,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	4900	LF	$78		$382,200
	Stormwater	0	ump Sum			$0
Earthwork	Misc Earthwork	9,200	LF	$10		$92,000
	Fill	2,711	CY	$15		$40,700
	Cut and Waste	8,733	CY	$18		$157,200
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	0	Acre	$6,000		$0
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		1	Mile	$5,000		$5,000
ITS		1	ump Sur	$500,000		$500,000
Traffic Control (10% of Total)				10%		$974,300
Construction Staging (15% of Total)				15%		$1,461,400
Removal Items (5% of Total)				5%		$487,100
Mobilization @ 8%				8%		$1,013,300
Misc Allowance @ 5%				5%		$684,000
Right of Way			SF	$70	P	$0
Preliminary Engineering @ 12%				12%		$1,723,600
Construction Engineering @ 10%				10%		$1,436,300
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$1,263,900
Escalation from 7/2003 to 3/2004				3.51%		$658,841
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$20,000,000**

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Extend EB HOV Lane through 108th
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 5 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	2	0.1837		U	
Freeway Ramp Addition	0	0			
Freeway Lane Addition	1	1.69		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	1	1.7657		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (Pedestrian)	0	0	$125		$0
New Bridge (Arterial Roadway)	81	425	$120	U	$4,110,000
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	0	0	$200		$0
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0
					$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)	0	SF	$125		$0
New Bridge (Arterial Roadway)	34300	SF	$120		$4,116,000
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	0	SF	$200		$0
New Lake Bridge (Fixed Portion)	0	SF	$150		$0
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	14,700	SF	$20		$294,000
Cut and Cover non ventilated	0	SF	$270		$0
Non Ventilated Lid	0	SF	$150		$0
Walls Low End	0	SF	$40		$0
Mid Range	33,000	SF	$60		$1,980,000
High End	0	SF	$120		$0
Noise	0	LF	$275		$0
Guardrail (# of Anchors in Other)	1000	LF	$15	4	$17,200
Concrete Barrier	8,923	LF	$30		$267,700
Signals	2	EA	$125,000	INT	$250,000

Six Lane Alternative: Phasing Option

SR 520 **Posted Speed:**
Project Title: Extend EB HOV Lane through 108th
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 5 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Signals		0	EA	$250,000	IC	$0
Illumination		2	INT	$25,000	INT	$50,000
Illumination		0	IC	$100,000	IC	$0
Illumination		0	EA	$8,000		$0
Signing/Striping		16000	LF	$18		$288,000
Sidewalks, Curb, & Gutter		5,810	LF	$40		$232,400
Surface/Paving (PCC)		16000	LF	$70		$1,120,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	11400	LF	$78		$889,200
	Stormwater	1	ump Sur	$0		$0
Earthwork	Misc Earthwork	27,000	LF	$10		$270,000
	Fill	14,667	CY	$15		$220,000
	Cut and Waste	0	CY	$18		$0
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	8	Acre	$6,000	x	$48,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		3	Mile	$5,000		$15,000
Aestetic Treatment		0	ump Sur	$0		$0
ITS		0	ump Sur	$0		$0
Traffic Control (10% of Total)				10%		$1,005,800
Construction Staging (15% of Total)				15%		$1,508,600
Removal Items (5% of Total)				5%		$488,200
Mobilization @ 8%				8%		$1,044,800
Misc Allowance @ 5%				5%		$705,200
Right of Way		0	SF	$70		$0
Right of Way (New Align @ L Wash)		0	SF	$175		$0
Preliminary Engineering @ 12%				12%		$1,777,200
Construction Engineering @ 10%				10%		$1,481,000
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$1,303,300
Escalation from 7/2003 to 3/2004				3.51%		$679,349
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$20,000,000**

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Bellevue Way I/C Improvements
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 5 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

General per Mile Quantities:					
	# of Lanes	Mile		R/U*	
Arterial Lane Addition	4	0.0852		U	
Freeway Ramp Addition	2	1.4593		U	
Freeway Lane Addition	6	0.8203		U	
Channelize Intersection	0	0			
Realignment	0	0			
Arterial Transit Queue Bypass Lane	0	0			
Widen Shoulders	2	1.9792		U	
	Structure Wid	cture Le	Cost per SF		Cost
New Bridge (Pedestrian)	0	0	$125		$0
New Bridge (Arterial Roadway)	95	250	$120	U	$2,850,000
New Bridge (Freeway Ramp)	0	0	$130		$0
New Bridge (Freeway Mainline)	0	0	$120		$0
Bridge Widening (Frwy Mainline)	12	370	$200	U	$888,000
New Lake Bridge (Fixed Portion)	0	0	$150		$0
New Lake Bridge (Floating Portion)	0	0	$315		$0
New Urban I/C	0	0	$425		$0
New Diamond I/C	0	0	$475		$0

Enter **R for Rural, **U** for Urban*

Detailed Planning Cost Estimate:					
	Quantity	Unit	Unit Cost	Other	Cost
New Bridge (Pedestrian)	0	SF	$125		$0
New Bridge (Arterial Roadway)	23800	SF	$120		$2,856,000
New Bridge (Freeway Ramp)	0	SF	$130		$0
New Bridge (Freeway Mainline)	0	SF	$120		$0
Bridge Widening (Frwy Mainline)	4500	SF	$200		$900,000
New Lake Bridge (Fixed Portion)	0	SF	$150		$0
New Lake Bridge (Floating Portion)	0	SF	$315		$0
Bridge Removal	10,200	SF	$20		$204,000
Walls Low End	0	SF	$40		$0
Mid Range	112,256	SF	$60		$6,735,400
High End	0	SF	$120		$0
Noise	5,650	LF	$275		$1,553,800
Other	1	ump Sur	$800,000		$800,000
Liquefaction Mitigation	1	ump Sur	$4,000,000		$4,000,000
Guardrail (# of Anchors in Other)	2000	LF	$15	8	$34,400
Concrete Barrier	17,110	LF	$30		$513,300
Signals	0	EA	$125,000	INT	$0

Six Lane Modified Alternative: Full Funding

SR 520 **Posted Speed:**
Project Title: Bellevue Way I/C Improvements
Subject Section: **MP** **to** **MP**
Length of Subject Section: 0 **Miles**
Number of Lanes: **No - Build** 5 **Build** 6
Terrain for this project (*L* for Level, *R* for Rolling, *M* for Mountain R

Signals		1	EA	$250,000	IC	$250,000
Illumination		0	INT	$25,000	INT	$0
Illumination		1	IC	$100,000	IC	$100,000
Illumination		8	EA	$8,000		$64,000
Signing/Striping		54300	LF	$18		$977,400
Sidewalks, Curb, & Gutter		1,700	LF	$40		$68,000
Surface/Paving (PCC)		54300	LF	$70		$3,801,000
Drainage	Ditch	0	LF	$15		$0
	Enclosed System	10860	LF	$78		$847,100
	Stormwater	1	ump Sur	$304,849		$304,800
Earthwork	Misc Earthwork	54300	LF	$10		$543,000
	Fill	50,052	CY	$15		$750,800
	Cut and Waste	84,648	CY	$18		$1,523,700
Clear/Grub	Shrubs/Grass	0	Acre	$2,000		$0
	Light Woods	24	Acre	$6,000	x	$144,000
	Heavy Forest	0	Acre	$10,000		$0
Wetland Mitigation (Not Included)		0	Acre	$0		$0
Roadside Development		5	Mile	$5,000		$25,000
Aesthetic Treatment		1	ump Sur	$1,200,000		$1,200,000
ITS		1	ump Sur	$8,000,000		$8,000,000
Traffic Control (6% of Total)				6%		$2,171,700
Construction Staging (8% of Total)				8%		$2,895,700
Removal Items (5% of Total)				5%		$1,799,600
Mobilization @ 8%				8%		$3,445,000
Misc Allowance @ 5%				5%		$2,153,100
Right of Way		75,000	SF	$175	W	$13,125,000
Preliminary Engineering @ 6%				6%		$2,919,600
Construction Engineering @ 10%				10%		$4,866,100
Change Orders @ 0%				0%		$0
Sales Tax @ 8.8%				8.8%		$4,282,200
Escalation from 7/2003 to 3/2004				3.51%		$2,129,716
Scope Contingency @ 0%				0%		$0
DETAILED COST ESTIMATE USED FOR B/C						**$76,000,000**

PARAMETRIX, INC.-- TASK ORDER AG COST SUMMARY

Parametrix, Inc.			
Labor Total:		$ 2,754,598.95	
Direct Expense Total:		$ 25,857.00	
Parametrix, Inc. Total:		$ 2,780,455.95	$ 2,780,455.95
Subconsultant Expenses			
CH2M Hill, Inc. Total:		$ 2,589,646.25	
Parsons Brinckerhoff Total:		$ 984,471.13	
Michael Minor and Associates, Inc. Total:		$ 153,704.00	
Subconsultant Expenses Total:		$ 3,727,821.38	$ 3,727,821.38
Task Order AG Total:			**$ 6,508,277.33**

TASK ORDER AG--COST BREAKDOWN BY FIRM

Firm	Labor	Expenses	Total	% of Task Order
Parametrix	$ 2,754,598.95	$ 25,857.00	$ 2,780,455.95	42.72%
CH2M Hill	$ 2,557,705.75	$ 31,940.50	$ 2,589,646.25	39.79%
Parsons-Brinckerhoff	$ 915,900.53	$ 68,570.60	$ 984,471.13	15.13%
Michael Minor and Associates, Inc.	$ 152,560.00	$ 1,144.00	$ 153,704.00	2.36%
Task Order AG Grand Total:	**$ 6,380,765.23**	**$ 127,512.10**	**$ 6,508,277.33**	**100.00%**

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SR 520 BUDGET WORKSHEET
TASK ORDER NO. AG
Summary of All Firms

No.	ACTIVITY (with fee on labor)	Task Order No. AG Total Hours	Task Order No. AG Total Cost	PMX Activity Hours	PMX Activity Cost	CH2M HILL Activity Hours	CH2M HILL Activity Cost	P-B Activity Hours	P-B Activity Cost	MMA Activity Hours	MMA Activity Cost
1.0	**Project Management**										
1.1	Management and Administration	7788	$ 825,739.81	6280	$ 613,007.16	736	$ 90,938.66	772	$ 121,793.99	0	$ -
1.2	Project Schedule	592	$ 74,848.90	500	$ 58,091.64	54	$ 9,525.60	38	$ 7,231.66	0	$ -
1.3	Update Project Management Plan	402	$ 43,358.31	386	$ 40,424.66	8	$ 1,411.20	8	$ 1,522.45	0	$ -
1.4	Partnering Session and EIS Team Project Kickoff Meeting	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	1.4.1 Partnering Session	89	$ 12,427.33	39	$ 5,245.11	13	$ 2,293.20	24	$ 3,849.02	13	$ 1,040.00
	1.4.2 Work Plan and EIS Team Project Kickoff Meeting	243	$ 29,288.77	104	$ 11,326.39	111	$ 14,498.47	20	$ 2,823.91	8	$ 640.00
1.5	Research and Establish SR 520 Corridor Program Project Office	412	$ 41,960.16	412	$ 41,960.16	0	$ -	0	$ -	0	$ -
	Subtotals	**9526**	**$ 1,027,623.29**	**7721**	**$ 770,055.12**	**922**	**$ 118,667.13**	**862**	**$ 137,221.04**	**21**	**$ 1,680.00**
2.0	**Project Meetings**										
2.1	Project Management Team Meetings	320	$ 56,930.43	120	$ 21,168.00	40	$ 7,056.00	160	$ 28,706.43	0	$ -
2.2	EIS Progress Meetings	1992	$ 297,283.75	1140	$ 166,174.20	840	$ 128,913.00	12	$ 2,196.55	0	$ -
2.3	EIS Team Management and Coordination Meetings	4200	$ 551,746.72	2202	$ 268,485.24	1720	$ 239,267.86	198	$ 37,593.62	80	$ 6,400.00
2.4	Technical and Executive Committee Meetings	828	$ 106,865.94	510	$ 56,521.62	266	$ 43,978.18	20	$ 3,806.14	32	$ 2,560.00
2.5	Advisory Committee Meetings and Local Sounding Board Meetings	1392	$ 170,798.87	878	$ 92,358.70	446	$ 68,495.20	44	$ 8,024.97	24	$ 1,920.00
2.6	Other Agency, Local Jurisdiction, and Tribal Meetings	880	$ 127,674.98	434	$ 64,090.95	434	$ 62,624.03	0	$ -	12	$ 960.00
2.7	Principals Meeting	420	$ 81,812.85	140	$ 27,955.20	140	$ 27,123.60	140	$ 26,734.05	0	$ -
	Subtotals	**10032**	**$ 1,393,113.53**	**5424**	**$ 696,753.91**	**3886**	**$ 577,457.87**	**574**	**$ 107,061.75**	**148**	**$ 11,840.00**
3.0	**Public Outreach Support**										
3.1	Public Information Events Planning, Support, and Attendance	562	$ 60,935.33	268	$ 25,496.13	253	$ 31,451.01	8	$ 1,348.19	33	$ 2,640.00
3.2	Community Meeting Planning, Support, and Attendance	993	$ 128,603.04	495	$ 62,334.85	440	$ 60,920.00	8	$ 1,348.19	50	$ 4,000.00
3.3	Response to Public Questions and Issues	488	$ 60,474.16	228	$ 26,634.76	228	$ 29,688.76	16	$ 2,870.64	16	$ 1,280.00
	Subtotals	**2043**	**$ 250,012.53**	**991**	**$ 114,465.74**	**921**	**$ 122,059.77**	**32**	**$ 5,567.02**	**99**	**$ 7,920.00**
4.0	**Alternatives Definition and Supplemental Engineering**										
4.1	Evergreen Point Bridge East Touchdown Value Analysis	296	$ 46,683.21	176	$ 22,974.12	60	$ 11,104.20	60	$ 12,604.89	0	$ -
4.2	Engineering Refinement of Alternatives	4476	$ 398,191.67	3508	$ 314,320.64	168	$ 17,450.64	800	$ 66,420.39	0	$ -
4.3	I-5 Alternative Development	5144	$ 495,166.37	3684	$ 335,047.84	120	$ 15,573.60	1340	$ 144,544.93	0	$ -
4.4	Lid Opportunities and Preliminary Design	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.1 I-5 Lidding Opportunities	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.2 Preliminary SR 520 Lid Design	2316	$ 236,606.67	48	$ 6,628.80	0	$ -	2268	$ 229,977.87	0	$ -
4.5	I-5 Structures Concept Development	1200	$ 174,742.85	160	$ 24,960.88	0	$ -	1040	$ 149,781.97	0	$ -
4.6	Stormwater Management Facilities Preliminary Design	564	$ 62,739.64	128	$ 12,826.32	436	$ 49,913.32	0	$ -	0	$ -
4.7	Construction Staging and Impacts Assessment	1232	$ 127,436.01	888	$ 88,275.52	0	$ -	344	$ 39,160.49	0	$ -
4.8	Cost Opinions and CEVP Support	732	$ 76,780.90	196	$ 23,659.00	496	$ 46,380.96	40	$ 6,740.94	0	$ -
	Subtotals	**15960**	**$ 1,618,347.32**	**8788**	**$ 828,693.12**	**1280**	**$ 140,422.72**	**5892**	**$ 649,231.48**	**0**	**$ -**
5.0	**Draft Environmental Impact Statement (DEIS)**										
5.1	Environmental Support and Screening for I-5 Project Alternatives and Other Design Revisions	508	$ 55,918.44	92	$ 8,337.60	400	$ 46,300.84	0	$ -	16	$ 1,280.00
5.2	Revisions to Previous Environmental Documents	2897	$ 335,683.20	479	$ 50,445.46	2368	$ 281,237.74	0	$ -	50	$ 4,000.00
5.3	Discipline Reports	9631	$ 1,127,916.68	1725	$ 171,416.61	6544	$ 845,484.56	72	$ 7,815.51	1290	$ 103,200.00
5.4	Environmental Justice Analysis	400	$ 50,063.06	2	$ 352.80	374	$ 46,758.82	24	$ 2,951.44	0	$ -
5.5	Section 4(f) and Section 6(f) Resources Evaluation	376	$ 46,147.36	2	$ 352.80	350	$ 43,874.56	0	$ -	24	$ 1,920.00
5.6	Ship Canal Bridge Noise Modeling and Support	80	$ 6,400.00	0	$ -	0	$ -	0	$ -	80	$ 6,400.00
	5.6.1 Ship Canal Bridge Noise Mitigation Alternatives	138	$ 13,083.42	24	$ 2,854.80	18	$ 2,207.26	16	$ 1,621.36	80	$ 6,400.00
	5.6.2 Literature Review of Proprietary Acoustical Noise Abatement Alternatives	496	$ 52,246.34	450	$ 48,224.98	0	$ -	16	$ 1,621.36	30	$ 2,400.00
5.7	Prepare Preliminary Draft Environmental Impact Statement (PDEIS) and DEIS	2104	$ 279,215.38	188	$ 22,676.76	1904	$ 255,578.62	0	$ -	12	$ 960.00
5.8	NEPA/SEPA DEIS Public Hearings	690	$ 84,381.45	216	$ 27,285.75	417	$ 52,535.70	0	$ -	57	$ 4,560.00
5.9	Coordination with SR 520/West Lake Sammamish Parkway to SR 202 Project	74	$ 10,011.78	16	$ 2,822.40	58	$ 7,189.38	0	$ -	0	$ -
5.10	Concurrence Point 2 & 3	86	$ 11,496.06	8	$ 1,411.20	78	$ 10,084.86	0	$ -	0	$ -
	Subtotals	**17480**	**$ 2,072,563.16**	**3202**	**$ 336,181.16**	**12511**	**$ 1,591,252.34**	**128**	**$ 14,009.66**	**1639**	**$ 131,120.00**
	Total for Work Activities (including fee)	**55041**	**$ 6,361,659.83**	**26126**	**$ 2,746,149.05**	**19520**	**$ 2,549,859.83**	**7488**	**$ 913,090.95**	**1907**	**$ 152,560.00**

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SR 520 BUDGET WORKSHEET
TASK ORDER NO. AG
PARAMETRIX, INC.

No.	ACTIVITY (with fee on labor)	Activity Hours	Activity Cost	Principal In Charge $199.85		Project Manager $176.40		Sr. Planner/Engineer $118.95		Engineer/Planner/Architect IV $108.12		Engineer/Planner/Architect III - Sr. CADD $89.36		Engineer/Planner II $80.43		Engineer/Planner I - Architect II $72.38		Graphics - CADD $65.15		Project Coordinator $ 58.63		Contracts Admin/Clerical $50.71	
1.0	**Project Management**																						
1.1	Management and Administration	6280	$ 613,007.16	0	$ -	1322	$ 233,200.80	1506	$ 179,138.70	50	$ 5,406.00	0	$ -	0	$ -	0	$ -	0	$ -	2872	$ 168,385.36	530	$ 26,876.30
1.2	Project Schedule	500	$ 58,091.64	0	$ -	72	$ 12,700.80	28	$ 3,330.60	376	$ 40,653.12	0	$ -	0	$ -	0	$ -	0	$ -	24	$ 1,407.12	0	$ -
1.3	Update Project Management Plan	386	$ 40,424.66	0	$ -	40	$ 7,056.00	36	$ 4,282.20	180	$ 19,461.60	0	$ -	90	$ 7,238.70	0	$ -	16	$ 1,042.40	16	$ 938.08	8	$ 405.68
1.4	Partnering Session and EIS Team Project Kickoff Meeting	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	1.4.1 Partnering Session	39	$ 5,245.11	0	$ -	13	$ 2,293.20	13	$ 1,546.35	13	$ 1,405.56	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	1.4.2 Work Plan and EIS Team Project Kickoff Meeting	104	$ 11,326.39	0	$ -	13	$ 2,293.20	21	$ 2,497.95	31	$ 3,351.72	15	$ 1,340.40	20	$ 1,608.60	0	$ -	0	$ -	4	$ 234.52	0	$ -
1.5	Research and Establish SR 520 Corridor Program Project Office	412	$ 41,960.16	12	$ 2,396.16	120	$ 21,168.00	0	$ -	40	$ 4,324.80	0	$ -	0	$ -	0	$ -	0	$ -	240	$ 14,071.20	0	$ -
	Subtotals	**7721**	**$ 770,055.12**	**12**	**$ 2,396.16**	**1580**	**$ 278,712.00**	**1604**	**$ 190,795.80**	**690**	**$ 74,602.80**	**15**	**$ 1,340.40**	**110**	**$ 8,847.30**	**0**	**$ -**	**16**	**$ 1,042.40**	**3156**	**$ 185,036.28**	**538**	**$ 27,281.98**
2.0	**Project Meetings**																						
2.1	Project Management Team Meetings	120	$ 21,168.00	0	$ -	120	$ 21,168.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.2	EIS Progress Meetings	1140	$ 166,174.20	0	$ -	600	$ 105,840.00	180	$ 21,411.00	360	$ 38,923.20	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.3	EIS Team Management and Coordination Meetings	2202	$ 268,485.24	0	$ -	652	$ 115,012.80	402	$ 47,817.90	602	$ 65,088.24	144	$ 12,867.84	144	$ 11,581.92	72	$ 5,211.36	0	$ -	186	$ 10,905.18	0	$ -
2.4	Technical and Executive Committee Meetings	510	$ 56,521.62	0	$ -	160	$ 28,224.00	46	$ 5,471.70	80	$ 8,649.60	0	$ -	0	$ -	0	$ -	160	$ 10,424.00	64	$ 3,752.32	0	$ -
2.5	Advisory Committee Meetings and Local Sounding Board Meetings	878	$ 92,358.70	0	$ -	208	$ 36,691.20	130	$ 15,463.50	90	$ 9,730.80	0	$ 6,487.20	160	$ 12,868.80	0	$ -	320	$ 20,848.00	0	$ -	0	$ -
2.6	Other Agency, Local Jurisdiction, and Tribal Meetings	434	$ 64,090.95	0	$ -	217	$ 38,278.80	217	$ 25,812.15	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.7	Principals Meeting	140	$ 27,955.20	140	$ 27,955.20	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**5424**	**$ 696,753.91**	**140**	**$ 27,955.20**	**1957**	**$ 345,214.80**	**975**	**$ 115,976.25**	**1102**	**$ 119,148.24**	**144**	**$ 12,867.84**	**304**	**$ 24,450.72**	**72**	**$ 5,211.36**	**480**	**$ 31,272.00**	**250**	**$ 14,657.50**	**0**	**$ -**
3.0	**Public Outreach Support**																						
3.1	Public Information Events Planning, Support, and Attendance	268	$ 25,496.13	0	$ -	46	$ 8,114.40	15	$ 1,784.25	15	$ 1,621.80	0	$ -	96	$ 7,721.28	0	$ -	96	$ 6,254.40	0	$ -	0	$ -
3.2	Community Meeting Planning, Support, and Attendance	495	$ 62,334.85	0	$ -	200	$ 35,280.00	75	$ 8,921.25	60	$ 6,487.20	0	$ -	80	$ 6,434.40	0	$ -	80	$ 5,212.00	0	$ -	0	$ -
3.3	Response to Public Questions and Issues	228	$ 26,634.76	0	$ -	64	$ 11,289.60	103	$ 12,251.85	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	61	$ 3,093.31
	Subtotals	**991**	**$ 114,465.74**	**0**	**$ -**	**310**	**$ 54,684.00**	**193**	**$ 22,957.35**	**75**	**$ 8,109.00**	**0**	**$ -**	**176**	**$ 14,155.68**	**0**	**$ -**	**176**	**$ 11,466.40**	**0**	**$ -**	**61**	**$ 3,093.31**
4.0	**Alternatives Definition and Supplemental Engineering**																						
4.1	Evergreen Point Bridge East Touchdown Value Analysis	176	$ 22,974.12	0	$ -	72	$ 12,700.80	20	$ 2,379.00	60	$ 6,487.20	0	$ -	0	$ -	0	$ -	0	$ -	24	$ 1,407.12	0	$ -
4.2	Engineering Refinement of Alternatives	3508	$ 314,320.64	0	$ -	60	$ 10,584.00	300	$ 35,685.00	590	$ 63,790.80	1330	$ 118,848.80	400	$ 32,172.00	0	$ -	720	$ 46,908.00	108	$ 6,332.04	0	$ -
4.3	I-5 Alternative Development	3684	$ 335,047.84	0	$ -	56	$ 9,878.40	360	$ 42,822.00	820	$ 88,658.40	1000	$ 89,360.00	700	$ 56,301.00	0	$ -	640	$ 41,696.00	108	$ 6,332.04	0	$ -
4.4	Lid Opportunities and Preliminary Design	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.1 I-5 Lidding Opportunities	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.2 Preliminary SR 520 Lid Design	48	$ 6,628.80	0	$ -	16	$ 2,822.40	32	$ 3,806.40	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.5	I-5 Structures Concept Development	160	$ 24,960.88	0	$ -	120	$ 21,168.00	24	$ 2,854.80	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	16	$ 938.08	0	$ -
4.6	Stormwater Management Facilities Preliminary Design	128	$ 12,826.32	0	$ -	8	$ 1,411.20	40	$ 4,758.00	0	$ -	64	$ 5,719.04	0	$ -	0	$ -	0	$ -	16	$ 938.08	0	$ -
4.7	Construction Staging and Impacts Assessment	888	$ 88,275.52	0	$ -	24	$ 4,233.60	100	$ 11,895.00	340	$ 36,760.80	300	$ 26,808.00	60	$ 4,825.80	0	$ -	0	$ -	64	$ 3,752.32	0	$ -
4.8	Cost Opinions and CEVP Support	196	$ 23,659.00	0	$ -	48	$ 8,467.20	108	$ 12,846.60	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	40	$ 2,345.20	0	$ -
	Subtotals	**8788**	**$ 828,693.12**	**0**	**$ -**	**404**	**$ 71,265.60**	**984**	**$ 117,046.80**	**1810**	**$ 195,697.20**	**2694**	**$ 240,735.84**	**1160**	**$ 93,298.80**	**0**	**$ -**	**1360**	**$ 88,604.00**	**376**	**$ 22,044.88**	**0**	**$ -**
5.0	**Draft Environmental Impact Statement (DEIS)**																						
5.1	Environmental Support and Screening for I-5 Project Alternatives and Other Design Revisions	92	$ 8,337.80	0	$ -	8	$ 1,411.20	28	$ 3,330.60	0	$ -	12	$ 1,072.32	4	$ 321.72	8	$ 579.04	0	$ -	0	$ -	32	$ 1,622.72
5.2	Revisions to Previous Environmental Documents	479	$ 50,445.46	0	$ -	97	$ 17,110.80	30	$ 3,568.50	66	$ 7,135.92	180	$ 16,084.80	0	$ -	54	$ 3,906.52	0	$ -	0	$ -	52	$ 2,636.92
5.3	Discipline Reports	1725	$ 171,416.61	0	$ -	132	$ 23,284.80	441	$ 52,456.95		$ -	736	$ 65,768.96	242	$ 17,515.96	0	$ -	0	$ -	54	$ 2,738.34		
5.4	Environmental Justice Analysis	2	$ 352.80	0	$ -	2	$ 352.80	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.5	Section 4(f) and Section 6(f) Resources Evaluation	2	$ 352.80	0	$ -	2	$ 352.80	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.6	Ship Canal Bridge Noise Modeling and Support	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	5.6.1 Ship Canal Bridge Noise Mitigation Alternatives	24	$ 2,854.80	0	$ -	0	$ -	24	$ 2,854.80	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	5.6.2 Literature Review of Proprietary Acoustical Noise Abatement Alternatives	450	$ 48,224.98	0	$ -	4	$ 705.60	92	$ 10,943.40	320	$ 34,598.40	0	$ -	0	$ -	0	$ -	0	$ -	32	$ 1,876.16	2	$ 101.42
5.7	Prepare Preliminary Draft Environmental Impact Statement (PDEIS) and DEIS	188	$ 22,676.76	0	$ -	36	$ 6,350.40	92	$ 10,943.40	12	$ 1,297.44	36	$ 3,216.96	0	$ -	12	$ 868.56	0	$ -	0	$ -	0	$ -
5.8	NEPA/SEPA DEIS Public Hearings	216	$ 27,285.75	0	$ -	46	$ 8,114.40	125	$ 14,868.75	15	$ 1,621.80	30	$ 2,680.80	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.9	Coordination with SR 520/West Lake Sammamish Parkway to SR 202 Project	16	$ 2,822.40	0	$ -	16	$ 2,822.40	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.10	Concurrence Point 2 & 3	8	$ 1,411.20	0	$ -	8	$ 1,411.20	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
																							$ -
	Subtotals	**3202**	**$ 336,181.16**	**0**	**$ -**	**351**	**$ 61,916.40**	**832**	**$ 98,966.40**	**413**	**$ 44,653.56**	**994**	**$ 88,823.84**	**124**	**$ 9,973.32**	**316**	**$ 22,872.08**	**0**	**$ -**	**32**	**$ 1,876.16**	**140**	**$ 7,099.40**
	Total for Work Activities (including fee)	26126	$ 2,746,149.05	152	$ 30,351.36	4602	$ 811,792.80	4588	$ 545,742.60	4090	$ 442,210.80	3847	$ 343,767.92	1874	$ 150,725.82	388	$ 28,083.44	2032	$ 132,384.80	3814	$ 223,614.82	739	$ 37,474.69

SUMMARY OF COSTS
TASK ORDER AG -- COST SUMMARY BY FIRM

Parametrix, Inc.

Classification	Rate w/ Fee	Total Hours w/ Fee	Cost w/ Fee
Principal In Charge	$ 199.68	152	$ 30,351.36
Project Manager	$ 176.40	4602	$ 811,792.80
Sr. Planner/Engineer	$ 118.95	4588	$ 545,742.60
Engineer/Planner/Architect IV	$ 108.12	4090	$ 442,210.80
Engineer/Planner/Architect III - Sr. CADD	$ 89.36	3847	$ 343,767.92
Engineer/Planner II	$ 80.43	1874	$ 150,725.82
Engineer/Planner I - Architect II	$ 72.38	388	$ 28,083.44
Graphics - CADD	$ 65.15	2032	$ 132,384.80
Project Coordinator	$ 58.63	3814	$ 223,614.82
Contracts Admin/Clerical	$ 50.71	739	$ 37,474.69
Parametrix, Inc. Total:		**26,126**	**$ 2,746,149.05**
Escalation: 13th month of 13-month schedule at 4% = 0.308 of one percent			$ 8,449.90
Parametrix Labor (Adjusted for Escalation)			$ 2,754,598.95
Parametrix Direct Expenses			$ 25,857.00
Parametrix Total			**$ 2,780,455.95**

Direct Reimbursibles:

Activity #1						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	500	copies @	$ 0.05	$	25.00	
(11 x 17)	250	copies @	$ 0.10	$	25.00	
(Color copies)	100	copies @	$ 1.00	$	100.00	
Mileage	4000	miles @	$ 0.345	$	1,380.00	
Parking	300	days @	$ 8.00	$	2,400.00	
Traffic Counts	0	locations @	$ 221.00	$	-	
Shipping/Postage	-	estimated @	$ 300.00	$	300.00	
				$	4,230.00	Subtotal
Activity #2						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	500	copies @	$ 0.05	$	25.00	
(11 x 17)	250	copies @	$ 0.10	$	25.00	
(Color copies)	100	copies @	$ 1.00	$	100.00	
Mileage	10000	miles @	$ 0.345	$	3,450.00	
Parking	24	days @	$ 8.00	$	192.00	
Traffic Counts	0	locations @	$ 221.00	$	-	
Shipping/Postage	-	estimated @	$ 500.00	$	500.00	
				$	4,292.00	Subtotal
Activity #3						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	250	copies @	$ 0.05	$	12.50	
(11 x 17)	125	copies @	$ 0.10	$	12.50	
(Color copies)	100	copies @	$ 1.00	$	100.00	
Mileage	5000	miles @	$ 0.345	$	1,725.00	
Parking	100	days @	$ 8.00	$	800.00	
Lodging	0	days @	$ 109.00	$	-	
Per Diem	0	days @	$ 46.00	$	-	
Airfare	0	trips @	$ 300.00	$	-	
Shipping/Postage	-	estimated @	$ 300.00	$	300.00	
				$	2,950.00	Subtotal
Activity #4						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	500	copies @	$ 0.05	$	25.00	
(11 x 17)	600	copies @	$ 0.10	$	60.00	
(Color copies)	200	copies @	$ 1.00	$	200.00	
Mileage	5000	miles @	$ 0.345	$	1,725.00	
Parking	120	days @	$ 8.00	$	960.00	
Lodging	10	days @	$ 109.00	$	1,090.00	
Per Diem	10	days @	$ 46.00	$	460.00	
Airfare	5	trips @	$ 300.00	$	1,500.00	
Traffic Counts	0	locations @	$ 221.00	$	-	
Shipping/Postage	-	estimated @	$ 300.00	$	300.00	
				$	6,320.00	Subtotal
Activity #5						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	5000	copies @	$ 0.05	$	250.00	
(11 x 17)	5000	copies @	$ 0.10	$	500.00	
(Color copies)	2500	copies @	$ 1.00	$	2,500.00	
Mileage	5000	miles @	$ 0.345	$	1,725.00	
Parking	120	days @	$ 8.00	$	960.00	
Lodging	6	days @	$ 109.00	$	654.00	
Per Diem	6	days @	$ 46.00	$	276.00	
Airfare	3	trips @	$ 300.00	$	900.00	
Traffic Counts	0	locations @	$ 221.00	$	-	
Shipping/Postage	-	estimated @	$ 300.00	$	300.00	
				$	8,065.00	Subtotal
Reimbursables Subtotal:				$	25,857.00	

DRAFT
SR 520 BUDGET WORKSHEET
TASK ORDER NO. A0
CH2M HILL, INC.

No.	ACTIVITY (with fee on labor)	CH2M HILL Hours	CH2M HILL Cost	Principal Project Manager $193.74		Sr. Project Manager $176.40		Project Manager/Engineer $153.90		Project Engineer/Planner $129.78		Associate Engineer/Planner $112.19		Staff Consultant/Engineer II $83.51		Staff Planner/Engineer I $85.85		Lead CAD Technician $112.78		Sr. CAD Technician $102.03		CAD Tech $89.38		CAD Tech $76.88		Office $77.69	
1.0	**Project Management**																										
1.1	Management and Administration	736	$ 90,938.86	0	$ -	342	$ 60,328.80		$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	394	$ 30,609.86
1.2	Project Schedule	54	$ 9,525.60	0	$ -	54	$ 9,525.60		$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
1.3	Update Project Management Plan	8	$ 1,411.20	0	$ -	8	$ 1,411.20		$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
1.4	Partnering Session and EIS Team Project Kickoff Meeting	0	$ -	0	$ -	0	$ -		$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	1.4.1 Partnering Session	13	$ 2,293.20	0	$ -	13	$ 2,293.20		$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	1.4.2 Work Plan and EIS Team Project Kickoff Meeting	111	$ 14,498.47	0	$ -	28	$ 4,939.20		$ -	30	$ -	30	$ 3,893.40	38	$ 4,263.22	15	$ 1,402.65	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
1.5	Research and Establish SR 520 Corridor Program Project Office	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	922	$ 118,667.13	0	$ -	445	$ 78,498.00	0	$ -	30	$ 3,893.40	38	$ 4,263.22	15	$ 1,402.65	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	394	$ 30,609.86
2.0	**Project Meetings**																										
2.1	Project Management Team Meetings	40	$ 7,056.00	0	$ -	40	$ 7,056.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.2	EIS Progress Meetings	840	$ 128,913.00	0	$ -	540	$ 95,256.00	0	$ -	0	$ -	300	$ 33,657.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.3	EIS Team Management and Coordination Meetings	1720	$ 239,267.86	0	$ -	706	$ 124,538.40	0	$ -	208	$ 26,994.24	662	$ 74,269.78	144	$ 13,465.44	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.4	Technical and Executive Committee Meetings	266	$ 43,978.18	0	$ -	220	$ 38,808.00	0	$ -	0	$ -	30	$ 3,365.70	0	$ -	0	$ -	16	$ 1,804.48	0	$ -	0	$ -	0	$ -	0	$ -
2.5	Advisory Committee Meetings and Local Sounding Board Meetings	446	$ 68,485.20	0	$ -	286	$ 50,450.40	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	160	$ 18,044.80	0	$ -	0	$ -	0	$ -	0	$ -
2.6	Other Agency, Local Jurisdiction, and Tribal Meetings	434	$ 62,824.03	0	$ -	217	$ 38,278.80	0	$ -	0	$ -	217	$ 24,345.23	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.7	Principals Meeting	140	$ 27,123.60	140	$ 27,123.60	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	3886	$ 577,457.87	140	$ 27,123.60	2009	$ 354,387.80	0	$ -	208	$ 26,994.24	1209	$ 135,637.71	144	$ 13,465.44	0	$ -	176	$ 19,849.28	0	$ -	0	$ -	0	$ -	0	$ -
3.0	**Public Outreach Support**																										
3.1	Public Information Events Planning, Support, and Attendance	253	$ 31,451.01	0	$ -	46	$ 8,114.40	0	$ -	0	$ -	15	$ 1,682.85	0	$ -	0	$ -	192	$ 21,653.76	0	$ -	0	$ -	0	$ -	0	$ -
3.2	Community Meeting Planning, Support, and Attendance	440	$ 60,920.00	0	$ -	200	$ 35,280.00	0	$ -	0	$ -	40	$ 4,487.60	0	$ -	0	$ -	160	$ 18,044.80	0	$ -	0	$ -	0	$ -	40	$ 3,107.60
3.3	Response to Public Questions and Issues	228	$ 29,686.76	0	$ -	64	$ 11,289.60	0	$ -	0	$ -	164	$ 18,399.16	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	921	$ 122,059.77	0	$ -	310	$ 54,684.00	0	$ -	0	$ -	219	$ 24,569.61	0	$ -	0	$ -	352	$ 39,698.56	0	$ -	0	$ -	0	$ -	40	$ 3,107.60
4.0	**Alternatives Definition and Supplemental Engineering**																										
4.1	Evergreen Point Bridge East Touchdown Value Analysis	60	$ 11,104.20	30	$ 5,812.20	30	$ 5,292.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.2	Engineering Refinement of Alternatives	168	$ 17,450.64	0	$ -	0	$ -	0	$ -	48	$ 6,229.44	0	$ -	120	$ 11,221.20	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.3	I-5 Alternative Development	120	$ 15,573.60	0	$ -	0	$ -	0	$ -	120	$ 15,573.60	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.4	Lid Opportunities and Preliminary Design	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.1 I-5 Lidding Opportunities	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.2 Preliminary SR 520 Lid Design	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.5	I-5 Structures Concept Development	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.6	Stormwater Management Facilities Preliminary Design	436	$ 49,913.32	0	$ -	8	$ 1,411.20	0	$ -	220	$ 28,551.60	76	$ 8,526.44	0	$ -	0	$ -	0	$ -	0	$ -	100	$ 8,938.00	0	$ -	32	$ 2,486.08
4.7	Construction Staging and Impacts Assessment	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.8	Cost Opinions and CEVP Support	496	$ 46,380.96	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	496	$ 46,380.96	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	1280	$ 140,422.72	30	$ 5,812.20	38	$ 6,703.20	0	$ -	388	$ 50,354.64	76	$ 8,526.44	616	$ 57,602.16	0	$ -	0	$ -	0	$ -	100	$ 8,938.00	0	$ -	32	$ 2,486.08
5.0	**Draft Environmental Impact Statement (DEIS)**																										
5.1	Environmental Support and Screening for I-5 Project Alternatives and Other Design Revisions	400	$ 46,300.84	0	$ -	56	$ 9,878.40	4	$ 614.00	64	$ 8,305.92	108	$ 12,116.52	104	$ 9,725.04	16	$ 1,370.40	16	$ 1,804.48	0	$ -	0	$ -	0	$ -	32	$ 2,486.08
5.2	Revisions to Previous Environmental Documents	2368	$ 281,227.74	0	$ -	478	$ 84,319.20	50	$ 7,675.00	180	$ 23,360.40	764	$ 85,713.16	395	$ 36,936.45	136	$ 11,648.40	92	$ 10,375.76	0	$ -	0	$ -	0	$ -	273	$ 21,209.37
5.3	Discipline Reports	6544	$ 845,484.56	0	$ -	1944	$ 342,921.60	288	$ 44,208.00	556	$ 111,091.68	1492	$ 167,387.48	796	$ 74,433.96	824	$ 70,575.60	232	$ 26,164.96	0	$ -	0	$ -	0	$ -	112	$ 8,701.28
5.4	Environmental Justice Analysis	374	$ 46,758.52		$ -	12	$ 2,116.80	0	$ -	282	$ 36,587.96	30	$ 3,365.70	28	$ 2,618.28	0	$ -	10	$ 1,127.80							12	$ 932.28
5.5	Section 4(f) and Section 6(f) Resources Evaluation	350	$ 43,874.56	0	$ -	140	$ 24,696.00	0	$ -	0	$ -	30	$ 3,365.70	28	$ 2,618.28	130	$ 11,154.50	10	$ 1,127.80	0	$ -	0	$ -	0	$ -	12	$ 932.28
5.6	Ship Canal Bridge Noise Modeling and Support	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	5.6.1 Ship Canal Bridge Noise Mitigation Alternatives	18	$ 2,207.26		$ -	4	$ 705.60		$ -		$ -	12	$ 1,346.28	0	$ -	0	$ -	0	$ -							2	$ 155.38
	5.6.2 Literature Review of Proprietary Acoustical Noise Abatement Alternatives	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.7	Prepare Preliminary Draft Environmental Impact Statement (PDEIS) and DEIS	1904	$ 255,578.62	0	$ -	772	$ 136,180.80	12	$ 1,842.00	42	$ 5,450.76	458	$ 51,383.02	60	$ 5,610.60	12	$ 1,027.80	328	$ 36,991.84	0	$ -	0	$ -	0	$ -	220	$ 17,091.80
5.8	NEPA/SEPA DEIS Public Hearings	417	$ 52,535.70	0	$ -	93	$ 16,405.20	15	$ 2,302.50	15	$ 1,946.70	166	$ 18,623.54	32	$ 2,992.32	0	$ -	80	$ 9,022.40	0	$ -	0	$ -	0	$ -	16	$ 1,243.04
5.9	Coordination with SR 520/West Lake Sammamish Parkway to SR 202 Project	58	$ 7,189.38	0	$ -	16	$ 2,822.40	0	$ -	0	$ -	32	$ 3,590.08	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	10	$ 776.90
5.10	Concurrence Point 2 & 3	78	$ 10,084.86	0	$ -	24	$ 4,233.60	0	$ -	0	$ -	48	$ 5,385.12	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	6	$ 466.14
					$ -																						
	Subtotals	12511	$ 1,591,252.34	0	$ -	3539	$ 624,279.60	369	$ 56,641.50	1439	$ 186,753.42	3140	$ 352,276.60	1443	$ 134,934.93	1118	$ 95,756.70	768	$ 86,615.04	0	$ -	0	$ -	0	$ -	695	$ 53,994.55
	Total for Work Activities (including fee)	19520	$ 2,549,859.83	170	$ 32,935.80	6341	$ 1,118,552.40	369	$ 56,641.50	2065	$ 267,995.70	4682	$ 525,273.58	2218	$ 207,405.18	1118	$ 95,756.70	1296	$ 146,162.88	0	$ -	100	$ 8,938.00	0	$ -	1161	$ 90,198.09

SUMMARY OF COSTS
TASK ORDER AG -- COST SUMMARY BY FIRM

CH2M Hill Classification	Rate w/ Fee	Total Hours w/ Fee		Cost w/ Fee
Principal Project Manager	$193.74	170	$	32,935.80
Sr. Project Manager	$176.40	6341	$	1,118,552.40
Project Manager/Engineer	$153.50	369	$	56,641.50
Project Engineer/Planner	$129.78	2065	$	267,995.70
Associate Engineer/Planner	$112.19	4682	$	525,273.58
Staff Consultant/Engineer II	$93.51	2218	$	207,405.18
Staff Planner/Enginner I	$85.65	1118	$	95,756.70
Lead CAD Technicain	$112.78	1296	$	146,162.88
Sr. CAD Technician	$102.03	0	$	-
CAD Tech	$89.38	100	$	8,938.00
CAD Tech	$76.88	0	$	-
Office	$77.69	1161	$	90,198.09
CH2M Hill Total:		**19,520**	**$**	**2,549,859.83**

Escalation: 13th month of 13-month schedule at 4% = 0.308 of one percent	$	7,845.92
CH2M Hill Labor (Adjusted for Escalation)	$	2,557,705.75
CH2M Hill Direct Expenses	$	31,940.50
CH2M Hill Total	**$**	**2,589,646.25**

Direct Reimbursibles:

Activity #1							
Copies (8.5 x 11)	0	copies @	$	0.05	$	-	
Copies (11 x 17)	0	copies @	$	0.10	$	-	
Color Copies	0	copies @	$	1.00	$	-	
Outside Production							
(8.5 x 11)	0	copies @	$	0.05	$	-	
(11 x 17)	0	copies @	$	0.10	$	-	
(Color copies)	0	copies @	$	1.00	$	-	
Mileage	720	miles @	$	0.345	$	248.40	
Lodging	1	days @	$	109.00	$	109.00	
Meals	2	days @	$	46.00	$	92.00	
Rental Car	2	days @	$	50.00	$	100.00	
Parking	7	days @	$	8.00	$	56.00	
Traffic Counts		locations @	$	221.00	$	-	
Shipping/Postage	29	estimated @	$	16.00	$	464.00	
					$	1,069.40	Subtotal
Activity #2							
Copies (8.5 x 11)	0	copies @	$	0.05	$	-	
Copies (11 x 17)	0	copies @	$	0.10	$	-	
Color Copies	0	copies @	$	1.00	$	-	
Outside Production							
(8.5 x 11)	0	copies @	$	0.05	$	-	
(11 x 17)	0	copies @	$	0.10	$	-	
(Color copies)	0	copies @	$	1.00	$	-	
Mileage	13025	miles @	$	0.345	$	4,493.63	
Parking	152	days @	$	8.00	$	1,216.00	
Traffic Counts	0	locations @	$	221.00	$	-	
Shipping/Postage	0	estimated @	$	16.00	$	-	
					$	5,709.63	Subtotal
Activity #3							
Copies (8.5 x 11)	0	copies @	$	0.05	$	-	
Copies (11 x 17)	0	copies @	$	0.10	$	-	
Color Copies	0	copies @	$	1.00	$	-	
Outside Production							
(8.5 x 11)	0	copies @	$	0.05	$	-	
(11 x 17)	0	copies @	$	0.10	$	-	
(Color copies)	0	copies @	$	1.00	$	-	
Mileage	1095	miles @	$	0.345	$	377.78	
Parking	0	days @	$	8.00	$	-	
Lodging	0	days @	$	109.00	$	-	
Meals	0	days @	$	46.00	$	-	
Rental Car	0	days @	$	50.00	$	-	
Airfare	0	trips @	$	300.00	$	-	
Shipping/Postage	0	estimated @	$	16.00	$	-	
					$	377.78	Subtotal
Activity #4							
Copies (8.5 x 11)	0	copies @	$	0.05	$	-	
Copies (11 x 17)	0	copies @	$	0.10	$	-	
Color Copies	0	copies @	$	1.00	$	-	
Outside Production							
(8.5 x 11)	0	copies @	$	0.05	$	-	
(11 x 17)	0	copies @	$	0.10	$	-	
(Color copies)	0	copies @	$	1.00	$	-	
Mileage	1080	miles @	$	0.345	$	372.60	
Parking	54	days @	$	8.00	$	432.00	
Lodging	0	days @	$	109.00	$	-	
Meals	0	days @	$	46.00	$	-	
Rental Car	0	days @	$	50.00	$	-	
Airfare	0	trips @	$	300.00	$	-	
Traffic Counts	0	locations @	$	221.00	$	-	
Shipping/Postage	0	estimated @	$	16.00	$	-	
					$	804.60	Subtotal
Activity #5							
Copies (8.5 x 11)	198810	copies @	$	0.05	$	9,940.50	
Copies (11 x 17)	8910	copies @	$	0.10	$	891.00	
Color Copies	4394	copies @	$	1.00	$	4,394.00	
Outside Production							
(8.5 x 11)	0	copies @	$	0.05	$	-	
(11 x 17)	0	copies @	$	0.10	$	-	
(Color copies)	0	copies @	$	1.00	$	-	
Mileage	2080	miles @	$	0.345	$	717.60	
Parking	32	days @	$	8.00	$	256.00	
Lodging	10	days @	$	109.00	$	1,090.00	
Meals	10	days @	$	46.00	$	460.00	
Rental Car	15	days @	$	50.00	$	750.00	
Airfare	0	trips @	$	300.00	$	-	
Traffic Counts	0	locations @	$	221.00	$	-	
Hearing Facilitator	12	hours@	$	180.00	$	2,160.00	
Court Reporter	12	hours@	$	60.00	$	720.00	
Court Reporter - transcript	400	pages@	$	6.50	$	2,600.00	
Shipping/Postage	0	estimated @	$	16.00	$	-	
					$	23,979.10	Subtotal

Reimbursables Subtotal:	$	31,940.50

DRAFT
SR 520 BUDGET WORKSHEET
TASK ORDER NO. AG
PARSONS BRINCKERHOFF QUADE DOUGLAS

No	ACTIVITY (with fee on labor)	P-B Activity Hours	P-B Activity Cost	Principal In Charge		Sr. Planning Manager		Sr Technical Manager		Sr. Engineering Manager		Sr. Supv. Engr/Planner		Supv. Engineer/Planner		Lead Engr/Planner		Sr. Engr/Planner		Graphic Designer/CADD		Sr. Economist		Sr. Project Administrator		Sr Admin. Assistant	
				$190.96		$190.31		$251.64		$168.52		$144.08		$129.06		$101.33		$84.13		$72.53		$122.98		$87.44		$60.20	
1.0	**Project Management**																										
1.1	Management and Administration	772	$ 121,793.89	0	$ -	532	$ 101,243.23	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	224	$ 19,587.54	16	$ 963.22
1.2	Project Schedule	38	$ 7,231.66	0	$ -	38	$ 7,231.66	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
1.3	Update Project Management Plan	8	$ 1,522.45	0	$ -	8	$ 1,522.45	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
1.4	Partnering Session and EIS Team Project Kickoff Meeting	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	1.4.1 Partnering Session	24	$ 3,849.02	0	$ -	8	$ 1,522.45	0	$ -	16	$ 2,696.38	8	$ 1,152.65	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	1.4.2 Work Plan and EIS Team Project Kickoff Meeting	20	$ 2,823.91	0	$ -	5	$ 951.53	0	$ -	0	$ -	5	$ 720.40	5	$ 645.29	5	$ 506.67	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
1.5	Research and Establish SR 520 Corridor Program Project Office	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**862**	**$ 137,221.04**	**0**	**$ -**	**583**	**$ 110,948.88**	**0**	**$ -**	**16**	**$ 2,696.38**	**13**	**$ 1,873.05**	**5**	**$ 645.29**	**5**	**$ 506.67**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**224**	**$ 19,587.54**	**16**	**$ 963.22**
2.0	**Project Meetings**																										
2.1	Project Management Team Meetings	160	$ 28,706.43	0	$ -	80	$ 15,224.55	0	$ -	80	$ 13,481.88	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.2	EIS Progress Meetings	12	$ 2,196.55	0	$ -	8	$ 1,522.45	0	$ -	4	$ 674.09	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.3	EIS Team Management and Coordination Meetings	198	$ 37,593.62	0	$ -	194	$ 36,919.53	0	$ -	4	$ 674.09	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.4	Technical and Executive Committee Meetings	20	$ 3,806.14	0	$ -	20	$ 3,806.14	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.5	Advisory Committee Meetings and Local Sounding Board Meetings	44	$ 8,024.97	0	$ -	28	$ 5,328.59	0	$ -	16	$ 2,696.38	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.6	Other Agency, Local Jurisdiction, and Tribal Meetings	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
2.7	Principals Meeting	140	$ 26,734.06	140	$ 26,734.06		$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**574**	**$ 107,061.75**	**140**	**$ 26,734.06**	**330**	**$ 62,801.25**	**0**	**$ -**	**104**	**$ 17,526.45**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**
3.0	**Public Outreach Support**																										
3.1	Public Information Events Planning, Support, and Attendance	8	$ 1,348.19	0	$ -	0	$ -	0	$ -	8	$ 1,348.19	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
3.2	Community Meeting Planning, Support, and Attendance	8	$ 1,348.19	0	$ -	0	$ -	0	$ -	8	$ 1,348.19	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
3.3	Response to Public Questions and Issues	16	$ 2,870.64	0	$ -	8	$ 1,522.45	0	$ -	8	$ 1,348.19	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**32**	**$ 5,567.02**	**0**	**$ -**	**8**	**$ 1,522.45**	**0**	**$ -**	**24**	**$ 4,044.56**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**
4.0	**Alternatives Definition and Supplemental Engineering**																										
4.1	Evergreen Point Bridge East Touchdown Value Analysis	60	$ 12,604.89	0	$ -	0	$ -	30	$ 7,549.19	30	$ 5,055.71	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.2	Engineering Refinement of Alternatives	800	$ 66,420.39	0	$ -	0	$ -	0	$ -	80	$ 13,481.88	0	$ -	0	$ -	0	$ -	0	$ -	720	$ 52,938.51	0	$ -	0	$ -	0	$ -
4.3	I-5 Alternative Development	1340	$ 144,544.93	0	$ -	0	$ -	0	$ -	160	$ 26,963.76	240	$ 34,579.43	200	$ 25,811.80	100	$ 10,133.48	0	$ -	640	$ 47,096.45	0	$ -	0	$ -	0	$ -
4.4	Lid Opportunities and Preliminary Design	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.1 I-5 Lidding Opportunities	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.2 Preliminary SR 520 Lid Design	2268	$ 229,877.87	0	$ -	0	$ -	212	$ 35,726.99	112	$ 16,137.07	0	$ -	976	$ 98,902.75	808	$ 67,979.94	120	$ 8,823.09	0	$ -	0	$ -	40	$ 2,408.04
4.5	I-5 Structures Concept Development	1040	$ 149,781.97	0	$ -	40	$ 10,065.58	320	$ 53,927.53	200	$ 28,816.19	400	$ 51,623.59	0	$ -	0	$ -	40	$ 2,841.03	0	$ -	0	$ -	40	$ 2,408.04
4.6	Stormwater Management Facilities Preliminary Design	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
4.7	Construction Staging and Impacts Assessment	344	$ 39,160.49	0	$ -	0	$ -	40	$ 6,740.94	100	$ 14,408.10	60	$ 7,743.54	0	$ -	0	$ -	120	$ 8,823.09	0	$ -	0	$ -	24	$ 1,444.83
4.8	Cost Opinions and CEVP Support	40	$ 6,740.94	0	$ -	0	$ -	40	$ 6,740.94	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**5892**	**$ 649,231.48**	**0**	**$ -**	**0**	**$ -**	**702**	**$ 17,614.77**	**882**	**$ 148,637.75**	**652**	**$ 93,940.79**	**660**	**$ 85,178.93**	**1076**	**$ 109,036.22**	**808**	**$ 67,979.94**	**1640**	**$ 120,582.16**	**0**	**$ -**	**104**	**$ 6,260.92**
5.0	**Draft Environmental Impact Statement (DEIS)**																										
5.1	Environmental Support and Screening for I-5 Project Alternatives and Other Design Revisions	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.2	Revisions to Previous Environmental Documents	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.3	Discipline Reports	72	$ 7,815.51	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	48	$ 4,864.07	0	$ -	0	$ -	24	$ 2,951.44	0	$ -	0	$ -
5.4	Environmental Justice Analysis	24	$ 2,951.44	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	24	$ 2,951.44	0	$ -	0	$ -
5.5	Section 4(f) and Section 6(f) Resources Evaluation	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.6	Ship Canal Bridge Noise Modeling and Support	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	5.6.1 Ship Canal Bridge Noise Mitigation Alternatives	16	$ 1,621.36	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	16	$ 1,621.36	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	5.6.2 Literature Review of Proprietary Acoustical Noise Abatement Alternatives	16	$ 1,621.36	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	16	$ 1,621.36	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.7	Prepare Preliminary Draft Environmental Impact Statement (PDEIS) and DEIS	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.8	NEPA/SEPA DEIS Public Hearings	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.9	Coordination with SR 520/West Lake Sammamish Parkway to SR 202 Project	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
5.10	Concurrence Point 2 & 3	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**128**	**$ 14,009.66**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**80**	**$ 8,106.78**	**0**	**$ -**	**0**	**$ -**	**48**	**$ 5,902.88**	**0**	**$ -**	**0**	**$ -**
	Total for Work Activities (including fee):	**7488**	**$ 913,090.95**	**140**	**$ 26,734.06**	**921**	**$ 175,272.59**	**70**	**$ 17,614.77**	**1026**	**$ 172,905.14**	**665**	**$ 95,813.85**	**665**	**$ 85,824.22**	**1161**	**$ 117,649.68**	**808**	**$ 67,979.94**	**1640**	**$ 120,582.16**	**48**	**$ 5,902.88**	**224**	**$ 19,587.54**	**120**	**$ 7,224.13**

SUMMARY OF COSTS
TASK ORDER AG -- COST SUMMARY BY FIRM

Parsons Brinckerhoff Quade and Douglas

Classification	Rate w/ Fee	Total Hours w/ Fee	Cost w/ Fee
Principal-in-Charge	$ 190.96	140	$ 26,734.05
Sr. Planning Manager	$ 190.31	921	$ 175,272.59
Sr. Technical Manager	$ 251.64	70	$ 17,614.77
Sr. Engineering Manager	$ 168.52	1026	$ 172,905.14
Sr. Supv. Engr/Planner	$ 144.08	665	$ 95,813.85
Supv. Engineer/Planner	$ 129.06	665	$ 85,824.22
Lead Engr/Planner	$ 101.33	1161	$ 117,649.68
Sr. Engr/Planner	$ 84.13	808	$ 67,979.94
Graphic Designer/CADD	$ 73.53	1640	$ 120,582.16
Sr. Economist	$ 122.98	48	$ 5,902.88
Sr. Project Administrator	$ 87.44	224	$ 19,587.54
Sr Admin. Assistant	$ 60.20	120	$ 7,224.13
Parsons Brinckerhoff Total:		**7,488**	**$ 913,090.95**

Escalation: 13th month of 13-month schedule at 4% = 0.308 of one percent	$ 2,809.58
PB Labor (Adjusted for Escalation)	$ 915,900.53
PB Direct Expenses	$ 68,570.60
PB Total	**$ 984,471.13**

Direct Reimbursibles:

Direct Reimbursibles:

Activity #1					
Copies (8.5 x 11)	500	copies @	$ 0.04	$ 20.00	
Copies (11 x 17)	100	copies @	$ 0.04	$ 4.00	
Color Copies	100	copies @	$ 1.00	$ 100.00	
Outside Production					
(8.5 x 11)	250	copies @	$ 0.05	$ 12.50	
(11 x 17)	100	copies @	$ 0.10	$ 10.00	
(Color copies)	0	copies @	$ 1.00	$ -	
Mileage	520	miles @	$ 0.345	$ 179.40	
Parking	26	days @	$ 8.00	$ 208.00	
Traffic Counts		locations @	$ 221.00	$ -	
Shipping/Postage	10	estimated @	$ 16.00	$ 160.00	
				$ 693.90	Subtotal
Activity #2					
Copies (8.5 x 11)	200	copies @	$ 0.04	$ 8.00	
Copies (11 x 17)	80	copies @	$ 0.04	$ 3.20	
Color Copies	80	copies @	$ 1.00	$ 80.00	
Outside Production					
(8.5 x 11)	125	copies @	$ 0.04	$ 5.00	
(11 x 17)	50	copies @	$ 0.04	$ 2.00	
(Color copies)	0	copies @	$ 1.00	$ -	
Mileage	260	miles @	$ 0.345	$ 89.70	
Parking	16	days @	$ 8.00	$ 128.00	
Traffic Counts	0	locations @	$ 221.00	$ -	
Shipping/Postage	10	estimated @	$ 16.00	$ 160.00	
				$ 475.90	Subtotal
Activity #3					
Copies (8.5 x 11)	200	copies @	$ 0.04	$ 8.00	
Copies (11 x 17)	100	copies @	$ 0.04	$ 4.00	
Color Copies	100	copies @	$ 1.00	$ 100.00	
Outside Production					
(8.5 x 11)		copies @	$ 0.04	$ -	
(11 x 17)	0	copies @	$ 0.04	$ -	
(Color copies)	0	copies @	$ 1.00	$ -	
Mileage	120	miles @	$ 0.345	$ 41.40	
Parking	6	days @	$ 8.00	$ 48.00	
Lodging	0	days @	$ 109.00	$ -	
Meals	0	days @	$ 50.00	$ -	
Airfare	0	trips @	$ 300.00	$ -	
Shipping/Postage	4	estimated @	$ 16.00	$ 64.00	
				$ 265.40	Subtotal
Activity #4					
Copies (8.5 x 11)	500	copies @	$ 0.04	$ 20.00	
Lid Anaysis Model Runs: 5				$ 48,000.00	
Color Copies	250	copies @	$ 1.00	$ 250.00	
Outside Production					
(8.5 x 11)	500	copies @	$ 0.04	$ 20.00	
(11 x 17)	200	copies @	$ 0.04	$ 8.00	
(Color copies)	200	copies @	$ 1.00	$ 200.00	
Mileage	2000	miles @	$ 0.345	$ 690.00	
Parking	30	days @	$ 8.00	$ 240.00	
Lodging	30	days @	$ 109.00	$ 3,270.00	
Per Diem	30	days @	$ 46.00	$ 1,380.00	
Airfare	10	trips @	$ 1,200.00	$ 12,000.00	
Traffic Counts	0	locations @	$ 221.00	$ -	
Shipping/Postage	20	estimated @	$ 16.00	$ 320.00	
				$ 66,398.00	Subtotal
Activity #5					
Copies (8.5 x 11)	500	copies @	$ 0.04	$ 20.00	
Copies (11 x 17)	200	copies @	$ 0.04	$ 8.00	
Color Copies	200	copies @	$ 1.00	$ 200.00	
Outside Production					
(8.5 x 11)	500	copies @	$ 0.04	$ 20.00	
(11 x 17)	200	copies @	$ 0.04	$ 8.00	
(Color copies)	200	copies @	$ 1.00	$ 200.00	
Mileage	120	miles @	$ 0.345	$ 41.40	
Lodging	0	days @	$ 109.00	$ -	
Per Diem	0	days @	$ 46.00	$ -	
Airfare	0	trips @	$ 300.00	$ -	
Parking	10	days @	$ 8.00	$ 80.00	
Traffic Counts	0	locations @	$ 221.00	$ -	
Shipping/Postage	10	estimated @	$ 16.00	$ 160.00	
				$ 737.40	Subtotal

Reimbursables Subtotal: $ 68,570.60

DRAFT
SR 520 BUDGET WORKSHEET
TASK ORDER NO. AG
MICHAEL MINOR AND ASSOCIATES

No.	ACTIVITY (with fee on labor)	Michael Minor & Associates Activity Hours	Michael Minor & Associates Activity Cost	President $80.00	President	Acoustical PE $80.00	Acoustical PE	Acoustical Specialists $80.00	Acoustical Specialists
1.0	**Project Management**								
1.1	Management and Administration	0	$ -	0	$ -	0	$ -	0	$ -
1.2	Project Schedule	0	$ -	0	$ -	0	$ -	0	$ -
1.3	Update Project Management Plan	0	$ -	0	$ -	0	$ -	0	$ -
1.4	Partnering Session and EIS Team Project Kickoff Meeting	0	$ -	0	$ -	0	$ -	0	$ -
	1.4.1 Partnering Session	13	$ 1,040.00	13	$ 1,040.00	0	$ -	0	$ -
	1.4.2 Work Plan and EIS Team Project Kickoff Meeting	8	$ 640.00	8	$ 640.00	0	$ -	0	$ -
1.5	Research and Establish SR 520 Corridor Program Project Office	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**21**	**$ 1,680.00**	**21**	**$ 1,680.00**	**0**	**$ -**	**0**	**$ -**
2.0	**Project Meetings**	0	$ -	0	$ -	0	$ -	0	$ -
2.1	Project Management Team Meetings	0	$ -	0	$ -	0	$ -	0	$ -
2.2	EIS Progress Meetings	0	$ -	0	$ -	0	$ -	0	$ -
2.3	EIS Team Management and Coordination Meetings	80	$ 6,400.00	80	$ 6,400.00	0	$ -	0	$ -
2.4	Technical and Executive Committee Meetings	32	$ 2,560.00	32	$ 2,560.00	0	$ -	0	$ -
2.5	Advisory Committee Meetings and Local Sounding Board Meetings	24	$ 1,920.00	24	$ 1,920.00	0	$ -	0	$ -
2.6	Other Agency, Local Jurisdiction, and Tribal Meetings	12	$ 960.00	12	$ 960.00	0	$ -	0	$ -
2.7	Strategy Team Meetings	0	$ -	0	$ -	0	$ -	0	$ -
2.8	Risk Management and Mitigation Plan	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**148**	**$ 11,840.00**	**148**	**$ 11,840.00**	**0**	**$ -**	**0**	**$ -**
3.0	**Public Outreach Support**								
3.1	Public Information Events Planning, Support, and Attendance	33	$ 2,640.00	33	$ 2,640.00	0	$ -	0	$ -
3.2	Community Meeting Planning, Support, and Attendance	50	$ 4,000.00	50	$ 4,000.00	0	$ -	0	$ -
3.3	Response to Public Questions and Issues	16	$ 1,280.00	16	$ 1,280.00	0	$ -	0	$ -
	Subtotals	**99**	**$ 7,920.00**	**99**	**$ 7,920.00**	**0**	**$ -**	**0**	**$ -**
4.0	**Alternatives Definition and Supplemental Engineering**								
4.1	Evergreen Point Bridge East Touchdown Value Analysis	0	$ -	0	$ -	0	$ -	0	$ -
4.2	Engineering Refinement of Alternatives	0	$ -	0	$ -	0	$ -	0	$ -
4.3	I-5 Alternative Development	0	$ -	0	$ -	0	$ -	0	$ -
4.4	Lid Opportunities and Preliminary Design	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.1 I-5 Lidding Opportunities	0	$ -	0	$ -	0	$ -	0	$ -
	4.4.2 Preliminary SR 520 Lid Design	0	$ -	0	$ -	0	$ -	0	$ -
4.5	I-5 Structures Concept Development	0	$ -	0	$ -	0	$ -	0	$ -
4.6	Stormwater Management Facilities Preliminary Design	0	$ -	0	$ -	0	$ -	0	$ -
4.7	Construction Staging and Impacts Assessment	0	$ -	0	$ -	0	$ -	0	$ -
4.8	Cost Opinions and CEVP Support	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**
5.0	**Draft Environmental Impact Statement (DEIS)**								
5.1	Environmental Support and Screening for I-5 Project Alternatives and Other Design Revisions	16	$ 1,280.00	16	$ 1,280.00	0	$ -	0	$ -
5.2	Revisions to Previous Environmental Documents	50	$ 4,000.00	50	$ 4,000.00	0	$ -	0	$ -
5.3	Discipline Reports	1290	$ 103,200.00	930	$ 74,400.00	240	$ 19,200.00	120	$ 9,600.00
5.4	Environmental Justice Analysis	0	$ -	0	$ -	0	$ -	0	$ -
5.5	Section 4(f) and Section 6(f) Resources Evaluation	24	$ 1,920.00	24	$ 1,920.00	0	$ -	0	$ -
5.6	Ship Canal Bridge Noise Modeling and Support	80	$ 6,400.00	60	$ 4,800.00	20	$ 1,600.00	0	$ -
	5.6.1 Ship Canal Bridge Noise Mitigation Alternatives	80	$ 6,400.00	60	$ 4,800.00	20	$ 1,600.00	0	$ -
	5.6.2 Literature Review of Proprietary Acoustical Noise Abatement Alternatives	30	$ 2,400.00	24	$ 1,920.00	6	$ 480.00	0	$ -
5.7	Prepare Preliminary Draft Environmental Impact Statement (PDEIS) and DEIS	12	$ 960.00	12	$ 960.00	0	$ -	0	$ -
5.8	NEPA/SEPA DEIS Public Hearings	57	$ 4,560.00	57	$ 4,560.00	0	$ -	0	$ -
5.9	Coordination with SR 520/West Lake Sammamish Parkway to SR 202 Project	0	$ -	0	$ -	0	$ -	0	$ -
5.10	Concurrence Point 2 & 3	0	$ -	0	$ -	0	$ -	0	$ -
	Subtotals	**1639**	**$ 131,120.00**	**1233**	**$ 98,640.00**	**286**	**$ 22,880.00**	**120**	**$ 9,600.00**
	Total for Work Activities (including fee)	**1907**	**$ 152,560.00**	**1501**	**$ 120,080.00**	**286**	**$ 22,880.00**	**120**	**$ 9,600.00**

SUMMARY OF COSTS
TASK ORDER AG -- COST SUMMARY BY FIRM

Michael Minor and Associates

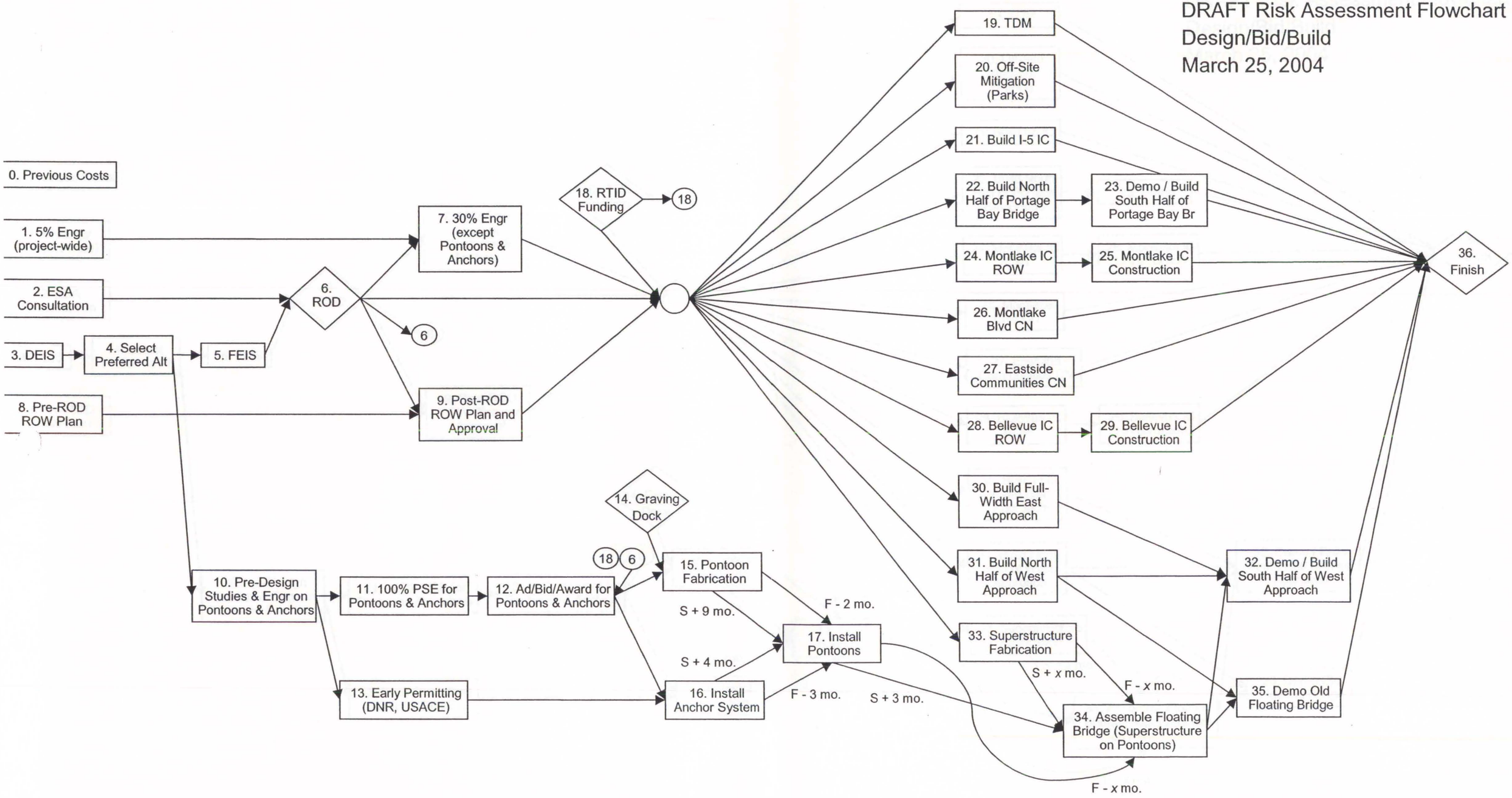
Classification	Rate w/ Fee	Total Hours w/ Fee	Cost w/ Fee
President	$ 80.00	1501	$ 120,080.00
Senior Acoustical PE	$ 80.00	286	$ 22,880.00
Acoustical Specialists	$ 80.00	120	$ 9,600.00
Parametrix, Inc. Total:		**1,907**	**$ 152,560.00**
MMA Labor			$ 152,560.00
MMA Direct Expenses			$ 1,144.00
Michael Minor and Associates Total:			**$ 153,704.00**

Direct Reimbursable:

Activity #1						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	100	copies @	$ 0.05	$	5.00	
(11 x 17)	100	copies @	$ 0.10	$	10.00	
(Color copies)	100	copies @	$ 1.00	$	100.00	
Mileage	200	miles @	$ 0.345	$	69.00	
Parking	5	days @	$ 8.00	$	40.00	
Traffic Counts	0	locations @	$ 221.00	$	-	
Shipping/Postage	-	estimated @	$ 150.00	$	150.00	
				$	374.00	Subtotal
Activity #2						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	0	copies @	$ 0.05	$	-	
(11 x 17)	0	copies @	$ 0.10	$	-	
(Color copies)	0	copies @	$ 1.00	$	-	
Mileage	2000	miles @	$ 0.345	$	690.00	
Parking	10	days @	$ 8.00	$	80.00	
Traffic Counts	0	locations @	$ 221.00	$	-	
Shipping/Postage	0	estimated @	$ 16.00	$	-	
				$	770.00	Subtotal
Activity #3						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	0	copies @	$ 0.05	$	-	
(11 x 17)	0	copies @	$ 0.10	$	-	
(Color copies)	0	copies @	$ 1.00	$	-	
Mileage	0	miles @	$ 0.345	$	-	
Parking	0	days @	$ 8.00	$	-	
Lodging	0	days @	$ 109.00	$	-	
Meals	0	days @	$ 46.00	$	-	
Rental Car	0	days @	$ 50.00	$	-	
Airfare	0	trips @	$ 300.00	$	-	
Shipping/Postage	0	estimated @	$ 16.00	$	-	
	0			$	-	Subtotal
Activity #4						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	0	copies @	$ 0.05	$	-	
(11 x 17)	0	copies @	$ 0.10	$	-	
(Color copies)	0	copies @	$ 1.00	$	-	
Mileage	0	miles @	$ 0.345	$	-	
Parking	0	days @	$ 8.00	$	-	
Lodging	0	days @	$ 109.00	$	-	
Meals	0	days @	$ 46.00	$	-	
Rental Car	0	days @	$ 50.00	$	-	
Airfare	0	trips @	$ 300.00	$	-	
Traffic Counts	0	locations @	$ 221.00	$	-	
Shipping/Postage	0	estimated @	$ 16.00	$	-	
				$	-	Subtotal
Activity #5						
Copies (8.5 x 11)	0	copies @	$ 0.05	$	-	
Copies (11 x 17)	0	copies @	$ 0.10	$	-	
Color Copies	0	copies @	$ 1.00	$	-	
Outside Production						
(8.5 x 11)	0	copies @	$ 0.05	$	-	
(11 x 17)	0	copies @	$ 0.10	$	-	
(Color copies)	0	copies @	$ 1.00	$	-	
Mileage	0	miles @	$ 0.345	$	-	
Parking	0	days @	$ 8.00	$	-	
Lodging	0	days @	$ 109.00	$	-	
Meals	0	days @	$ 46.00	$	-	
Rental Car	0	days @	$ 50.00	$	-	
Airfare	0	trips @	$ 300.00	$	-	
Traffic Counts	0	locations @	$ 221.00	$	-	
Shipping/Postage	0	estimated @	$ 16.00	$	-	
				$	-	Subtotal
Reimbursable Subtotal:				$	1,144.00	

SR 520 - 6 Lane Full

DRAFT Risk Assessment Flowchart
Design/Bid/Build
March 25, 2004



Notes:

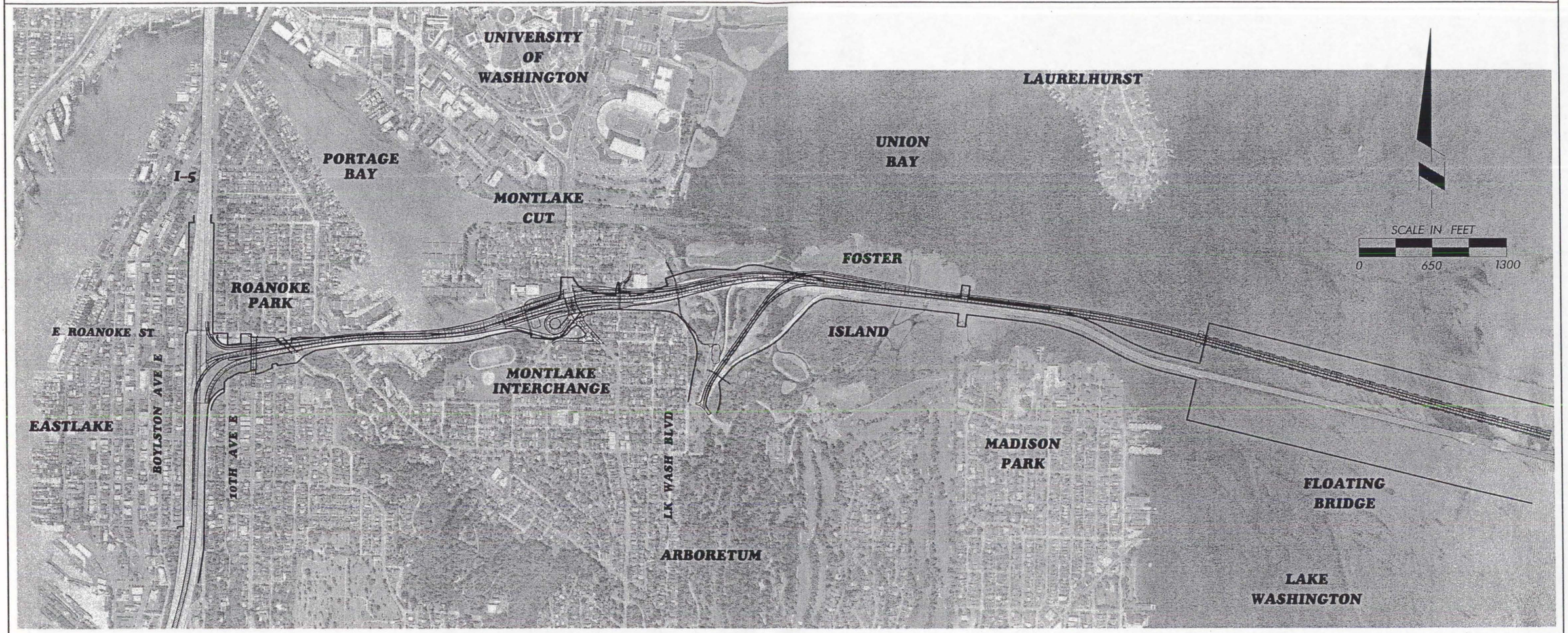
1. All construction activities Design/Bid/Build (many separate contracts).
2. Except for Pontoons and Anchors, Construction activities include appropriate permits, 100% PSE, Final ROW acquisition, Ad/Bid/Award, and construction phasing.
3. Numbers in circles represent connectors from the activity with that number to subsequent activities.

EIS Alternatives Summary

October 28, 2003

Alternative	I-5	Roanoke Park/ Portage Bay	Montlake Cut	Montlake I/C	Bike/Ped Lane	HOV Lanes	Floating Bridge & Approaches	Evergreen Point-Bellevue Way	Bellevue Way/ 108th	I-405	124th-W Lake Sammamish Pkwy	Flexible Trans-portation Plan
4-Lane $1.5 – $1.9 billion 2 General Purpose Lanes, Each Direction	▪ Build HOV/transit ramp from west-bound SR 520 to the southbound I-5 express lanes. Ramp serves the westbound, morn-ing commute only	▪ Rebuild Portage Bay bridge with 5 to 6 lanes and full shoulders	▪ No change to Montlake Blvd at Montlake Bridge	▪ Rebuild with 4 lanes and full shoulders under Montlake Blvd ▪ Rebuild inter-change ramps and Montlake Blvd over SR 520 ▪ Rebuild flyer stops on the outside ▪ Add signal at westbound ramp terminus	▪ Build continuous bike/ped lane from Montlake Blvd across the lake to vicinity of 96th Ave NE and NE Points Dr	▪ Rebuild west-bound HOV lanes with full shoulders from 108th to 76th	▪ Rebuild floating bridge and approaches with 4 lanes and full shoulders ▪ Option to build pontoons to allow future high capacity transit	▪ Rebuild with 4 lanes and full shoulders ▪ Option for toll plaza	▪ No change to the existing facility	▪ No change to the existing facility	▪ No change to the existing facility	▪ Funding for vanpools, public information, education and promotion programs, employer-based programs, and land use as demand management
6-Lane $2.1 – $2.5 billion* 2 General Purpose Lanes and 1 HOV Lane, Each Direction * Items in **bold** are not included in CEVP cost estimation.	▪ Build reversible HOV/transit ramp between SR 520 and I-5 express lanes. Ramp serves westbound SR 520 traffic during the morning and eastbound SR 520 traffic in the afternoon	▪ Build lid over SR 520 from 10th Ave to Delmar St ▪ Rebuild Portage Bay bridge with 6 to 9 lanes and full shoulders ▪ **Includes HOV lanes from Montlake Blvd to I-5**	▪ No change to Montlake Blvd at Montlake Bridge	▪ Rebuild with 6 lanes and full shoulders under Montlake Blvd ▪ Rebuild inter-change ramps and Montlake Blvd over SR 520 ▪ Add signal at westbound ramp terminus ▪ Build lid over SR 520 ▪ Build inline transit stops on the inside	▪ Build continuous bike/ped lane from Montlake Blvd across the lake to vicinity of 9 6th Ave NE and NE Points Dr	▪ Build inside HOV lanes westbound and eastbound from I-5 to 108th ▪ Restripe HOV lanes to inside from 108th to W Lake Sammamish Pkwy	▪ Rebuild floating bridge and approaches with 6 lanes and full shoulders ▪ Build pontoons to allow future high capacity transit	▪ Rebuild with 6 lanes and full shoulders ▪ Build lids at 76th, 84th, and 92nd ▪ Rebuild flyer stops on inside at 76th and 92nd ▪ Option for toll plaza	▪ Rebuild inter-change ramps and Bellevue Way over SR 520 ▪ Connect to existing 6 lanes at 108th	▪ Restripe HOV lanes to inside 108th to W Lake Sammamish Pkwy ▪ **Other necessary changes being evaluated**	▪ Restripe HOV lanes to inside 108th to W Lake Samm Parkway	▪ Funding for vanpools, public information, education and promotion programs, employer-based programs, and land use as demand management
8-Lane $2.9 – $3.4 billion* 3 General Purpose Lanes and 1 HOV Lane, Each Direction * Items in **bold** are not included in CEVP cost estimation.	▪ Build reversible HOV/transit ramp between SR 520 and the I-5 express lanes. Ramp serves westbound SR 520 traffic during the morning and eastbound SR 520 traffic in the afternoon ▪ **I-5/SR 520 interchange and I-5 improvments being evaluated**	▪ Build lid over SR 520 from 10th Ave to Delmar St ▪ Rebuild Portage Bay bridge with 9 lanes and full shoulders	▪ No change to Montlake Blvd at Montlake Bridge ▪ Build tunnel under Montlake Cut from Lake Washington Blvd to Pacific St with grade-separated intersection at Pacific & Montlake	▪ Rebuild with 6 lanes and full shoulders under Montlake Blvd ▪ Rebuild interchange ramps and Montlake Blvd over SR 520 and westbound off-ramp ▪ Add signal at westbound ramp terminus ▪ Build lid over SR 520 ▪ Build inline transit stops on the inside	▪ Build continuous bike/ped lane from Montlake Blvd across the lake to vicinity of 96th Ave NE and NE Points Dr	▪ Build inside HOV lanes westbound and eastbound from I-5 to 108th ▪ **Change as necessary to accommodate 8 lanes east of Bellevue Way** ▪ Restripe HOV lanes to inside to W Lake Sammamish Pkwy	▪ Rebuild floating bridge and approachs with 8 lanes and full shoulders ▪ Build pontoons to allow future high capacity transit	▪ Rebuild with 8 lanes and full shoulders ▪ Build lids at 76th, 84th, and 92nd ▪ Rebuild flyer stops on inside at 76th and 92nd ▪ Option for toll plaza	▪ Rebuild interchange ramps and Bellevue Way over SR 520 ▪ **Change as necessary to accommodate 8 lanes**	▪ **Change as necessary to accommodate 8 lanes east of Bellevue Way**	▪ **Change as necessary to accommodate 8 lanes east of Bellevue Way**	▪ Funding for vanpools, public information, education and promotion programs, employer-based programs, and land use as demand management

SR 520 - BRIDGE REPLACEMENT AND HOV PROJECT
4 LANE ALTERNATIVE



	I-5	Portage Bay	Montlake
4-lane	• *WB to SB HOV Ramp*	• *5 lanes*	• *Begin Bike/Ped Trail at Montlake Park* • *Outside Flyer stops*
4-lane Phase 1			• *Match existing at Park Ave* • *Begin Bike/Ped Trail at Park Ave*

SHEET NO.
1

FILE NAME T:\CAD\4 Lane_MatrixPhoto.dgn
DATE 04/06/2004

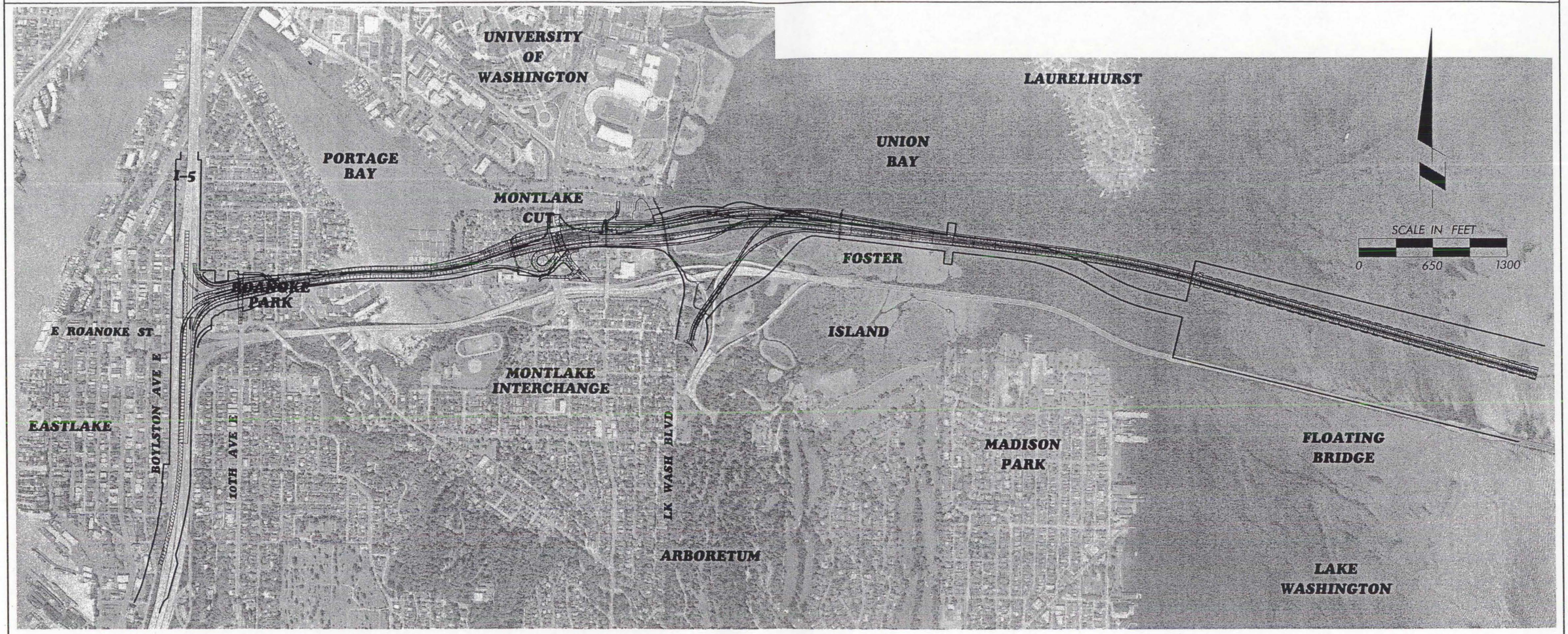
Parametrix, Inc.
with CH2M Hill &
Parsons Brinkerhoff

SOUND TRANSIT

Washington State Department of Transportation

U.S. Department of Transportation
Federal Highway Administration

SR 520 - BRIDGE REPLACEMENT AND HOV PROJECT
6 LANE ALTERNATIVE



	I-5	Portage Bay	Montlake
6-lane	• *Reversible ramp to express lanes south of SR 520* • *Lids at Delmar and 10th*	• *8 to 9 lanes*	• *Begin Bike/Ped Trail at Montlake Park* • *Inside Flyer stops* • *HOV braided ramps* • *Lid at Montlake*
6-lane Phase 1			• *Match existing at Park Ave* • *Begin Bike/Ped Trail at Park Ave*

SHEET NO.
1

FILE NAME T:\CADD\6 Lane_Alt\r1aPhoto.dgn
DATE 04/06/2004

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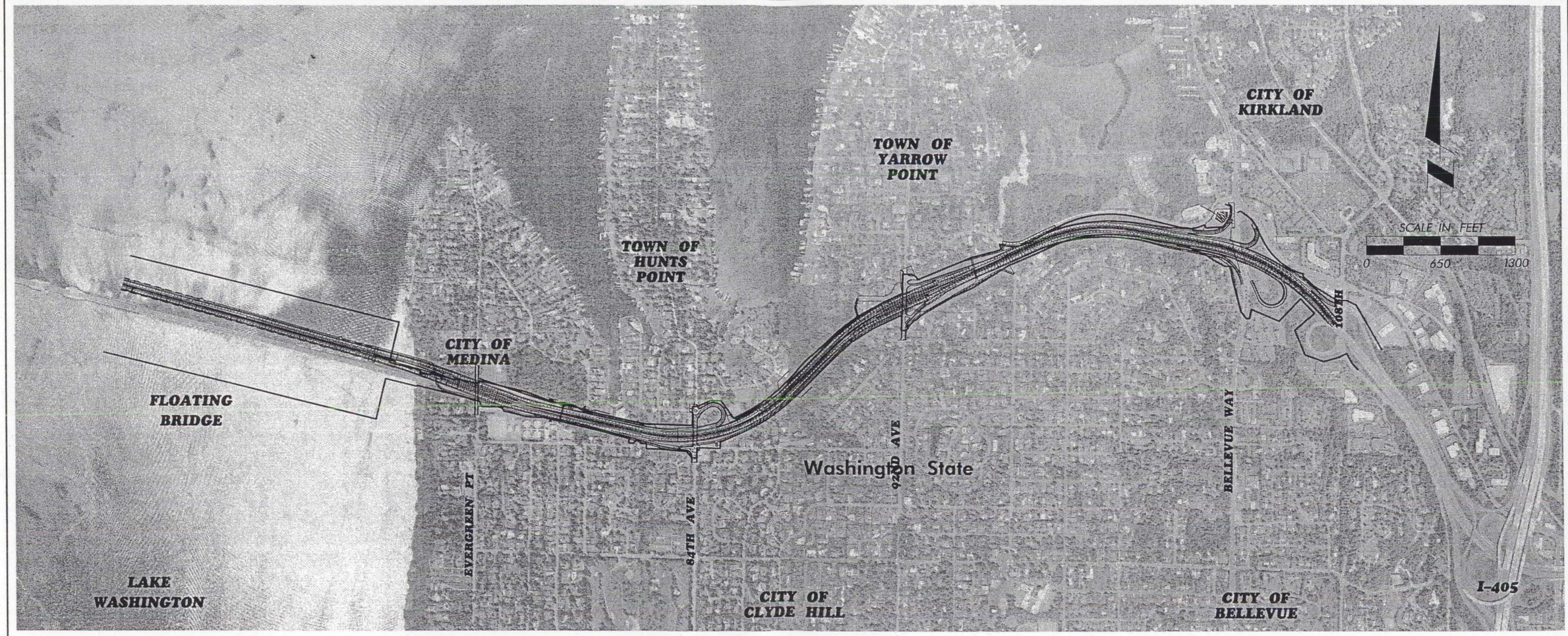
SOUND TRANSIT

Department of Transportation

U.S. Department of Transportation
Federal Highway Administration

SR 520 - BRIDGE REPLACEMENT AND HOV PROJECT
6 LANE ALTERNATIVE



	Floating Bridge	Evergreen Point	84th Ave NE	92nd Ave NE	Bellevue Way/108th
6-lane	• *Expandable Pontoons*	• *Inside Flyer stop* • *Lid at Evergreen Point*	• *Lid at 84th Ave*	• *Inside Flyer stop* • *Lid at 92nd Ave*	• *Match existing west of 108th Ave*
6-lane Phase 1	• *Expandable Pontoons*	• *Inside Flyer stop* • *Lid at Evergreen Point*	• *Match existing at 84th* • *End EB HOV lane* • *End Bike/Ped Trail*		

SHEET NO. 2

FILE NAME T:\CADD\6 Lane_Matrix\Photo.dgn
DATE 04/08/2004

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SOUND TRANSIT

Washington State
Department of Transportation

U.S. Department of Transportation
Federal Highway Administration