

Preliminary Risk Assessment Questionnaire

Project Sponsor: City of Emeryville

Name of Project: Powell Street Bridge Widening - WB

Project Location and Brief Description:

Widen the south side of the Powell Street Bridge between Christie Avenue and Shellmound Street to provide a second left turn lane from WB Powell Street to SB Christie Avenue.

Date of Field Review: 04/04/2011

Estimate Type (check one): Initial PID/PSR PA/ED
 35% PS&E 65% PS&E 100% PS&E Final Engineer's Estimate

Directions:

Answer the questions in each risk category and mark "Yes" or "No" in the adjacent column. For each risk category marked with one or more "Yes", consider its probability of occurrence (low, medium, or high) and carry down the appropriate allowance into the "Assessed Risk Allowance" row below the risk category.

*** If something is considered over 80% likely to occur, it should be assumed that it will definitely occur and be accounted for in the project estimate with a specific line item, rather than with a percentage from the Preliminary Risk Assessment.**

Note: References to applicable cost estimate sections (i.e. Section I. Roadway, Section II. Structures, and Section III. Utilities & Right-of-Way) are analogous to the groupings in the Caltrans Standard Cost Estimate format.

No.	Risk Category	Yes or No	Probability of Occurrence & Allowance [%]*		
			Low (1-12%)	Med (13-32%)	High (33-80%)
1	UTILITIES:				
	1) Is it possible that there are utilities that are present and unaccounted for within the project footprint?	(Y)N	10%	30%	80%
	2) Are you missing utility maps from any utility company that may have facilities in the area?	(Y)N			
	3) Are there utilities within the project site that have not been located by USA?	(Y)N			
	4) Are there any high-risk utilities (e.g. gas lines, oil lines, high voltage transmission lines) within the project footprint?	(Y)N			
	5) Are there overhead powerlines that might need to be relocated?	Y(N)			
	6) Are there fiber optic lines within the footprint, and if so, is there any chance the project will conflict with them?	(Y)N			
	7) If the project is within Caltrans' right-of-way, are there longitudinal utilities that you may be required to relocate as part of the project?	Y(N)			
	8) Do any of the utilities have prior rights status?	(Y)N			
9) Are there utilities on any of the structures?	Y(N)				
Assessed Risk Allowance based on understanding of risks associated with Utilities: (Apply to Section I. Roadway Category 2 and Section III. Utilities & Right-of-Way)				30%	

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2	GEOTECHNICAL and/or SEISMIC: 1) Are there known faults within, or in close proximity to, the project site? 2) Is there a documented history of earth movement in the area? 3) Are there any visible fractures or offsets of existing facilities near or within the project site? 4) Are there current signs of unstable soils or slopes within or close to the project site? 5) If there is existing pavement within the project footprint, does it show signs of uneven settlement or other problems that could be attributable to underground conditions? 6) Is there a high water table within the project vicinity? 7) Are there signs of drainage issues or flooding? 8) Are there any existing soil borings or technical data available from previous projects that you have not reviewed?	Y(N) Y(N) Y(N) Y(N) Y(N) Y(N) Y(N) Y(N)	5%	10%	30%
	Assessed Risk Allowance based on understanding of risks associated with Geotechnical and/or Seismic issues: (Apply to Section I. Roadway Categories 1-4 and Section II. Structures)		5%		
3	ENVIRONMENTAL: 1) Is the site likely to affect any known sensitive resources? 2) Is the site within or near any special jurisdictions that will require more coordination than average or issuance of a special permit? 3) Are there any regulatory agencies that the project will have to coordinate with that you have not contacted? 4) Is the site within proximity to open space? 5) Are there mature trees or other mature landscape elements within the footprint or in close proximity to it? 6) Are there known species of concern (plant or animal) in the general area of the project site? 7) Are there sensitive noise receptors in the vicinity that could trigger the need for sound walls? 8) Is there a possibility that there could be an archaeological site within the project footprint? 9) Is there a possibility that there could be a paleontological site within the project footprint? 10) Are there any bridges over water? 11) Are there wetlands in or near your site?	Y(N) Y(N) Y(N) Y(N) Y(N) Y(N) Y(N) Y(N) Y(N) Y(N)	10%	30%	60%
	Assessed Risk Allowance based on understanding of risks associated with Environmental issues: (Apply to Section I. Roadway Categories 4 and 6, Section III. Utilities & Right-of-Way, Section IV. Conceptual Engineering Studies, and Section V. Environmental Studies)		10%		

No.	Risk Category	Yes or No	Probability of Occurrence & Allowance [%]*		
			Low (1-12%)	Med (13-32%)	High (33-80%)
4	SITE ACCESS and TRAFFIC CONTROL: 1) Is access to the site constrained (i.e. is it accessible only from freeway ramps or other controlled facilities)? 2) Will construction of a project at this location require lane closures or significant re-routing of traffic? 3) Will there be potential impacts to other modes of transportation such as bike/pedestrian, bus, light rail, or rail? 4) Is the project within a particularly congested or constrained corridor that will result in limited work hours/days? 5) Do you expect there to be significant limitation on allowable days/times for lane closures? 6) Is the project in a corridor that provides the primary access to/from a destination or facility? 7) Will workers be in close proximity to traffic (i.e. will there need to be special considerations for worker safety)? 8) Will the project require night and/or weekend work (could be due to location, congestion, or other)? 9) Are there overhead utilities that could affect access, especially for equipment, to the site?	Y(N) (Y)N (Y)N Y(N) (Y)N Y(N) Y(N) (Y)N Y(N)	5%	15%	30%
	Assessed Risk Allowance based on understanding of risks associated with Site Access and Traffic Control: (Apply to Section I. Roadway Categories 1, 5, 7, and 9, and Section II. Structures)				15%
5	HAZARDOUS MATERIALS: 1) Is the project site listed on the Caltrans "Cortese List"? 2) Are there records of any hazardous materials present within the project footprint? 3) Are there any gas stations, automotive repair, or other industrial uses that might be associated with hazardous materials within or in close proximity to the project? 4) Is the site on or near an active or past railroad right of way? 5) Are there buildings or other structures on the site that will be disturbed and might contain asbestos or other hazardous materials or lead based paints? 6) Will the project disturb ground that is likely to contain aerially deposited lead? 7) Is there an old landfill in the area or within your site?	Y(N) Y(N) Y(N) Y(N) Y(N) Y(N) Y(N)	5%	20%	40%
	Assessed Risk Allowance based on understanding of risks associated with Hazardous Material: (Apply to Section I. Roadway Categories 1 -4 and Section III. Utilities & Right-of-Way)		5%		

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6	CONTROVERSY and/or ENVIRONMENTAL JUSTICE: 1) Is the project already or likely to become controversial? 2) Is there organized opposition to the project? 3) Has the project been the subject (directly or indirectly) of any lawsuits? 4) Has the project been featured in any press coverage? 5) Will the project be constructed in a neighborhood that will require Environmental Justice evaluation and assessment? 6) Will demolition of an existing structure or facility be required in order to construct the project? 7) Are there nearby residential neighborhoods?	Y/N Y/N Y/N Y/N Y/N Y/N	10%	20%	30%
	Assessed Risk Allowance based on understanding of risks associated with Controversy and/or Environmental Justice: (Apply to the Section IV. Engineering Studies, Section V. Environmental Studies, and Section VI. Design Engineering)		10%		
7	OTHER ISSUES: Are there any unique features of the project or its location that might have an affect the cost or the schedule of the project? If so, describe below, and indicate the likelihood that the issue will affect the project. Use your judgment to determine which elements of the project cost estimate will be affected, and make a reasonable determination about the percent increase on those elements could be incurred if it were to occur. (If applicable, describe other issues in the space below.)	Y/N	X%	X%	X%
	Assessed Risk Allowance based on understanding of risks associated with other issues not listed above: (Determine as appropriate and apply to relevant Section/s)		0%		

Participants in Field Review:

- 1) Garret Low
- 2) Bob Faber
- 3) Alex Zhang
- 4)

Title or Project Role:

- 1) Project Engineer
- 2) Lead Civil Engineer
- 3) Design Engineer
- 4)