

Construction Q & A

1. What are the structural issues with the Mercer Island P&R?

In September about one year ago, the contractor was removing forms from one of the garage's upper deck concrete support beams when the beam cracked. The cracking appeared to be the result of design errors. As Sound Transit project management worked with the designer to develop a repair for the beam, the designer informed Sound Transit that there were design problems with two other beams and with the design of the parking structure for seismic strength.

2. How long has construction been delayed by the structural issues?

Construction had been proceeding on target for a scheduled opening in March of 2007 when the structural issues were discovered. At that point in time, most of the areas of the parking structure affected by the design problems were already built. Control of the schedule for opening the project became dependent upon how quickly the designer could prepare the designs to fix the problems and could obtain the required building permits from the City of Mercer Island.

The building permit for the re-design of two of the beams was received on November 29, 2006. The process to design and permit the re-design of the two beams had the effect of delaying the contractor by about two months, moving the scheduled completion date for the project out to early June 2007.

The building permit for the seismic retrofit and the repair of the cracked beam was not received until May 1, 2007. The process to design and permit the seismic retrofit and beam repair had the effect of delaying the contractor by about another five months, moving the scheduled completion date for the project out to late October 2007.

However, construction for the seismic retrofit and the cracked beam repair did not go smoothly. The contractor was delayed by about three more weeks due to the need for additional engineering on portions of the seismic retrofit work. This delay had the effect of pushing the scheduled completion date to mid-November. And, the repair of the cracked beam was underway in June 2007 when the designer realized that the repair design was not appropriate for the as-built condition of the beam, as discovered during initial repair activities. Delay from mid-November 2007 until Sound Transit is able to open the project will be attributable to the need to resolve this final issue.

3. Everything looks done. Why isn't the P&R open to commuters?

At this time, everything is done except for the work to repair the cracked beam. We are waiting for design coordination and permitting review by the designer and the City of

Mercer Island to be complete before construction activities to repair the cracked beam resume.

4. Can a portion of the P&R be opened while repairs are underway?

No. The location of the cracked beam in the garage's upper deck means that parking on the top deck is restricted, and the location of shoring under the cracked beam means that parking on the first floor of the garage also is restricted.

5. The cracked beam was the first issue discovered. Why hasn't it been repaired yet?

As stated previously, the design and permit process for the seismic retrofit and beam repair was not complete until May 1, 2007. When the repair of the cracked beam was undertaken in June 2007, the designer discovered that the repair design was not appropriate for the as-built condition of the beam. The designer has been leading a process to re-design and permit a repair for the beam ever since.

6. Why can't Sound Transit say when the P&R will be open?

Once the repair procedure for the cracked beam has been permitted, the contractor will be given the directive to proceed with the repair work. Following the repair of the cracked beam, a load test will be required to determine the structural integrity of the repaired beam. The results of the load test on the performance of the beam will dictate the next steps in the construction process and whether or not we will be able to announce a formal opening of the facility. Right now we are forecasting that the repair will be complete in December 2007 and that the load test will be complete by January 2008. We hope that no further work on the beam will be required, but we will not know until the load test is complete.

7. Whose fault is this?

We believe that the structural issues arose as the result of design errors.

8. After all the work to fix the structural problems, how does Sound Transit know that the garage will be safe?

Sound Transit is taking extraordinary precautions to ensure that the garage will be safe. In addition to all of the construction inspections that Sound Transit, the City of Mercer Island, and the building codes require, Sound Transit hired an independent structural engineer to review all of the structural issues and all of the design work to resolve the issues. The contractor is also being directed to perform a load test of the repaired beam to determine if the repaired beam is structurally sound and in conformance with all building code requirements.

9. What was the City of Mercer Island's responsibility in the resolution of the structural issues?

The City of Mercer Island's responsibility has been to review the engineering and plans needed to resolve the structural issues for compliance with the applicable building codes. The City has gone overboard to ensure the timeliness and thoroughness of the required reviews.

10. How much extra has fixing the structural issues cost?

The cost to date is about \$2.3 million, which includes construction costs, construction management costs, the costs to retain the services of an independent structural engineer, and the costs to lease additional parking spaces on Mercer Island and to provide Metro shuttle bus services during the extended duration of construction.

11. Who's going to pay for all the extra costs due to the structural issues?

Sound Transit is engaged in a process to obtain reimbursement for those costs from the designer.

12. Since the P&R still isn't open, is Sound Transit going to continue leasing additional parking spaces and the shuttle bus service?

Yes. Leased spaces and shuttle bus services will continue until the park-and-ride is open.

13. Who is the contractor?

Howard S. Wright Construction Co.

14. How much was the original construction contract?

\$8,160,000

15. How much has been actually spent on construction?

\$9,967,492.43 through October 31, 2007. However, this number does not include the full value of all change orders to the contract to date.

16. Who is the designer?

URS Corporation

17. How much is the design contract?

\$919,191.57 is the current contract amount.

18. Is the designer being paid for the design work to rectify the structural issues?

NO.

19. Has the contractor done anything that might have led to the structural issues?

The construction records appear to confirm the quality of the contractor's work.

20. What was Sound Transit's role in ensuring that the design was being properly formulated?

Sound Transit's role during design was to secure and ensure adequate review of the final design phase documents, independent of the designer's own quality control and quality assurance process. Reviews were performed at 60%, 90%, and 100% design to ensure that the design documents were consistent with established criteria, guidance, procedures, policies, and best practice. However, these reviews were not intended to relieve the designer of responsibility, mandated under law, for complete, competent, properly coordinated, and thoroughly checked design documents.

21. Who is managing the construction?

Harris and Associates

22. How much was the original construction management contract?

\$898,331

23. How much has been spent to date on construction management?

\$873,771.18 through October 31, 2007. However, this number does not include the full value of all changes to the contract to date.

24. Can bike commuters use the bike lockers that have been installed?

Until a Certificate of Occupancy is issued by the City of Mercer Island, amenities within the garage footprint, e.g. bicycle storage, are not available for use by the public.