


MEMORANDUM

DATE: April 17, 2006

TO: Silicon Valley Rapid Transit Policy Advisory Board (PAB)

FROM: Jack J. Collins 
Chief Construction Officer

SUBJECT: Silicon Valley Rapid Transit Project
Engineering Progress Report – March 2007

FOR INFORMATION ONLY

Engineering Activities:

In January 2007, work began on the 65% Engineering Phase of the Project as approved by the VTA Board of Directors on December 14, 2006. The California Transportation Commission approved \$364 million in Transportation Congestion Relief Program funds, that will reimburse VTA for \$151 million in Preliminary Engineering work with the balance funding the 65% Engineering Phase of the Project. The 65% Engineering Phase is scheduled to continue from January 2007 through December 2008.

To facilitate management and reporting during the 65% Engineering phase, the project has been organized into three geographic areas plus Project-Wide Systems. Design of the guideway, stations, campus facilities and parking structures from the proposed Warm Springs BART station to the East Tunnel Portal is included in the **Northern Area**. The **Central Area** design efforts includes approximately 5 miles of tunnel guideway, 3 underground stations, campus facilities and parking structures from the East Tunnel Portal to the West Tunnel Portal. The **Western Area** includes design of the guideway, Yard & Shop facilities, Santa Clara Station, campus facilities and parking structure from the West Tunnel Portal to the end of the tail track. The **Project Wide Systems** is responsible for design of project-wide train control, security, communications, and traction power systems

With the culmination of Preliminary Engineering, the project has developed an overall schedule for the completion of design and construction of the project. Phase II Value Engineering workshops and reports have been completed and evaluation of the VE alternatives are underway.

Northern Area

The Guideway Design team has issued the design development plan and initiated traffic studies to develop street configurations for Mabury and Berryessa Roads. The team also issued their 35% record drawings.

The Stations Design team presented two architectural design themes for the Montague and Berryessa stations to the staffs of Milpitas and San Jose, respectively, and continued to develop architectural concepts based on the city staff's preferred theme.

Central Area

The Guideway Design team issued their final work plan for the 65% Engineering phase. A technical memorandum evaluating the potential cost savings and structural modifications associated with lowering the concourse level of the Downtown San Jose Crossover Structure was issued. During the report period, they completed work on the 35% Issued for Record drawings and technical specifications.

The Stations Design team presented two architectural design themes for the Alum Rock, Downtown San Jose, and Diridon stations to the City of San Jose staff and continued to develop architectural concepts based on the city staff's preferred theme. Non-invasive field surveys on the former Bank of America building were conducted during the month and the team continued with the seismic and historic building preservation evaluations

Western Area

The Guideway, and Yard & Shops Design team continued to meet with reviewers to resolve comments received on the 35% Plans and Specifications. The team presented the revised Yard Entrance Layout drawing to the City of San Jose for their concurrence. They evaluated several Phase II VE proposals on Heating, Ventilation and Air Conditioning (HVAC), and issued reports recommending acceptance of one recommending the use of single zone package rooftop air conditioning unit in lieu of split system.

The Stations Design team presented two architectural design themes for the Santa Clara Station to the City of Santa Clara Staff and continued to develop architectural concepts based on the City staff's preferred theme. The team issued the 35% Issued for Record drawings for the Santa Clara Station.

Project Wide Systems

The Systems Design team completed review of the City of San Jose's as-built drawing of the site for the Mabury High Voltage Substation and continued to develop a Technical Coordination Memorandum to facilitate reaching an agreement with the city. A Request for Variance on the number of tunnel ventilation plants was issued for BART's approval. The Design Development Board approved the team's recommendation on the Phase II VE proposal on Mid-Tunnel Ventilation Structure Spacing.

The Systems Team met with BART to resolve the tunnel cross passage spacing issues. The design spacing has been established and a Design Development Memorandum has been approved. A Request for Variance was issued to BART for their approval.

The **Design Integration Team** received comments on the Contract Implementation Plan and began efforts to revise and republish the revised plans. They continued to develop rendered images to support property acquisition.

Community Outreach:

The Community Outreach team held four public hearings during February associated with the release of the Draft Supplemental Environmental Impact Report.

Meeting was held with property owners in the Alum Rock Station area to provide a project update and environmental schedule.

Meeting was held with the owner of the Bank of America building to discuss the potential of developing a station entrance with the building. The entrance is one of three that are being considered for the Downtown San Jose Station.

A general schedule of public outreach activities over the next 2 years has been completed. The activities relate to the state and federal environmental processes, seeking public input on station architecture, Contaminant Management Plan (CMP), Relocation Plan, Santa Clara station area concept plan, construction education outreach and general update of project publication materials.

Fire/Life/Safety:

The Fire/Life/Safety team met with the Fremont Fire Department to discuss mutual aid responsibilities with the Milpitas Fire Department during the construction period. The team, along with the systems designers, presented an overview of the proposed Sierra Lundy Ventilation System to the San Jose Fire Department.

The team also presented exiting calculations for the Montague Station to the Milpitas Fire Department and plans to make similar presentations for other stations to the Cities of San Jose and Santa Clara.

Right of Way, Railroad & Inter Agency Coordination:

The Right-of-Way Coordination team with the Northern Area Guideway Design team evaluated cost savings related to a potential realignment of the guideway in the vicinity of Mission Boulevard.

The Third Party Coordination team met with Caltrans regarding preparation of the Project Study Report (PSR) for facilities within the State owned Right-of-Way. A Preliminary Draft PSR will be circulated in March.

The Third Party Coordination team continued efforts regarding the existing property rights (easements, deeds, permits, licenses, franchises) of all utility agencies throughout the SVRT project. Specific efforts focused on easement deeds granted to Santa Clara Valley Water

District and several permits issued to utility companies by the Southern Pacific Transportation Company in the Berryessa Creek vicinity.

The Railroad Coordination team continued planning for engineering fieldwork on the Northern Area and coordinated efforts on the preparation of the bid documents for the Newhall Yard security fence and demolition contract in the Western Area.

Budget Status:

The current authorized budget for the SVRT Project through June 2007 is \$408.2 million and includes the Environmental, Conceptual, Preliminary and 65% Engineering Phases of project development and Right of Way acquisition. Approximately 78% of the approved budget has been incurred as of March 2007, as shown on Table 1. The additional budget for the balance of the 65% Engineering Phase budget will be presented to the VTA Board of Directors for approval in June 2007 as part of the biennial capital budget.

Table 1: SVRT Budget Report

(Status as of March 2007; \$ in millions)

Phase	Approved Budget	Incurred To-Date	% Incurred	Balance
Conceptual Engineering/EIR	\$45.2	\$43.3	96%	\$1.9
UPRR Right of Way	81.7	81.7 ¹	100%	0
Newhall Yard Property	37.3	37.3	100%	0
UPRR Relocation	31.0	0.0	0%	31.0
Preliminary Engineering:				
Design Consultants	121.0	121.0	100%	0
VTA/BART	29.1	29.1	100%	0
65% Engineering (to June 2007)				
Design Consultants	45.9	4.1	9%	41.8
VTA/BART	11.2	2.6	23%	8.6
Contingency	5.8	0.0	0%	5.8
Sub-total PE/65% Engineering:	\$213.0²	\$156.8	74%	\$56.2
TOTALS	\$408.2	\$319.1	78%	\$89.1

Notes: ¹ BART's share of the UPRR to Warm Springs included.
² Under runs of Preliminary Engineering budgets were transferred to 65% Engineering.