COUNCIL AGENDA: 11-20-07
ITEM: 6.2

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: James R. Helmer

SUBJECT: **BART EXTENSION TO SAN JOSE/SILICON VALLEY DESIGN ISSUES**

DATE: 10-03-07

Approved

Date 10/4/07

COUNCIL DISTRICT: 3

RECOMMENDATION

Approve preferred design recommendations to the Santa Clara Valley Transportation Authority (VTA) regarding the BART Extension to San Jose/Silicon Valley as follows:

a. Select the "Historic Bank of America Building Lobby" as the Downtown San Jose BART station portal in the Transit Mall area.

b. Select the "Southern Offset" for the BART tunnel alignment in the vicinity of Santa Clara Street and Coyote Creek, for the purpose of supporting continuation of project design work, and with the condition that a subsequent environmental review process demonstrates the option to be preferred based on environmental and cost effectiveness issues.

OUTCOME

The desired outcome of this Council item is to support continued progress in the development of the BART extension to San Jose and Silicon Valley. The completed BART project aligns with the City's goals for transportation service, economic development and community livability.

EXECUTIVE SUMMARY

This report recommends the selection of preferred BART design options for two issues. Resolution of these issues is important for continuing timely implementation of the BART project. For the first issue, staff recommends selecting the Bank of America building lobby as a preferred Downtown BART station portal location as part of a joint effort to rehabilitate the historic building and create a grand BART access portal. For the second issue, staff recommends aligning the BART tunnel south of Santa Clara Street at the Coyote Creek bridge in order to avoid significant risks related to cost, schedule, safety and community impact.

BACKGROUND

The VTA is developing a project to extend BART service to Silicon Valley, with station stops located in Milpitas, San Jose and Santa Clara. A map of the project location is provided in Attachment 1. The project has significant benefits for the Silicon Valley community related to improved regional mobility, interconnectivity with light rail, bus, Caltrain, and Mineta San Jose International Airport, and enhanced access to major job centers, universities, and cultural venues.

The project length is approximately 16 miles. The adopted BART route follows a former Union Pacific railroad corridor (now owned by VTA) and includes a 5-mile long subway tunnel in the greater Downtown San Jose area. The tunnel segment is generally located below Santa Clara Street and Stockton Avenue.

The cost of the project is estimated at $4.7 billion (in 2005$) and funding for approximately 80% of the project is currently identified from local, state and federal sources. Preliminary design for the project is complete, a state Environmental Impact Report has been completed (in accordance with CEQA), and major project construction is proposed for 2009 through 2015. Project completion and start of passenger service is planned for 2016. Further information is available and kept current on the VTA's website for the BART project at www.svrtc-vta.org.

The development of the BART project within San Jose is being closely coordinated between the City and VTA. The VTA has formal "BART Partnership" meetings twice a month with San Jose representatives to provide timely communications and address project issues. The City's Department of Transportation has two staff members fully dedicated to the project and has offices co-located with VTA BART project staff and consultants. The City has monthly internal meetings with executive staff to provide coordination between the City Manager's Office, Transportation, Redevelopment, Economic Development, Public Works, Planning, Building and Code Enforcement, Fire and Police.

At a policy level, the City is represented by Councilmembers Liccardo and Nguyen on the VTA's BART Policy Advisory Board. On March 22, 2007, the City Council held a half-day Study Session related to the BART project.

At this time, 65% design completion plans are being developed for the BART project and a federal Environmental Impact Statement is being prepared. To continue progress on the design of the BART project, policy direction is needed on the two key design issues in the City of San Jose:

a. The location of a BART station portal in Downtown San Jose Transit Mall area. The design options include either within the Bank of America building lobby or within the Western Dental building. Attachment 2 provides a photo rendering of both building locations.

b. The alignment of the BART tunnel along Santa Clara Street at Coyote Creek (near 17th Street). The design options include: either within Santa Clara Street and under the Coyote

Creek Bridge; a "northern offset" at Coyote Creek Bridge"; or a "southern offset" at Coyote Creek Bridge. Attachment 3 illustrates the tunnel alignment options.

These design options and staff's preferences were discussed with the Transportation and Environment Committee at their meeting on September 17, 2007.

ANALYSIS

Downtown San Jose BART Portal Location

The Downtown San Jose BART station is projected to be one of the highest BART ridership locations in the entire Bay Area BART system. The station is planned to include three access portals: 1) at the southwest corner of Santa Clara Street and Market Street, 2) at the north side of Santa Clara Street between Market Street and First Street, and 3) at the south side of Santa Clara Street between First Street and Second Street (Transit Mall area). For the Transit Mall area, the environmental document for the BART project includes both the Western Dental and Bank of America building options. A description of the two options is provided below:

Western Dental BART Portal

Under this option, the BART project would acquire the building, permanently relocate the tenants, and completely remove the building's two-story interior. The inside of the building would be reconstructed to include stairways, escalators and an elevator to access the subway BART station. The entire floor space of the building would be occupied by BART access facilities and circulation space. Some kiosk retail stands may be possible. The VTA would be the building owner. The exterior of the building would be restored based on historic guidelines. The building was originally constructed in 1869 and remodeled in the 1940's and 1950's. The Western Dental building is a Contributing Structure to the Downtown San Jose National Historic Commercial District and is a Candidate City Landmark. The VTA's estimated cost to develop a BART portal at the Western Dental location is approximately $22 million.

Bank of America BART Portal

Under this option, the BART project would acquire rights for access into the lobby of the building and for construction within the basement. Within the lobby the BART facilities would include stairways, escalators and an elevator to access the subway BART station. The historic Banker's Hall building lobby is a large space, with 30-foot high ceilings and historic architecture. Adjacent to the BART access facilities, the lobby space could be adaptively reused for other commercial or public uses. The Bank of America lobby and the 13-story tower was originally constructed in 1927 by the Bank of Italy as Downtown San Jose's first high rise building. The Bank of Italy was founded by Amadeo Pietro Giannini, a native of San Jose, and after 1930 it was renamed the Bank of America and later evolved into the world's largest commercial bank. The Bank of America building has long been a visual focal point of Downtown San Jose; the building is a City Landmark

and is considered the most significant Contributing Structure to the Downtown National Historic Commercial District.

The historic Bank of America building is in a deteriorating condition and would need a seismic retrofit in order to meet public safety standards for suitability as a BART station portal. A recent structural engineering report by Biggs Cardosa and Associates has concluded that the building is currently at significant risk of sustaining irreparable damage in the event of a major earthquake. Unless steps are taken to structurally retrofit the building, a major earthquake would have the consequence of requiring demolition of this historic resource. The cost to develop a BART portal at the Bank of America building, along with a structural retrofit of the entire 13-story tower and subsequent building upgrades, has been estimated by VTA consultants at approximately $50 million. Redevelopment Agency staff is working to update this analysis and intends to have detailed cost estimates before bringing any proposed acquisition forward for Agency Board/City Council approval.

Implementation Proposal for Bank of America Portal Option

Staff strongly favors selecting the Bank of America building option as the preferred location for the BART station portal and has developed with the VTA and building owner (Stephen Lin) an implementation strategy to address the costs. It includes the following provisions:

1. VTA to provide funding in an amount equal to the cost of developing Western Dental BART portal option.

2. Redevelopment Agency to acquire rights to building basement and lobby; to manage seismic retrofit of building; and to renovate building lobby.

3. Building owner and other private investment to rehabilitate building exterior and renovate office spaces within tower. Opportunities have been explored for obtaining financial assistance from federal historic tax credits and from the Bank of America corporation.

The proposed implementation plan for locating the Downtown BART Station portal in the lobby of the Bank of America building is intended to achieve the following outcomes:

- Provides revenues, otherwise not available to address the **seismic retrofit** of the building that would allow the building to withstand a major earthquake.

- Provides revenues to **rehabilitate the historic Banker's Hall** and allow for adaptive reuse as a BART portal and other commercial or public purposes.

- Provides a **"grand gateway"** for BART patrons accessing Downtown San Jose as advocated by key Downtown stakeholder organizations such a First ACT Silicon Valley and the San Jose Downtown Association. The 30-foot high vaulted ceilings and historic architectural details contained within the spacious Bank of America building lobby provide a memorable

"sense of arrival and place" for the numerous expected users of the BART system in Downtown San Jose that is both "iconic" for San Jose and extraordinary within the Bay Area BART system.

- Provides opportunity to **celebrate the legacy of AP Giannini** as the entrepreneurial native of San Jose and founder of the Bank of America corporation.

- Provides **public accessibility** and visibility to a significant historic landmark building. The current use of the building lobby as a private weekend nightclub greatly limits the public's ability to appreciate the historic lobby. The proposed BART portal would only occupy a portion of the building lobby, and therefore other areas of the lobby and mezzanine can be adaptively reused for other public or commercial purposes.

- Provides **enhanced economic vitality** and value for the office tower. The rehabilitation of the building, in combination with convenient regional transit access provided by BART, significantly improves the likelihood that the tower's interior will be renovated.

Redevelopment Agency Budget Action

On September 14, 2007, Mayor Reed issued a budget direction memorandum proposing Redevelopment Agency funding for the acquisition of the Bank of America building lobby and basement as an effort to support locating the BART station access portal within the building and to facilitate the building renovation. On September 25, 2007, the City Council/Redevelopment Agency Board endorsed this direction.

BART Tunnel Alignment at Coyote Creek Bridge

The current BART project plans include a subway tunnel along Santa Clara Street and under the bridge foundations for the Coyote Creek bridge. As part of developing more detailed geotechnical studies and 65% design completion plans for the project, the VTA and its consultants have concluded that the current plan creates an extraordinary risk to the project budget, the project schedule, the safety of construction workers, and the safety and livability of the adjacent community. For these reasons, the VTA is actively pursuing design options that offset the tunnel alignment to either the north or south of the Coyote Creek Bridge.

Issues with Santa Clara Street Alignment

The BART project includes constructing a five-mile long tunnel in the greater Downtown San Jose area and primarily under Santa Clara Street. The tunnel is proposed to be constructed using a tunnel boring machine at an elevation that is consistently 50 to 60 feet below the surface and below the groundwater table. This elevation corresponds with a cohesive clay soil layer that is ideal for tunneling in groundwater conditions.

However, the bridge foundation system for the Santa Clara Street bridge over Coyote Creek is an obstacle for the tunnel -- it extends more than 60 feet below the surface. The VTA's engineering consultants have advised that removing the bridge and its foundation is not a feasible option based on very significant issues related to environmental impacts, traffic management, cost and schedule. In summary the bridge foundation includes over 300 timber piles located adjacent to and below the Coyote Creek channel. Removal of the foundation piles would require diversion of Coyote Creek and the detouring of Santa Clara Street. Removal and replacement of the Coyote Creek bridge would need to occur in advance of the BART tunneling and would significantly delay the planned BART implementation schedule.

An alternative to the replacing bridge is to lower the tunnel alignment beneath the bridge foundations to a depth of about 80 feet and into a non-cohesive layer of sandy soil. At this lower tunnel elevation the ground water pressure would be increased by 50%. Tunneling in sandy and wet soil conditions creates extraordinary risks that can have significant cost, schedule, and safety implications. These risks and other concerns are summarized below:

- Tunneling in sandy soil beneath the groundwater table creates risks for **water infiltration** into the tunnel during construction. This can be a safety issue for workers and could have an estimated project cost impact of up to $38 million if ground freezing is needed to stabilize the soil and manage water flow.

- The Santa Clara Street **bridge foundation depth is unknown**. The current bridge was constructed in 1917 and is supported by over 300 timber piles. The design drawings for the bridge show a foundation depth of approximately 60 feet; however during actual construction (90 years ago) the timber piles could have been driven deeper toward the bedrock soil layer. If the tunnel boring machine were to hit a bridge pile, there could be potential project construction and contractor delay costs of up to $9 million to repair **bridge damage** and/or up to $60 million to repair **tunnel boring machine damage**, as estimated by VTA. Repairing the tunnel boring machine could have a project schedule delay of up to three months.

- To manage the issues noted above, another potential negative consequence is the **closure of Santa Clara Street**. To address water infiltration, bridge damage, and/or tunnel boring machine damage, Santa Clara Street may need to be temporarily closed. This would create the negative implications of detouring traffic through the adjoining neighborhoods and result in extended emergency response times. Fire Station No. 8 is located at the southwest corner of Santa Clara Street and Coyote Creek and it would have access impacts if Santa Clara Street is closed.

In summary, VTA staff and their consulting engineers strongly recommend against a tunnel alignment under the Coyote Creek bridge. As a result, BART tunnel alignment options that are offset to the north or south are proposed. These offset alignments would allow the BART tunnel to remain in cohesive clay soil layer (approximately 50 feet below the surface) and that is free from obstructions.

North or South Offset Options

As shown in Attachment 3, the BART tunnel is proposed to be offset either to the north or south of the Coyote Creek bridge. The offset tunnel would extend a maximum of 80 feet into the frontage of properties along Santa Clara Street. The limits of the Santa Clara Street offset would be between 14th Street and 22nd Street. The "North Offset" option would have a BART tunnel alignment generally under Roosevelt Park and the former San Jose Medical Center site. The "South Offset" option would have a BART tunnel alignment located beneath approximately 20 properties (including two apartment buildings). The BART tunnel would not have a physical or environmental impact to the existing buildings above the BART tunnel.

However, the BART tunnel would have an impact on the future development potential of the properties. In general, due to limits on foundation systems located above a BART tunnel, the properties would be limited to one level of basement parking and a maximum building height of approximately five stories. Because this is a significant constraint on the development potential for the three-block former San Jose Medical Center site, staff recommends against the "North Offset" option and supports the "South Offset" option. The properties along the "South Offset" are significantly less likely to be redeveloped as high-rise buildings due to the relatively small parcel size and proximity to residential development in the Naglee Park neighborhood.

Based on preliminary analysis conducted by VTA and their consultants, it appears conclusive that it is not prudent or feasible to maintain the BART tunnel alignment within Santa Clara Street. Also, the southern option appears to be the best alternative for the City based on future land use considerations. For the purposes of continuing progress on designing the BART project, staff recommends the selection of the "South Offset" alignment. It is emphasized that a formal environmental review process needs to be done for the "South Offset", which will include further technical environmental analysis (for all options), cost analysis, and public outreach. This review process would then conclude with a formal policy selection of a preferred alternative that would be subject to advisory action by the City Council and formal action by the VTA Board. This process is proposed for completion in 2009.

Tunnel Ventilation Facility

Another unresolved BART design issue in the Coyote Creek area relates to selecting a location for a mid-tunnel ventilation structure. Based on the distance of the subway BART stations between Alum Rock and Downtown, a ventilation facility is required for the tunnel in the vicinity of 13th Street to 17th Street. A separate community outreach process is being facilitated to address this topic and a community meeting is scheduled for October 2, 2007.

EVALUATION AND FOLLOW-UP

The VTA's BART Policy Advisory Board (PAB) is scheduled to meet on October 18, 2007 to address the BART design issues related to the Downtown station portal location and the BART tunnel alignment at Coyote Creek. The VTA would subsequently formally assess the preferred design options as part of a future Supplemental Environment Impact Report for the BART project.

Subject to both City Council and VTA Board approval of locating a Downtown BART Station portal within the Bank of America building, as a preferred concept, City and Redevelopment Agency staff would then negotiate implementation agreements with the VTA and the Bank of America building owner. Subsequently, these agreements would be proposed for action by the City Council and Redevelopment Agency Board.

POLICY ALTERNATIVES

Alternative 1 – Select Western Dental building for Downtown BART station portal in Transit Mall area

Pros: Has low cost and can be implemented directly by VTA
Cons: Results in a lost opportunity to facilitate rehabilitation of the historic landmark Bank of America building and development of a "grand gateway" BART portal for Downtown San Jose.
Reasons for not recommending: Does not align with City goals for historic preservation, Downtown revitalization and economic development.

Alternative 2 – Select North Offset for BART alignment at Coyote Creek

Pros: Avoids BART project risks associated with tunnel alignment within Santa Clara Street. Avoids tunneling beneath approximately 20 private properties related to "South Offset" option.
Cons: Impacts development potential of former San Jose Medical Center site
Reason for not recommending: Does not align with City goals for transit oriented development in the Santa Clara Street corridor.

Alternative 3 – Select Santa Clara Street for BART alignment at Coyote Creek

Pros: Avoids impacting development potential of properties both north and south of Santa Clara Street.
Cons: Creates significant risks for delivery of the BART project relative to cost, schedule, safety, environmental protection and community livability.
Reason for not recommending: Does not align with City goals to support efficient and effective delivery of the BART project.

PUBLIC OUTREACH/INTEREST

- ☐ **Criterion 1**: Requires Council action on the use of public funds equal to $1 million or greater.
  (Required: Website Posting)
- ☐ **Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- ☐ **Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

Public outreach for the subject report includes website posting as part of the Council Agenda process. A public meeting with the Historic Landmarks Commission regarding use of the Bank of America building lobby for a BART station portal is scheduled for October 3, 2007. Public meetings regarding the BART tunnel alignment at Coyote Creek were held on July 25, 2007 and September 10, 2007. A public meeting on the Tunnel Ventilation Facility in the Coyote Creek area is scheduled for October 2, 2007.

COORDINATION

Preparation of this Council item has been coordinated with the Department of Planning, Building and Code Enforcement, the Office of Economic Development, the Redevelopment Agency, and the City Attorney's Office.

FISCAL/POLICY ALIGNMENT

The recommended actions are consistent with the City's General Plan policy goals related to transportation service, historic preservation, Downtown revitalization, economic development, and neighborhood preservation. Fiscal participation by the San Jose Redevelopment Agency related to acquisition of the Bank of America building lobby and basement to support a BART station portal in the building was discussed and supported by the City Council/Agency Board at their meeting on September 25, 2007.

COST SUMMARY/IMPLICATIONS

Cost participation by the San Jose Redevelopment Agency related to the Bank of America building is subject to negotiation with the VTA and the Bank of America building owner.

BUDGET REFERENCE

Not applicable.

CEQA

The VTA Board of Directors approved a Final Environmental Impact Report (EIR) for the Silicon Valley Rapid Transit Project on December 9, 2004 (Agenda Item 10). A Supplemental EIR for the project was approved by the VTA Board on June 7, 2007 (Agenda Item 34). A proposed Second Supplemental EIR is being prepared by the VTA that would address the BART design issues related to the Downtown San Jose station portal and the tunnel alignment at Coyote Creek. The Second Supplemental EIR is proposed for completion in 2009.

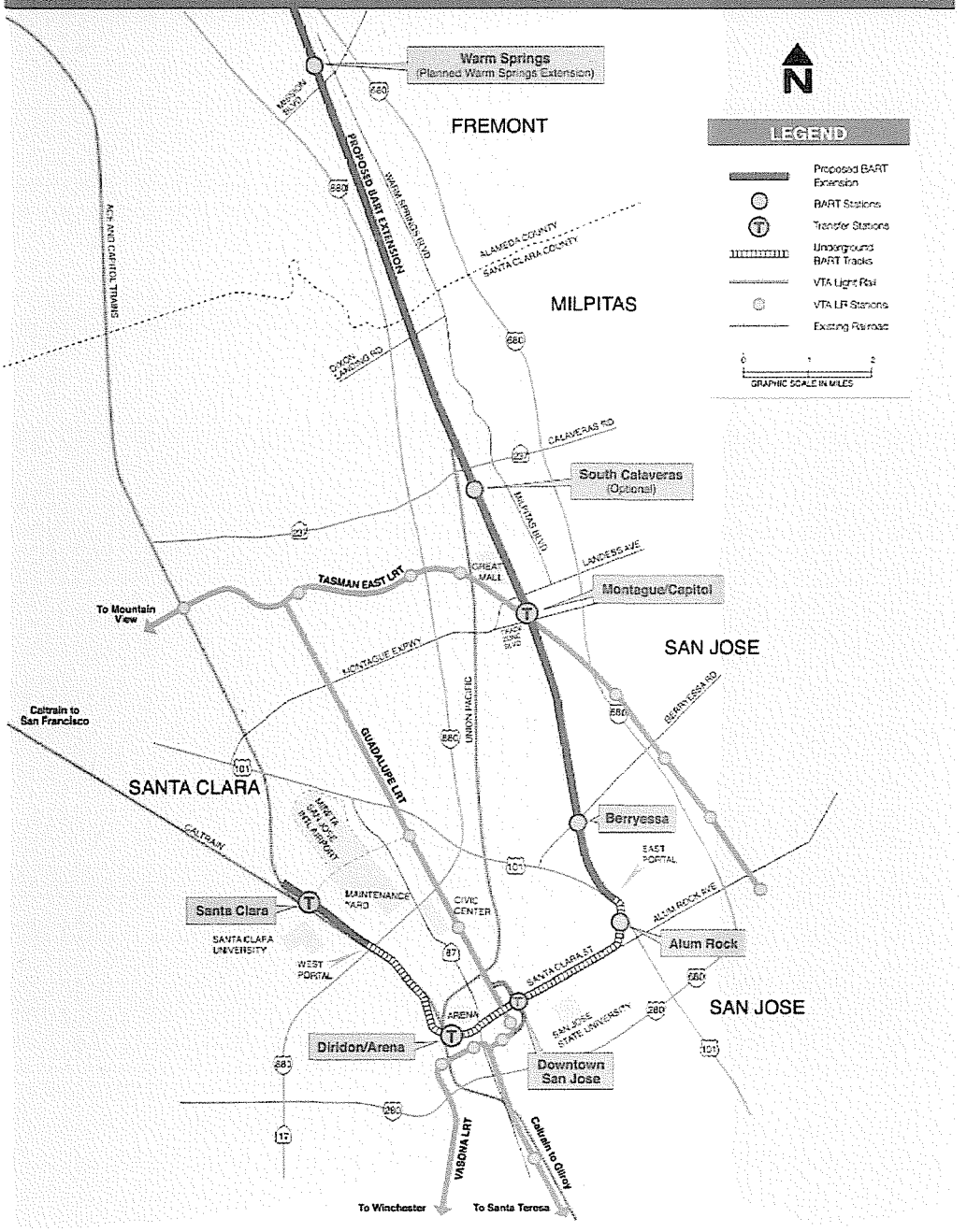
JAMES R. HELMER
Director of Transportation

For questions please contact Hans Larsen, Deputy Director, at 535-3835.

Attachments

Attachment 1

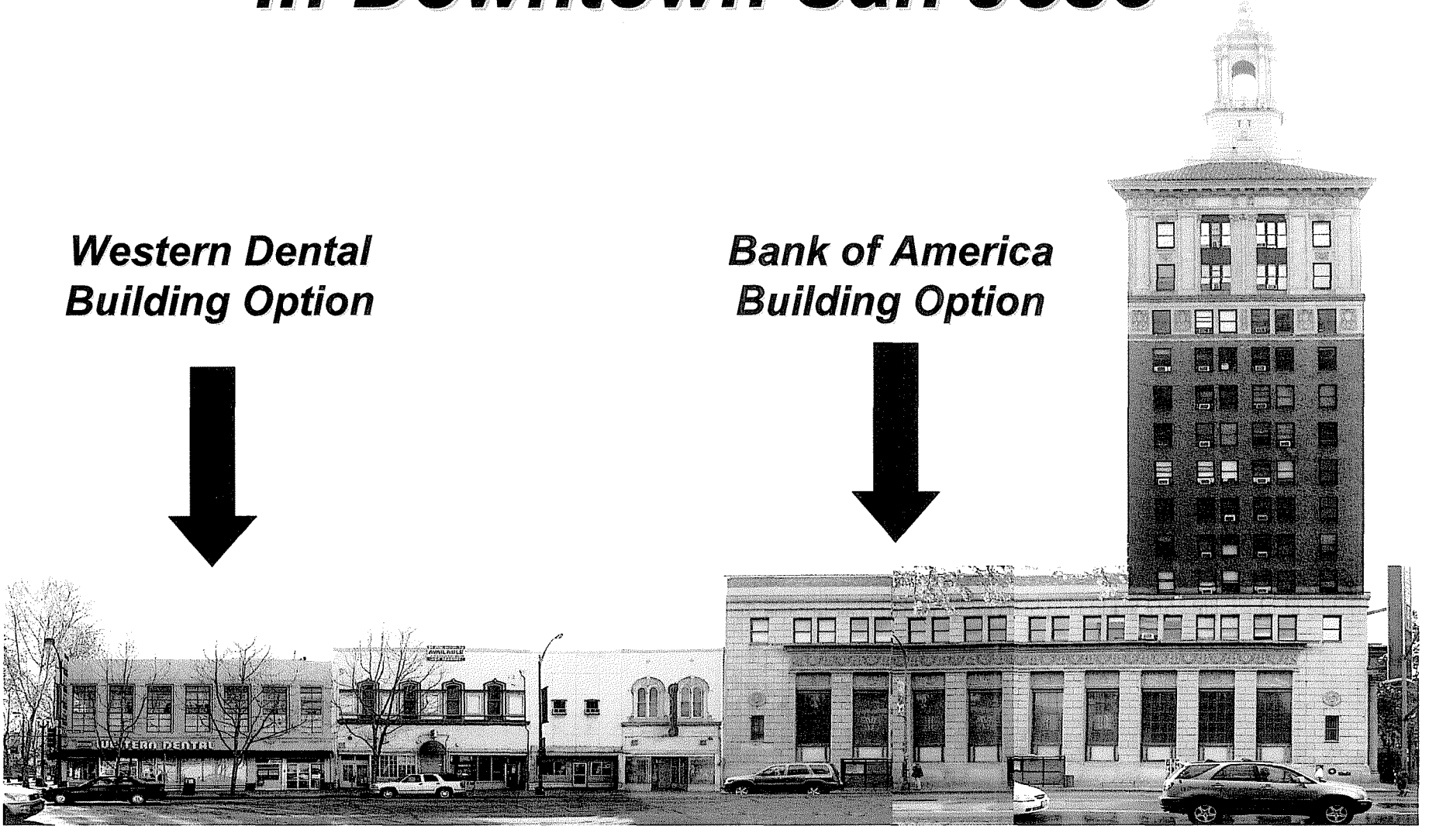
BART to Milpitas, San Jose and Santa Clara

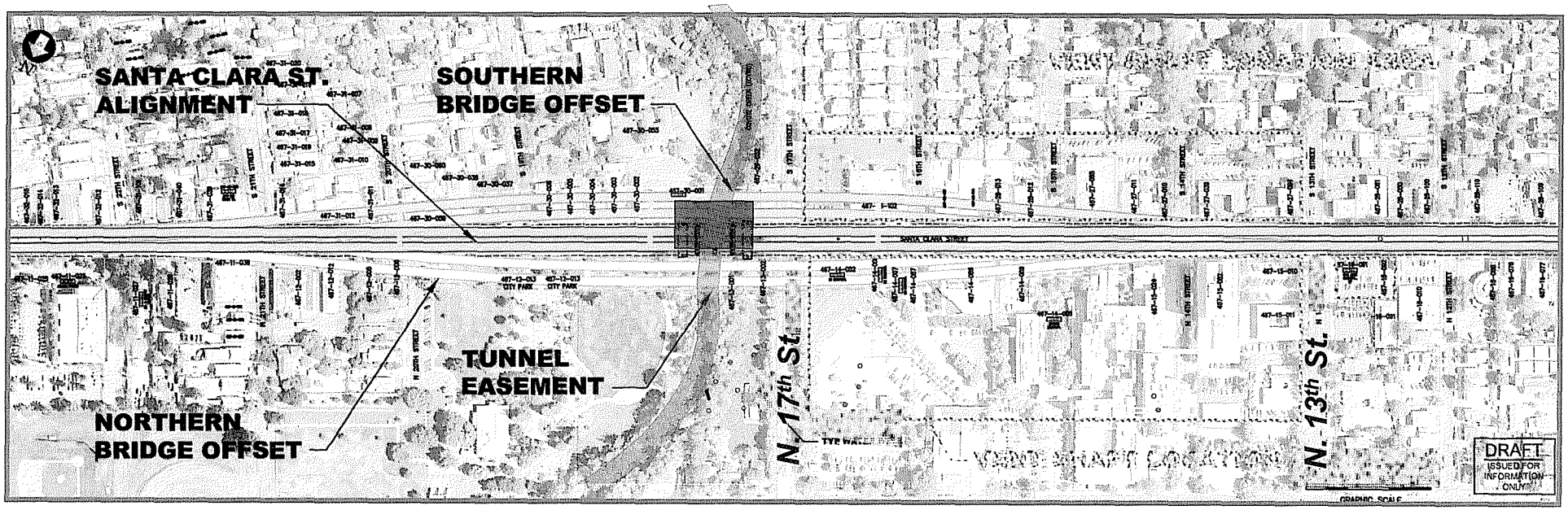
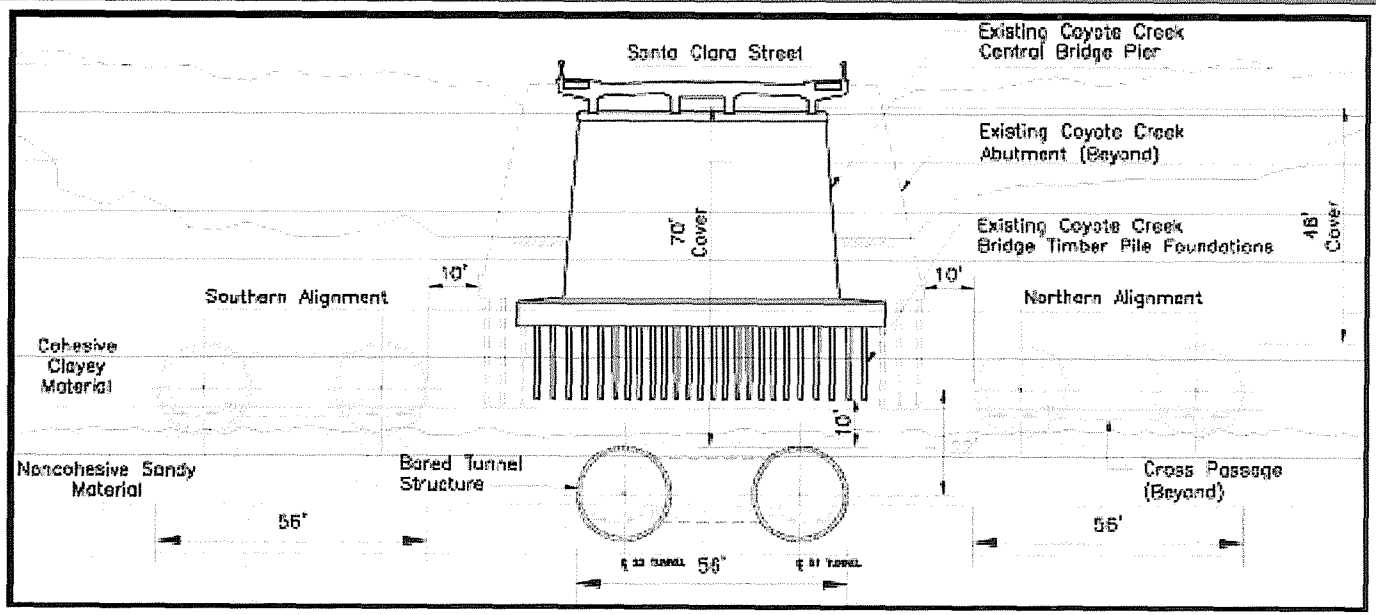


BART Station Portal Options in Downtown San Jose

Western Dental Building Option

Bank of America Building Option



Attachment 3

BART Tunnel Alignment at Coyote Creek