



**SANTA CLARA VALLEY  
TRANSPORTATION AUTHORITY  
REQUEST FOR INDUSTRY FEEDBACK (RFIF)**

**RFIF S20174**

Issue Date: September 16, 2020

Requested Response Due Date: October 30, 2020

**SUBJECT: VTA’s BART Silicon Valley Phase II Extension Program/Tunnel and Trackwork Project**

**PURPOSE:** The purpose of this Request for Industry Feedback (“RFIF”) is to gather information regarding interest from organizations (each an “Organization”) in a progressive design-build contract for the single-bore tunnel and trackwork (“Contract”) for VTA’s BART Silicon Valley (BSV) Phase II Program (“Program”). The information obtained pursuant to this RFIF will be considered by VTA in advancing the Program, and may be reflected in subsequent procurement documents, including but not limited to a Request for Qualifications and a Request for Proposals.

More specifically, this RFIF has two purposes:

- First, to seek the industry’s perspective and feedback on the questions in Appendix A to this RFIF. Interested parties are strongly encouraged to submit written responses to these questions.
- Second, to arrange for optional follow-up individual meetings (at VTA’s sole discretion) with qualified Organizations as described in Section 4 below.

**RFIF SCHEDULE:** VTA anticipates the following schedule for this RFIF S20174:

<b>Milestone</b>	<b>Date</b>
RFIF released	September 16, 2020
Deadline for receipt of RFIF Questions	5:00 p.m. Pacific Time, September 29, 2020
RFIF Clarification/Addendum Released	October 21, 2020
Deadline for receipt of RFIF Responses	5:00 p.m. Pacific Time, October 30, 2020
Discretionary Meetings	November 9 – November 20, 2020

**NOTE TO ORGANIZATIONS:** This is an RFIF only and is *issued solely for market research purposes*. It does not constitute a formal solicitation, nor does it guarantee that a formal solicitation may follow. This RFIF should not be construed as a means to pre-qualify vendors; not responding to this RFIF does not preclude participation in any future solicitation, if one is issued. Time and resources spent by Organizations in the development of a response to this RFIF or attending an individual meeting are voluntary and solely at that Organization's cost. Any future contract related to the subject of this RFIF that may be awarded must comply with VTA's procurement policies/procedures as well as any other relevant VTA policies/procedures.

## **SECTION 1: INTRODUCTION**

**OPPORTUNITY:** VTA intends to award the Contract in the spring of 2022. The Contract budget is currently estimated between \$1.4B to \$1.9B. This RFIF is intended to gauge interest in the Contract from the transit design-build community, and to obtain specific feedback on the scope of the Contract, the optimal approach to project delivery and related considerations.

**ABOUT VTA's BART SILICON VALLEY PHASE II EXTENSION PROGRAM:** The largest single public infrastructure project ever constructed in Santa Clara County, the Program will extend BART service six miles from the Berryessa/North San Jose BART station through downtown San José, terminating in the City of Santa Clara.

Transit oriented communities are planned for each of the future station locations, and the completion of the project will finally "ring the bay" with frequent rail service.

Phase II is planned to include:

- 28th Street/Little Portugal Station
- Downtown San José Station
- Diridon Station
- Newhall Yard & Santa Clara Station
- Mid-Tunnel Ventilation/Egress Facilities
- Transit Oriented Communities

The Program is proposed to be divided into four discrete projects and corresponding contracts. These will include Contract 1 (Systems), Contract 2 (Tunnel and Trackwork), Contract 3 (Newhall Yard & Santa Clara Station), and Contract 4 (Stations). There will also be contracts associated with Transit Oriented Communities. **This RFIF covers only Contract 2 – Tunnel & Trackwork.**

It is noted that there are significant interface and coordination challenges within this Contract that the team will need to resolve. Aside from internal subcontractors like the trackwork and contact rail, there will be external interfaces with the systems installers, stations and railyard contractors, some of which will need to occupy portions of the mainline tunnel during construction. Having the ability to formulate and implement plans to overcome these logistical challenges is viewed as being critical to the program success.

For more information, please visit <https://www.vta.org/projects/bart-sv/phase-ii>. Please note that much of the background information contained under this website link was prepared for prior project configurations (i.e. twin bores rather than the current single bore). Regardless, the

information is useful in providing a general understanding of many of the project related challenges and issues.

**ABOUT THE CONTRACT:** The Contract will include:

- Bored tunnel: Approximately 4.7 miles of a minimum 43-foot interior diameter tunnel: TBM (estimated 48-foot excavated diameter soft ground, pressurized-face tunnel boring machine) procurement, tunnel construction (about 120 feet maximum depth to the invert with 1000 foot minimum horizontal curvature), tunnel interior structures (station platform structural concrete for two underground stations and two mid-tunnel ventilation/egress facilities, internal concrete work including emergency walkways, track slabs, invert, partition walls, etc.
- Portals: Utilities, enabling works, support of excavation (SOE) installation, excavation and support, permanent structure fit out including building services, civil site restoration (East Portal only) and demobilization
- Mid-Tunnel Ventilation/Egress Facilities: Utilities, enabling works, SOE installation, excavation and support, permanent structure fit out including building services, civil site restoration and demobilization
- 28th Street / Little Portugal Station: Utilities, building demolition, site preparation, SOE installation, excavation and support
- Tunnel liner knockout panels/sections for future adit connections and future entrances
- Compensation grouting
- Mainline trackwork including contact rail: The trackwork for this Contract will be complex and very unique for rail systems in the U.S. using a configuration to facilitate the transition and stacking of the guideway system through the proposed underground stations.

BART's track gage is non-standard at 66 inches (5'-6"). Two basic types of trackway construction are used: at-grade and subway. At-grade tracks are typically ballasted track using concrete ties. Subway tracks are typically constructed using concrete slab track with direct fixation fasteners. Continuous walkways are provided adjacent to all tracks to provide for emergency evacuation and maintenance access. Track designs will utilize continuously welded rail throughout, including on sharp curves and special trackwork. Standard turnouts and special trackwork designs, modified for BART's non-standard track gage, are to be used.

Traction power is of the direct current type (DC), at 1000 Volts, and supplied to revenue vehicles through an electrified contact rail system mounted outside of and in parallel with the running rails. The high voltage is converted at the receiving points to 34.5 kV AC for distribution to traction power substations via two sets of parallel feeder cables. The

traction-power substations transform the 34.5 kV AC to 1000 V DC using transformer-rectifier sets.

The contact rail system is electrically continuous throughout the system. The contact rail, a composite steel rail with aluminum insert, is supported at regular intervals by porcelain standoff insulators. The upper face of the steel rail provides the collector shoe running surface, and aluminum inserts fill both sides of the web area to provide good electrical conductivity.

***Please note, for this Contract the VTA is planning on furnishing the material for rail, switches and contact rail. The contractor will be responsible for installation, quality control and testing***

- Direct coordination of the interface with the separate Systems Contractor (Contract 1) during system wide installation and testing

VTA has decided to utilize a Project Labor Agreement (PLA) for this Contract. It is currently under discussions and, if successfully negotiated, VTA believes that it will be in-place by the end of 2020.

**ABOUT VTA:** The Santa Clara Valley Transportation Authority, also known as VTA, is the result of a 1995 merger between two previously separate entities: the Santa Clara County Transit District and the Congestion Management Agency for Santa Clara County. VTA is an independent special district responsible for bus and light rail operations, paratransit, congestion management, specific highway improvement projects and countywide transportation planning. As such, VTA is both an accessible transit provider and multi-modal transportation planning organization involved with transit, highways, roadways, bikeways, and pedestrian facilities. Working under the direction of a 12-member Board of Directors (“Board”), VTA’s annual operating budget is approximately \$400 million, and its currently approved capital program is approximately \$1 billion. VTA’s bus fleet of 505 buses serves a 346 square mile urbanized service area and operates approximately 18 million miles annually. The 42.2-mile light rail system is served by 99 rail cars and 5 historic trolley cars and operates approximately 2.2 million miles annually. VTA employs approximately 2,300 people, of whom approximately 700 are administrative, clerical and professional positions and approximately 1,600 are operators and maintenance positions. There are four operating/maintenance facilities located within Santa Clara County. The administrative headquarters is located separately from these four facilities.

For more information about VTA, log on to [www.VTA.org](http://www.VTA.org).

## **SECTION 2: INSTRUCTIONS & INFORMATION FOR ORGANIZATIONS**

**ORGANIZATION RESPONSES AND QUESTIONS:** Please submit your Organization's email response to this RFIF, along with relevant supplemental material if desired, to VTA using the contact information and subject line description below, no later than October 30, 2020.

In addition, you may submit questions or comments for clarification of this RFIF no later than September 29, 2020. A response to your questions or comments is not guaranteed.

Please send all responses, questions, and correspondence to:

Mary Talentinow, Contracts Manager  
Santa Clara Valley Transportation Authority  
3331 N. First Street, Bldg. B  
San Jose, CA 95134-1906  
Email: Mary.Talentinow@vta.org

Re: RFIF S20174 - BART Silicon Valley Phase II: Tunnel and Trackwork Contract

**VENDOR REGISTRATION:** Vendors are advised to register in VTA's vendor portal at [www.vta.org/business-center](http://www.vta.org/business-center) to ensure timely notifications to their e-mail address regarding this RFIF. This RFIF is posted under NAICS code 237990 – Other Heavy Civil Engineering & Construction. Vendors should choose this NAICS code when registering to enable RFIF-related notifications.

**RFIF OWNERSHIP:** All responses, inquiries, and correspondence related to this RFIF and all reports, charts, displays, schedules, exhibits, and other documentation submitted by any Organization as part of this RFIF or in an individual meeting will become the property of VTA when received by VTA and will not be returned. VTA will have the right to use such materials, information and ideas without restriction.

**DISCLOSURE OF INFORMATION:** All written submissions and all other information submitted to VTA in response to this RFIF or in an individual meeting are subject to applicable public record laws. As a result, participants in this process should not provide any information they are not willing to publicly disclose.

**EFFECT OF RESPONSES TO QUESTIONS AND INDIVIDUAL MEETINGS:** Neither responding to the questions nor participating in an individual meeting is a prerequisite for participating in any future procurement for the Program. Similarly, responding to the questions or participating in an individual meeting will not confer on the participant any preference, special designation, advantage or disadvantage whatsoever in any subsequent procurement process related to the Program. VTA will not evaluate responses to the questions or the results of an individual meeting as part of any procurement.

VTA will accommodate meeting requests in its sole discretion and is under no obligation to accommodate any or all meeting requests. VTA may cancel the opportunity to have individual meetings in its sole discretion at any time without any liability.

VTA will not make any commitments at the individual meetings. Similarly, organizations may not rely in any way whatsoever on any statements made by VTA or its representatives related to this RFIF, including any statements at the individual meetings.

VTA makes no representations, warranties, or guarantees that the information contained in this RFIF, on the Program website or discussed at individual meetings is accurate or that such information accurately represents the conditions that would be encountered during any subsequent procurement or contract.

Consistent with applicable law, VTA may communicate with one or more organizations responding to this RFIF, participants in the individual meetings or anyone else regarding the subject matter hereof.

By submitting a response to this RFIF and/or participating in an individual meeting, each Organization and meeting participant, as applicable, expressly agrees that it will not have any rights against VTA arising from the information provided by VTA, VTA's receipt and use of responses to questions, VTA's holding individual meetings or the results of those meetings.

### **SECTION 3: RESPONSES TO QUESTIONS**

In addition to written responses to the questions, respondents should provide a brief cover letter that references “RFIF S20174 - BART Silicon Valley Phase II: Tunnel and Trackwork Contract – Responses to Questions,” and includes the following descriptive information for itself and its team members (if any):

- (1) Name of respondent and its team members (if any).
- (2) Principal line of business for respondent and its team members (if any).
- (3) Respondent’s interest in the Contract (i.e., design-builder, tunnel contractor, track contractor, etc.).
- (4) Name, title and contact information of the person responsible for submitting the response.

Please send electronic .pdf responses via email to: [Mary.Talentinow@vta.org](mailto:Mary.Talentinow@vta.org).

The subject line of the email transmitting the responses should clearly indicate the respondent’s name and “RFIF S20174 - BART Silicon Valley Phase II: Tunnel and Trackwork Contract – Responses to Questions”. Please limit your responses to no more than 20 pages total. Please do not include any extraneous marketing or business development collateral materials.

For Office 365 e-mail attachments, a 15MB size limit applies.

Responses may also be submitted on a flash/thumb drive labeled with the respondent’s name and “RFIF S20174 – BART Silicon Valley Phase II: Tunnel and Trackwork Contract – Responses to Questions” and delivered to the address shown in Section 2, above prior to the deadline.

The deadline to submit the cover letter and responses to the questions in Appendix A to this RFIF is 5:00 p.m. Pacific Time, October 30, 2020.

## **SECTION 4: INDIVIDUAL MEETINGS**

Respondents to this RFIF may be offered an optional follow-up individual meeting (at VTA's sole discretion) to discuss the responses and gain further understanding of issues raised.

VTA will offer such meetings only to Organizations that either (i) are design-build entities that have a proven track record of delivering transit projects of similar size, scale, and complexity as this Contract; or (ii) are tunnel and/or track contractors with the capability of delivering tunnel and/or track components suitable for the Contract.

If VTA decides to conduct individual meetings, they will be offered during the following time period: November 9 – November 20, 2020. Meetings may be conducted in a virtual format. Further information regarding any such meetings will be contained in the meeting invite.

Each of the meetings will last up to 90 minutes. We request that Organizations limit their attendees to a maximum of eight (8) participants.

**APPENDIX A**  
**ADDITIONAL QUESTIONS AND COMMENTS**

**Contracting**

1. What minimum financial capacity and team member experience requirements should VTA consider in the shortlisting process for the Contract?
2. Based on your experience with other procurements for design-build transit projects, do you have any comments or suggestions on a progressive design-build procurement process that VTA is proposing to use? What are key lessons learned or case studies that VTA should consider to help ensure a successful outcome?
3. In your experience what has been the most effective way to implement the ATC (Alternative Technical Concepts) process? What are some “Best in Class” examples of the ATC process in your experience?
4. VTA is contemplating payment and performance bonds in the amounts equal to the cost of construction for the Contract, with the total estimated design-build budget of \$1.4B to \$1.9B. Would such a requirement be problematic, considering the size and scope of the Contract? Why or why not? If it would, what payment and performance security requirements do you believe would be appropriate for VTA to impose for the Contract, particularly in light of California law and FTA requirements for similar contracts?

**Contract Scope and Phasing**

5. Is the contemplated scope of design and construction work for a progressive design-build procurement going to produce better value or other advantages for VTA than other project delivery methods? Is the scope attractive to the industry?
6. Given the benefits of innovation capture VTA is seeking from the progressive design-build project delivery model, are there specific design elements that VTA should be less prescriptive about (or scope differently) in order to maximize the opportunity for innovation from private sector proposers? Conversely, are there specific scope elements that should be further progressed in design than others prior to solicitation?
7. What are key factors you would consider in determining whether to participate in the RFQ/RFP process to award the Contract? Please note: Due to the complexity of the tunnel and trackwork construction, the RFQ will contain eligibility criteria for the tunnel contractor, trackwork (sub)contractor and their design team(s).
8. Indicate whether you consider a reasonable stipend for unsuccessful but responsive proposals from responsible proposers to be a factor in deciding whether to submit a proposal in response to a final RFP. If so, indicate what payment amount is reasonable for a progressive design-build procurement of this size and nature.

9. What form of contract oversight features should VTA build into its program to balance its need to ensure high quality contractor performance while at the same time offering its contractors flexibility in meeting the design criteria and technical requirements? Some projects utilize an Independent Engineer. What is the value of that role for this Contract?
10. The adits located between the mainline tunnel and the underground stations at Downtown San Jose Station, the Diridon Station and the Ventilation/Egress Facilities are very complex. Are there potential construction methods, interfaces, phasing or contract scoping considerations that would benefit the project and mitigate potential risks?
11. Currently, VTA is considering that the TBM launch portal will be located at the western side of the proposed alignment, within the Newhall Yard/Santa Clara Station site. Would it be of benefit to the project to provide the area at the terminus of the eastern side of the alignment as an alternative TBM launch site? How much space would be reasonable to provide for an efficient tunneling operation including planning for muck processing and removal? What would be a reasonable estimate of temporary power needs and the timing? How important or beneficial is it to provide for heavy freight rail access near the site?
12. VTA is planning to establish four office spaces as a PMO complex. It is believed that co-locating the design-build team within the complex will be conducive to a collaborative and efficient team. Please provide any thoughts on this concept and any advice on special considerations for planning purposes.

### **Schedule**

13. VTA has done a preliminary schedule assessment and determined a 7 year estimate of construction duration. Based upon the available information do you consider this a reasonable duration? What do you believe will be the critical path items for the Contract? Are there specific tasks VTA can perform or processes it can put in place pre- or post-procurement to facilitate or encourage project delivery within, or ahead of, this schedule?

### **Environmental Approval**

14. How do we best ensure that compliance with permit and mitigation requirements are maximized for the Contract without negatively impacting technical performance, project costs or schedule? What is the ideal method to quantify incorporation of sustainability measures for the Contract? The Program's Final Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report can be found here: [https://www.vta.org/projects/documents?document\\_search=&document\\_category%5B%5D=3901&project=656](https://www.vta.org/projects/documents?document_search=&document_category%5B%5D=3901&project=656)

### **Risk Assessment, Allocation and Mitigation**

15. In preparing the Contract, VTA will be making important decisions about the reasonable allocation of risks among itself, the design-builder, the other contracts and third parties,

including teaming with the selected contractor, developing a Geotechnical Baseline Report (with contractor input) and including a tunnel-specific Differing-Site Conditions clause in the Contract. What are the major cost and schedule risk drivers you expect for the Contract? Which aspects of the Contract would benefit from risk-sharing between VTA and contractors?

VTA has elected to utilize an Owner Controlled Insurance Program (OCIP) for this project pursuant to the proposed construction contract documents. The OCIP will provide General Liability, Excess Liability, and Workers' Compensation for all eligible contractors of every tier. In addition, VTA will arrange for project specific master builder's risk, master professional liability, and master contractor's pollution liability policies in addition to a Railroad Protective Liability consolidated insurance program. Contractors will be required to provide evidence of off-site insurance. For on-site work, contractors will be required to insure their owned tools and equipment and provide evidence of Auto Liability insurance.

VTA anticipates the OCIP will allow the engagement and participation of eligible contractors in every tier including small and disadvantaged business enterprises. Please provide your responses to the following questions:

- Describe specifically how you and your subcontractor teams would support the OCIP and cooperate to ensure its success.
  - Describe your prior experiences with OCIPs and the key elements that made it successful and/or made it challenging including how challenges were addressed and resolved.
  - Describe your recommendations for a robust safety program that enforces accountability, tracks preventable and non-preventable incidents and holds contractors responsible for both unfavorable and favorable loss history.
16. What forms of alternative dispute resolution should VTA consider for the Contract? How many levels of informal discussions are appropriate for a contract of this size and scope? In your experience, is mediation productive? Some contracts utilize a Dispute Resolution Board (DRB)—what insight do you have on DRBs? Should DRB decisions be binding?