



# CALIFORNIA High-Speed Rail Authority

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**California High-Speed Rail**  
**BRIEFING: June 26, 2024, Board Meeting**  
**Agenda Item #5**

**TO:** Chairman Richards and Board Members

**FROM:** Bruce W. Armistead, Chief of Rail and Operations Delivery

**DATE:** June 26, 2024

**RE:** Request Board Approval to Award the Agreement Resulting from the Design Services for Track and Overhead Contact Systems Procurement (HSR23-32).

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## **Summary**

Staff recommends that the Board of Directors (Board) authorize the Chief Executive Officer (CEO) to execute an agreement with the SYSTRA|TYPASA Joint Venture (SYSTRA|TYPASA) for Design Services for Track and Overhead Contact Systems (OCS) for the Central Valley in an amount not to exceed \$131.2 million for the first Notice to Proceed (NTP), consistent with the procurement strategies approved in the 2024 Business Plan.

With Board approval, SYSTRA|TYPASA will be contracted for services including provision of the Design Principles (preliminary design) for the track and OCS system for the Central Valley 171-mile Early Operating Segment (EOS), the Detailed Design for the 119-mile First Construction Section (FCS), and construction support services for the FCS. Staff will return to the Board prior to issuing future NTPs for Detailed Design and construction support services for the Merced to Madera and the Fresno to Bakersfield Locally Generated Alternative project sections.

## **Background**

The California High-Speed Rail Authority (Authority) is responsible for planning, designing, building, and operating the first high-speed rail system in the nation, linking California's major population centers. The Authority aims to complete construction and begin train and systems testing on the first 119-mile project segment between Madera and Poplar Avenue north of Bakersfield (the First Construction Section, or FCS) by the end of 2028 and begin revenue operations between 2030 and 2033 on the 171-mile project segment between Merced, Fresno, and Bakersfield (the Early Operating Segment, or EOS). The initial 119-mile FCS is a crucial part of these goals, as it will serve as the test track. The track, traction power, OCS, signaling,

communications, and trains must all be tested extensively to achieve certification from the Federal Railroad Administration.

With the development and adoption of the 2024 Business Plan, the Authority restructured its previous trainsets and track and systems procurements into a multi-phase effort. The deliberate sequencing of the procurements best meets the Authority's delivery schedule necessary for operations. In addition, breaking up the scope of work into multiple packages provides the opportunity for increased flexibility with alternative delivery methods, reduced risks, more schedule efficiencies, and better alignment with industry standards.

### ***Prior Board Action***

Pursuant to Board Resolution HSRA #23-08, the Board approved the release of a Request for Qualifications for Design Services for Track and Overhead Contact Systems OCS on November 2, 2023 (RFQ No. HSR23-32). The procurement was advertised November 3, 2023, with the RFQ posted for 153 days over a five-month period. Two Statements of Qualifications were received by the April 4, 2024, deadline.

### **Discussion**

The Design Services for Track and OCS contract is a critical first step of the multi-phase procurement strategy for the track and systems and trainset procurements approved with the 2024 Business Plan.

The Consultant will provide design services for the track and OCS for the 171-mile EOS. This includes designing the entire track and OCS network and along-track cable containment, across-track ducts, access walkways, fencing, and drainage systems. The Consultant will collaborate extensively with the future track and OCS construction contractor, during the design phase and during construction, as well as with other interfacing contractors (trainsets, traction power, signaling and communications contractors) to ensure the system as a whole is integrated.

### ***Scope of Work***

The delivery of the scope of work will be phased through several NTPs and detailed through subsequent Task Orders issued by Authority staff for work that includes:

- Preparation of the design and design support during construction of the Authority's track system, sub-ballast layer, OCS, along-track cable containment, across-track ducts, access walkways, fencing, and drainage for the 171-mile EOS from Merced to Bakersfield.
- Production of high-level designs for track and OCS elements that cover the EOS, including track and OCS inside the maintenance of way facilities, maintenance of way sidings, Trainset Certification Facility, and light/heavy maintenance facilities.
- Production of detailed designs of the track system, including the sub-ballast layer, OCS, along-track

cable containment, across-track ducts, access walkways, fencing, and drainage for the 119-mile FCS.

- Collaboration with Authority and the track and OCS construction contractor, trainsets supplier, and the systems designers and constructors to ensure optimal design and operability of technical interfaces.
- Managing technical and non-technical interfaces related to their scope with interfacing contractors such as the civil design consultants, civil construction contractors, future track and OCS construction contractor, systems contractors, facilities and station design consultants, facilities and station construction contractors, trainsets contractor.
- The contract will support track and OCS elements for the Authority's Reliability Availability Maintainability (RAM) Management Plan and implement Building Information Modelling (BIM) for the development of the initial digital model of the entire rail system, stations, operations center, and maintenance facilities.

The Authority will issue a Notice to Proceed (NTP) to the Consultant to commence work after the execution of the contract. The entire work will be phased through multiple NTPs; NTP 1, NTP 2 and NTP 3 that are defined in the contract. The NTPs will require staggered start dates, beginning with NTP1 and ultimately the three NTPs will progress concurrently within the contract's period of performance.

**NTP 1:** NTP 1 will be five years and two months to complete the Design Principles stage for the track and OCS system for the 171-mile EOS, the Detailed Design stage for the 119-mile FCS, and to provide construction support services for the FCS. The not-to-exceed dollar value for NTP 1 is \$131.2 million.

**NTP 2:** The second Notice to Proceed NTP 2 will be approximately four years to complete the Detailed Design stage and to provide construction support services for the Merced to Madera (M-M) project section. The Authority anticipates issuing this NTP prior to completion of NTP 1.

**NTP 3:** The third Notice to Proceed includes completion of the Detailed Design stage and construction support services for the Fresno to Bakersfield Locally Generated Alternative (LGA) project section. NTP 3 will take approximately four years to complete. The Authority anticipates issuing this NTP prior to completion of NTP 1.

### ***Contract Term and Budget***

The anticipated total not-to-exceed dollar value for the Agreement is \$161 million for six years and eight months. The not-to-exceed dollar value for NTP 1 is \$131.2, with the balance of the total contract value available for NTP 2 and NTP 3, only with future Board approval.

### ***Procurement Process***

The solicitation followed the Authority's Request for Qualifications (RFQ) process for the architectural and engineering (A&E) contracting method where statements of qualifications (SOQs) are submitted, and selection was based on qualifications. The process was managed directly by Authority staff. Cost was not a factor in the selection, but fair and reasonable fees and costs have been negotiated and agreed upon with highest rated Offeror. The solicitation process was conducted in accordance with Article XXII of the California Constitution, Government Code section 4525 et seq., the Authority's A&E regulations (Cal. Code Regs., Title 21, § 10000 et seq.), and the Board's RFQ policy.

### ***Statement of Qualifications***

The Authority received Statements of Qualifications (SOQs) from two Offerors: SYSTRA|TYP SA Joint Venture and PGH Wong Engineering, Inc.

### ***Procurement Evaluation Criteria***

The RFQ process was managed by the Authority staff. The SOQs submitted by Offerors were reviewed to ensure that all requisite qualifications and other RFQ requirements were met.

The SOQs were evaluated and scored by an Evaluation Selection Committee (comprised of 8 Authority staff members from various program areas) pursuant to established criteria in the RFQ, which included the following area of evaluation: (Maximum SOQ Weighted Score = 60)

#### **1. PERFORMANCE AND EXPERIENCE (30 Points)**

The quality, depth, and relevance of the following items:

- a. Offeror examples of completed projects of similar size, scope, and/or complexity. (8 max)
- b. Offeror examples of experience performing the Work required for the Project. (8 max)
- c. Experience performing the Work required for the Project for Subconsultants employing Key Personnel. (4 max)
- d. Offeror examples of applicable cost savings and schedule improvement methodologies utilized on projects of similar scope and complexity. (4 max)
- e. Offeror demonstration of successful management of design integration with interfacing contractors on projects of similar scope and complexity. (3 max)
- f. Offeror demonstration of developing and achieving RAMS targets on projects of similar scope and complexity. (3 max)

#### **2. ORGANIZATION AND KEY PERSONNEL (30 Points)**

The extent to which:

- a. The proposed project organization demonstrates a logical and cohesive team with effective communication within its organization and with the Authority. (4 max)
- b. The initial draft organization and management plan conveys the proper level of response and commitment for the Work. (4 max)

#### KEY PERSONNEL AND ROLES

The extent to which:

- c. The Principal-in-Charge has the individual qualifications, professional skills, and sufficient experience to effectively lead and manage the Project. (6 max)
- d. The qualifications and professional skills of the Key Personnel (except for the Principal-in-Charge, which is evaluated in (c) above) appropriate for the roles assigned. (8 max)
- e. The past experience of the Key Personnel is sufficient to demonstrate the ability to effectively deliver the Work required for the Project. (8 max)

### 3. UNDERSTANDING OF PROJECT ELEMENTS (30 Points)

The extent to which:

- a. The Offeror demonstrates a thorough knowledge of the high-speed rail program. (8 max)
- b. The Offeror demonstrates an understanding of the Work required for the Project. (7 max)
- c. The Offeror demonstrates an ability on past projects to deliver on an engineering management plan, program management plan, BIM execution plan, and a detailed design schedule. (7 max)
- d. The Offeror demonstrates an understanding of how this Work integrates into the California High-Speed Rail Program requirements, including any potential challenges. (8 max)

### 4. SMALL BUSINESS PARTICIPATION (10 Points)

The extent to which:

- a. The Offeror provides a clear commitment to meeting the Authority's SB Program utilization goals under this Agreement. (5 max)
- b. The Offeror's SB narrative clearly identifies how the Offeror will utilize SBs to achieve the Authority's SB Program utilization goals under this Agreement. (5 max)

At the conclusion of each SOQ evaluation, the Evaluation Selection Committee used a consensus scoring process to score each SOQ. In accordance with Authority policy, the two Offerors were invited to participate in discussions with the Evaluation Selection Committee.

In-person discussions were held with both Offeror teams. Each discussion was evaluated and scored by the Evaluation Selection Committee in the areas of: (Maximum Discussion Weighted Score = 40)

#### 1. PRESENTATION (15 Points)

- a. Quality and appropriateness of the presentation. (5 max)
  - b. Appropriate speakers relative to Project challenges (5 max)
  - c. Principal-in-Charge leadership and management of the team. (5 max)
2. KEY PERSONNEL PARTICIPATION (25 Points)
- a. Principal-in-Charge's understanding of the Project, including challenges and requirements. (7 max)
  - b. Except for the Principal-in-Charge, which is evaluated in (a) above, Key Personnel's understanding of the Project, including challenges and requirements. (8 max)
  - c. Key Personnel's knowledge and understanding of the Work in their respective areas of expertise. (10 max)
3. RESPONSIVENESS TO QUESTIONS (60 Points)
1. Quality and thoroughness of response to question number 1. (10 max)
    - Describe the process you envision to incorporate the civil infrastructure documentation and data as you start your track and OCS design, including the sequencing of tasks.
  2. Quality and thoroughness of response to question number 2. (10 max)
    - Describe your experience working on a project with multiple progressive design contractors and the methodology you would use to successfully integrate the track and OCS within the overall system of systems.
  3. Quality and thoroughness of response to question number 3. (10 max)
    - Explain the challenges you anticipate in the track system design process that could prevent FRA's certification of a track system supporting an operating speed of 220 mph (354 km/h) and any potential solutions to these challenges.
  4. Quality and thoroughness of response to question number 4. (10 max)
    - What technical and operational elements will you consider in choosing a recommended OCS system and what issues do you envision with this.
  5. Quality and thoroughness of response to question number 5. (10 max)
    - Provide an overview of the proposed Common Data Environment (CDE) content, management, and access management you envision, as well as how the Authority will be included in the decision process around its design and evolution.
  6. Quality and thoroughness of response to question number 6. (10 max)
    - Please describe, with specific details, how you will meet or exceed the Authority's Small Business participation goals, particularly when the contract requires such highly technical expertise.

The Evaluation Selection Committee concluded the evaluation process by ranking the Offeror with the highest score as number one and recommended them to the Authority's CEO for contract award. A Notice of Proposed Award was posted on May 6, 2024, identifying the top-ranking Offeror as SYSTRA|TYPESA based upon the following scores:

Offeror	Total Weighted SOQ Score	Total Weighted Discussion Score	Final Score	Rank
SYSTRA TYP SA Joint Venture	56.94	38.4	95.34	1
PGH Wong Engineering, Inc	52.92	25.0	77.92	2

Negotiations were conducted and concluded with the highest ranked Offeror.

***Small Business Requirements***

The RFQ incorporated the Small Business (SB), Disabled Veteran Business Enterprise (DVBE) and Disadvantaged Business Entity (DBE) participation goals that were adopted November 2, 2023.

SYSTRA|TYP SA has partnered with 19 small businesses as part of a comprehensive team to support this contract and has committed to achieving a Small Business Participation goal of 32.00%. With the SYSTRA|TYP SA commitment to utilize 18 California based small business firms; 12 are Micro Businesses, 10 are Disadvantaged Business Enterprise and 2 are Disabled-Veteran Business Enterprises; additionally, one of the microbusinesses is also a certified LGBT Business Enterprise (LGBTBE), as part of California Public Utilities Commission’s Utility Supplier Diversity Program. The SYSTRA|TYP SA small business commitment will be expected to comply with the Authority’s SB program over the life of the contract and as a means of self-compliance SYSTRA|TYP SA has named a Small Business Officer who will report to the Principal-in-Charge in order to ensure open communications for any issue related to small business utilization.

**Legal Approval**

The Legal Office has reviewed, and this item complies with Authority policy.

This RFQ and procurement process was conducted with the assistance of, and under review of, the Authority’s Legal Office. The Legal Office has reviewed this contract and the relevant laws, regulations, and policies, and deems this contract to be legally sufficient for execution.

**Budget and Fiscal Impact**

This request is to execute a new A&E contract with an initial not-to-exceed amount of \$131.2 million for NTP 1. There is an option to increase this to a total not-to-exceed amount to \$161 million at a later date to complete the Detailed Design stage and to provide construction support services for the M-M project section (NTP 2) and the LGA project section (NTP 3).

If the Authority seeks to exercise the NTP 2 & NTP 3 options to progress to final design and construction oversight for M-M and LGA, staff will return to the Board for approval.

The funds associated with this request include State and Federal sources, including State Cap-and-Trade funds. Upon approval, allocated budget reserved for this work will be available to the Track and OCS Design Services contract for a not-to-exceed amount up to \$131.2 million. The request is consistent with the Updated Total Expenditure Authorization (#HSRA 24-01) approved at the January 18, 2024, Board Meeting.

<u>2024/25 Fiscal Year Budget</u>				
Contract Name	Contract Number	Current FY Contract Budget	Budget Change	Funding Source
TS1	HSR-PEND-23-09-11	\$54,998,106	-\$54,998,106	State and Federal
Design Services Track and OCS	TBD	\$0	\$54,998,106	State and Federal
Total			\$0	

<u>Total Program Budget</u>				
Contract Name	Contract Number/Budget Allocation	Current Total Program Contract Budget	Budget Change	Funding Source
TS1	HSR-PEND-23-09-11	\$131,200,000	-\$131,200,000	State and Federal
Design Services Track and OCS	TBD	\$0	\$131,200,000	State and Federal
Total			\$0	

REVIEWER INFORMATION	SIGNATURE
Reviewer Name and Title: Brian Annis Chief Financial Officer	Signature verifying budget analysis:
Reviewer Name and Title: Alicia Fowler Chief Legal Counsel	Signature verifying legal analysis:

**Recommendations**

Staff recommends that the Board authorize the Chief Executive Officer, or his designee, to execute a contract with SYSTRA|TYPASA Joint Venture for Design Services for Track and OCS for a contract value that shall not exceed \$131.2 million for NTP 1 work.

**Attachments**

- PowerPoint Presentation
- Draft Board Resolution HSR 24-09 Award of the Design Services for Track and Overhead Contact Systems Contract