

Schedule 17 Key Individuals

a. Key Personnel Qualifications

1. **Principal In Charge** – The Principal In Charge has overall responsibility for track, systems, integration, cost, schedule, safety, and quality obligations for delivery of the Project. This person has responsibility for the delivery and administration of all design integration, procurement, stakeholder coordination, construction, testing and commissioning activities for the duration of the Agreement and is responsible for the Work being delivered safely and within time and budget. The person nominated for this role should have at least twenty (20) years' experience in the delivery of railroad projects within a multidisciplinary environment. Proposer shall provide the following information for the mega projects referenced by the Principal in Charge: total value of the Agreement at award, final value of the Agreement at Agreement close, original completion date and final completion date and number of claims if any.
2. **Construction Manager – Responsible to manage the day to day operations and coordination with the Authority Construction Manager in all aspects of the Agreement and delivery thereof. This position should be proficient in managing Alternative Delivery contracting, with experience leading and supporting a collaborative management style and demands this of his/her team, Experienced in managing in excess of a billion in contracts with major components of rail, High Speed Rail is preferred but not required. Experience managing systems installation and coordination with track and OCS install. Will report daily to the project site in the Central Valley. This position should demonstrate the ability to work collaboratively with the Authority.**
3. **Engineering and Design Director** – The Engineering and Design Director is responsible for all engineering oversight and management within the TSCC Contractors' project organization. This person is responsible for coordination between the TSCC Contractor's construction, and testing teams, interface with the Track/OCS Design Services Consultant, interface with Interfacing Contractors and Interfacing Railroads and is responsible for the oversight of all subcontracting organizations. The person nominated for this role should have a minimum of twenty (20) years of progressive experience leading all engineering activities within a contractor's organization for the successful delivery of complex, multidisciplinary rail systems projects, including previous high-speed rail delivery experience. The Engineering Director should hold an appropriate license or have commensurate professional recognition/accreditation from a comparable engineering institution. Proposer shall list high speed rail projects referenced by the Engineering Director and their final value.
4. **Design Oversight Manager** – The Design Oversight Manager is responsible for the interface with the Track/OCS Design Consultant's and other Authority's appointed contractors organization(s) a. The person nominated for this role should have a minimum of 15years of progressive experience leading design organizations for the successful delivery of complex, multidisciplinary rail systems projects, including previous high-speed rail system design experience. The Design Oversight Manager shall be a registered professional engineer in the State of California.
5. **System Integration Manager** – The Integration Manager is responsible for the specification, control, implementation and testing (where applicable) of all interfaces, including, but not limited to, interface with the Track/OCS Design Consultant, interface with Interfacing Contractors and Interfacing Railroads and Third Party Organizations and is responsible for the interface oversight of all subcontracting organizations. The person nominated for this role shall have a minimum of 10 years of experience leading Interface management activities for installation organizations for the successful delivery of complex, multidisciplinary rail systems projects, including previous high-speed rail installation experience.
6. **Safety, Security and Certification Manager** – The Safety and Certification Manager is responsible for overseeing and managing the system safety and certification aspects of the TSCC Contractor's activities for the duration of the Agreement. This individual shall ensure project

compliance with regulations and standards, establish an appropriate system safety framework, interface with regulators to ensure program compliance and develop the safety case elements for the TSCC Contractor's works. The person nominated for this role should have a minimum of 15 years of experience leading safety and certification activities for complex, multidisciplinary rail systems projects.

7. **Track & OCS Installation Manager** – The Installation Manager is responsible for the management and oversight of the installation of all Track and OCS Systems, and will oversee the execution of all installation works required to satisfy program objectives. The Installation Manager shall be responsible for the management of all installation personnel and resources. The person nominated for this role shall have a minimum of 15 years of successfully delivering complex, multidisciplinary rail systems projects, including previous high-speed rail installation experience. The Installation Manager shall hold an appropriate CA PE or have commensurate professional recognition/accreditation from a comparable engineering institution.
8. **Traction Power System (TPS) Manager** – The TPS Manager is responsible for the management and oversight of the design, manufacturing, construction, installation, testing and commissioning of the TPS and coordination with stakeholders. The person proposed for this role shall have a minimum of 15 years of experience successfully delivering complex, multidisciplinary rail systems projects, including previous high-speed rail experience. The TPS Manager shall hold an appropriate CA PE or have commensurate professional recognition/accreditation from a comparable engineering institution.
9. **Communication Manager** – The Communication Manager is responsible for the management and oversight of the design, manufacturing, construction, installation, testing and commissioning of the Communication System and coordination with stakeholders. The person proposed for this role shall have a minimum of 15 years of experience successfully delivering complex, multidisciplinary rail systems projects, including previous high-speed rail experience. The Communication Manager shall hold an appropriate CA PE or have commensurate professional recognition/accreditation from a comparable engineering institution.
10. **Train Control Manager** – The Train Control Manager is responsible for the management and oversight of the design, manufacturing, construction, installation, testing and commissioning of the Train Control System and coordination with stakeholders. The person proposed for this role shall have a minimum of 15 years of experience successfully delivering complex, multidisciplinary rail systems projects, including previous high-speed rail experience. The Communication Manager shall hold an appropriate CA PE or have commensurate professional recognition/accreditation from a comparable engineering institution.
11. **Civil/Structural Integration Manager** – The Civil/Structural Integration Manager shall be a **California-licensed Professional Engineer (PE)** with experience in major rail or high-speed rail civil/structural works. The role leads all interfaces between the Track and Systems Works and the existing civil infrastructure—viaducts, bridges, tunnels, retained cuts, embankments, drainage, utilities, and station structures. The Manager ensures all track, OCS, traction power, signalling, and telecoms installations are fully compatible with **high-speed structures**, including requirements for clearances, dynamic behaviour at high speed, load paths, deflection limits, seismic performance, and structural capacity for system loads. The role coordinates field verification, identifies and resolves civil–systems interface issues, confirms the suitability of as-built structures, and ensures that all structural assessments, modifications, and approvals meet CHSRA requirements and are **signed and sealed in accordance with California PE regulations**.
12. **Digital Manager** – The Digital Manager shall lead all digital engineering activities for the Track & Systems Works, with primary responsibility for BIM delivery, Cyber Security data specifications, and digital integration of train control and systems assets. The role manages the TSCC Contractor's Common Data Environment (CDE), ensures compliance with CHSRA BIM/CAD Standards, Asset Information Requirements, GIS specifications, and all digital data requirements for signalling, ETCS, telecoms, SCADA, traction power, cyber security and OCS. The Manager

shall oversee the creation, federation, and quality of BIM models and structured data, ensuring all system components—train control equipment, cabinets, lineside assets, fibre routes, OCS supports, TPSS assets, and interfaces with civil structures—are accurately represented and coded. The role ensures all digital submissions, metadata, and asset data sets meet CHSRA specifications, support system integration, clash detection, testing and commissioning, and are fully verified for digital handover.

- 13. Supply Chain Manager** - The Supply Chain Manager is responsible for the management and oversight of the procurement of all Track and OCS Systems (including subsystems, assemblies, parts, materials and components), and will oversee the execution of all procurement efforts required to satisfy program objectives. The Supply Chain Manager shall be responsible for the management of all procurement personnel and resources. The person nominated for this role shall have a minimum of 10 years of experience leading the procurement for the successful delivery of complex, multidisciplinary rail systems projects, including previous high-speed rail installation experience. The Supply Chain Manager shall have commensurate professional recognition/accreditation from a comparable engineering institution.

b. Additional Expertise

Upon the Authority's Contract Manager's request, the TSCC Contractor shall provide individuals to fill the Additional Expertise positions described below. The Authority's Contract Manager's approval is required prior to start of work for each Additional Expertise position. Office locations may be changed by mutual agreement between the Authority's Contract Manager and the TSCC Contractor. Additional key member requirements are described in Exhibit D, Section 1.

Additional expertise includes the following:

Additional Expertise Position	Minimum Qualifications
Quality Manager	The Quality Manager is responsible for ensuring compliance with the quality requirements of the Agreement and the oversight of the Quality Program and Quality Management System. The person nominated for this role shall have a minimum of 10 years of experience leading quality management activities for installation organizations for the successful delivery of complex, multidisciplinary rail systems projects, including previous high-speed rail installation experience.
Safety and Security Manager	The Safety and Security Manager is responsible for ensuring compliance with the safety and security requirements of the Agreement and the oversight of the Safety and Security Program and Safety Management System. The person nominated for this role shall have a minimum of 10 years of experience leading safety and security management activities for installation organizations for the successful delivery of complex, multidisciplinary rail systems projects, including previous high-speed rail installation experience.
RAMS Manager	Under the general direction of the Engineering Director, this individual is responsible for providing RAMS engineering support for the Work. This individual should have at least 8 years of experience in RAMS engineering for rail transportation projects on projects of similar size, scope, and complexity.

Additional Expertise Position	Minimum Qualifications
Verification and Validation Lead	<p>The Verification and Validation Lead is responsible for defining, controlling, and executing all verification and validation activities and ensuring that suitable and sufficient evidence is gathered to ensure that the Track and OCS System satisfies the program requirements and is fit for entry into revenue service. The person nominated for this role shall have a minimum of 10 years of experience in a Verification and Validation role for the successful delivery of complex, multidisciplinary projects, including previous high-speed rail installation experience. The Verification and Validation Lead should hold an appropriate license or have commensurate professional recognition/accreditation from a comparable engineering institution.</p>
Track Engineer	<p>The Track Engineer is responsible for the technical delivery, quality, and compliance of all track construction works, ensuring that installation is carried out in accordance with approved designs, CHSRA technical requirements, and applicable high-speed rail standards. The role provides day-to-day engineering support to construction teams, including interpreting drawings, validating setting-out and geometry, managing track–structure interaction requirements, and coordinating interfaces with civil structures, OCS, signalling, and other systems. The Track Engineer oversees inspections, testing, welding and stressing activities, maintains accurate as-built records, and ensures construction sequencing, safety requirements, and progressive assurance evidence are fully met to support successful commissioning and handover.</p>
Civil Lead	<p>The Civil Lead should review all designs, plans, documents or reports for all engineering work defined in clause 6731 of the 2023 California Professional Engineers Act (Business and Professions Code Sections 6700-6799).</p> <p>The Civil Lead should be an Engineer(s) of Record with a Civil Professional Engineer (PE) license in the state of California.</p> <p>The Civil Lead should hold a Bachelor of Engineering in Civil Engineering, and/or a Bachelor of Science in Civil Engineering</p>
Lead Surveyor	<p>The Lead Surveyor is responsible for ensuring compliance with the requirements of the Agreement relating to field services such as site surveys, and inspections. The person nominated for this role shall have a minimum of 10 years of experience leading field activities for installation organizations for the successful delivery of complex, multidisciplinary rail systems projects, including previous high-speed rail installation experience.</p>