Request for Proposal

RFP 56A0651

PART 2 – BIDDER RESPONSE

FOR

Transportation Asset Management System (TAMS)

Issued by:

State of California, California Department of Technology (CDT),

on behalf of the

California Department of Transportation (Caltrans)

Part 1 of the solicitation contains the Bidder and bidding instructions, proposal form instructions, and all other instructional/compliance information that the Bidder must meet in order to be considered responsive and responsible to the solicitation.

Part 2 of the solicitation contains all forms a Bidder must complete and return with its Proposal Submission, including the CDT/STP administrative forms, qualification forms, requirement responses, and all exhibits/attachments discussed in Part 1.

Disclaimer: The original version and any subsequent solicitation addenda released by the Procurement Official of this solicitation remain the official version. In the event of any inconsistency between the Bidder's versions, articles, attachments, specifications or provisions (which constitute the Contract), the official State version of the solicitation in its entirety shall take precedence.

RFP

PART 2 – BIDDER RESPONSE

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1. Appendix A, Statement of Work (SOW)

1.1. General/Background

This Statement of Work (SOW) is the contract between the California Department of Transportation and the Contractor (TBD) to provide a Transportation Asset Management System (TAMS). The solution will provide 1) a centralized data repository and 2) tools to improve transportation asset management, analysis, project prioritization and project scoping, funding and decision support.

The proposed technology does **NOT** seek to replace source asset systems such as pavement, bridge and integrated maintenance (field work order) management.

Federal and State law have mandated implementation of a Transportation Asset Management Plan (TAMP).

- The Road Repair and Accountability Act of 2017, Senate Bill (SB) 1, provides the first significant, stable, and on-going increase in State transportation funding in more than two decades. The Legislature has increased revenues and expanded the California Transportation Commission's (CTC) role to provide transparent oversight and accountability for transportation infrastructure investments. For Caltrans, additional tracking, reporting and transparency are required as the result of SB 1. By January 31st of each even numbered year, Caltrans shall provide the CTC with detailed information for all programmed projects on cost, scope, schedule, and performance metrics as determined by the CTC. Additional detail required includes, at a minimum, specifying the State Highway Operation and Protection Program (SHOPP) project capital and support budget, as applicable, for the four project phases including:
    - Project approval and environmental documents (support only),
    - Plans, specifications, and estimates (support only),
    - Rights-of-way, and
    - Construction.

In addition, the newly-formed office of Caltrans Inspector General may require information (from Caltrans), upon request, to support investigation and audit reports requested by the Governor, Legislature, or CTC.

California Government Code Section 14520-14534.1 (formerly Senate Bill 486), 14526.4 states:

> "*(a) The department, in consultation with the commission, shall prepare a robust asset management plan to guide selection of projects for the state highway operation and protection program required by Section 14526.5. The asset management plan shall be consistent with any applicable state and federal requirements and be implemented by the year 2020.*"

Without a robust tool for performing the comparative analysis necessary, Caltrans would be unable to efficiently implement such a TAMP. Failure to develop the asset management plan, as required by state law, puts the Department in a position of losing credibility with the CTC, legislators, Governor, and the citizens of California. In addition, the CTC has the power to deny approval of the SHOPP project portfolio if the Department fails to comply with state law.

- Federal law (MAP-21(2012), FAST Act (2015)) has declared "*beginning with the second fiscal year after [effective date of final rule, in 2016] and in each fiscal year thereafter, if a State DOT has not developed and implemented an asset management plan consistent with the requirements of 23 U.S.C. 119 and this part, the maximum Federal share for National Highway Performance Program projects shall be reduced to 65 percent for that fiscal year.*"

The Final Rule of the asset management portion of this law was set for October 2016. If Caltrans were unable to implement its transportation asset management plan, it could result in millions of dollars in lost federal highway funding.

For further information on TAMS and the Transportation Asset Management Plan (TAMP), please see the following publicly available references:

Table 1-1: Publicly Available References

Reference	Link
California Transportation Plan	https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan
California Transportation Commission, Transportation Asset Management Plan	https://catc.ca.gov/-/media/ctc-media/documents/programs/shopp/20190626_adopted_shopp_guidelines_a11y.pdf

Reference	Link
Guidelines	
Caltrans TAM Home Page	https://dot.ca.gov/programs/asset-management
Caltrans' 2017/2018 TAMP (Document)	https://dot.ca.gov/programs/asset-management/california-transportation-asset-management-plan
Caltrans' 2019 State Highway System Management Plan	https://dot.ca.gov/programs/asset-management/state-highway-system-plan
Asset Management Regulations and Guidelines	https://dot.ca.gov/programs/asset-management/asset-management-regulations-guidelines
FHWA Transportation Performance Management	https://www.fhwa.dot.gov/tpm/
FHWA Asset Management – Transportation Asset Management Plans	https://www.fhwa.dot.gov/asset/plans.cfm
California State Performance Dashboard	https://www.fhwa.dot.gov/tpm/reporting/state/state.cfm?state=California
AASHTO TAMP Library	http://www.tamptemplate.org/existing-tamp/

1.2. Agreement Term

Effective upon approval of the California Department of Technology (CDT), Statewide Technology Procurement, the term of this contract is three (3) years with two (2) optional one-year (1 year) extensions for a total maximum contract term of five (5) years (3+1+1=5). Caltrans at its sole discretion will determine if an optional extension will be exercised.

The Contractor shall not be authorized to deliver goods or commence performance of services described in this Agreement prior to the Contract Execution Date. Any delivery of goods or performance of services by the Contractor commenced prior to the Contract Execution Date shall be considered gratuitous on the part of the Contractor.

The State reserves the option to amend the resulting Agreement for additional funds, optional services, additional hours, time extension, or for unanticipated tasks based upon the same costs/hourly rates as defined in the **Exhibit 18: Cost Workbook**.

1.3. Work Location

The Contractor shall perform services at the following locations as directed by the State:

- California Department of Transportation headquarters located at 1120 N Street, Sacramento, CA 95814.
- California Department of Transportation, Director's Office of Asset Management at 1530 12th Street, Sacramento, CA 95814.
- California Department of Transportation, Application Development and Support Division, 1500 5th Street, Sacramento, CA 95814.
- Other locations within 20 miles of Sacramento.

The contractor may be reimbursed for Caltrans pre-approved travel to Caltrans locations outside of the Sacramento area. Travel to and from the worksite in Sacramento will not be reimbursed in the contract.

Per State Administrative Manual 0744: Reimbursement for transportation and per diem costs to persons who are not state employees is outlined in CALHR Management Memo 86-01 https://www.calhr.ca.gov/employees/pages/travel-reimbursements.aspx. The State may only pay travel and per diem expenses according to State travel time and per diem rules (non-represented employee rates) and verified receipts. Travel will only be considered from Sacramento to another location in California. Reimbursement will not be provided for travel to or from California and any out of state location.

Caltrans shall be available during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, Pacific Time (PT) except for State holidays. Contractor remote work is acceptable based on bidders proposed approach and final negotiated agreement between the Contractor and Caltrans. Access to Caltrans' equipment and network will not be available remotely for Key Personnel. Caltrans reserves the right to review the Key Personnel's ability to work remotely if the timely delivery of tasks and deliverables becomes an issue. Collaboration with Caltrans is important. On-site work must be described in the bidders approach, phases, and tasks. Please describe on-site and off-site work in the **Exhibit 22: Narrative Response Items** that will be considered in the evaluation.

1.4. Cost

The total cost of this Agreement shall not exceed $19,249,562.01. Cost details are in the **Exhibit 18: Cost Workbook**. The costs associated with each Fiscal Year (FY) are approximate and may be redirected between FYs without the requirement of an Agreement amendment. The cost proposals shall include travel not to exceed $50,000 (see 1.3, Work Location, above).

Table 1-2: TAMS Budget

Project Year	Fiscal Year	Budget Amount
1	20/21	$5,659,520.67
2	21/22	$5,659,520.67
3	22/23	$5,659,520.67
4	22/23 (optional)	$800,000.00
5	23/24 (optional)	$1,471,000.00
	TOTAL	**$19,249,562.01**

All costs required for the operation of the solution shall be included. This includes required hardware and software already owned by the Department of Transportation. As not all existing licensing is based on enterprise agreements, all costs are required. Caltrans may, during negotiations, determine that available licenses will be utilized and request specific licensing costs be removed for the Best and Final Offer.

1.5. Description of Requested Solution

The proposed system is a solution that will enable Caltrans to aggregate asset inventory, location, and condition information for several asset classes currently available in several asset management systems to allow Caltrans to perform Asset Performance Management.

To facilitate development of the best possible projects, TAMS will have economic evaluation criteria available for the users to evaluate benefit, cost, and life cycle impacts of NEEDs on assets to be included in the proposed projects. TAMS is intended to integrate data, mapping, and visual information (photos, video, LiDAR, etc.) to provide a tool for project nomination (bundling of NEEDs), project decision making (portfolio selection), and fiscal program selection (Funding Program). Once integrated, this information is envisioned to have multiple reports and dashboards to easily convey transportation system, program, project, and portfolio level performance and funding information.

1.5.1. TAMS Business Capability Model

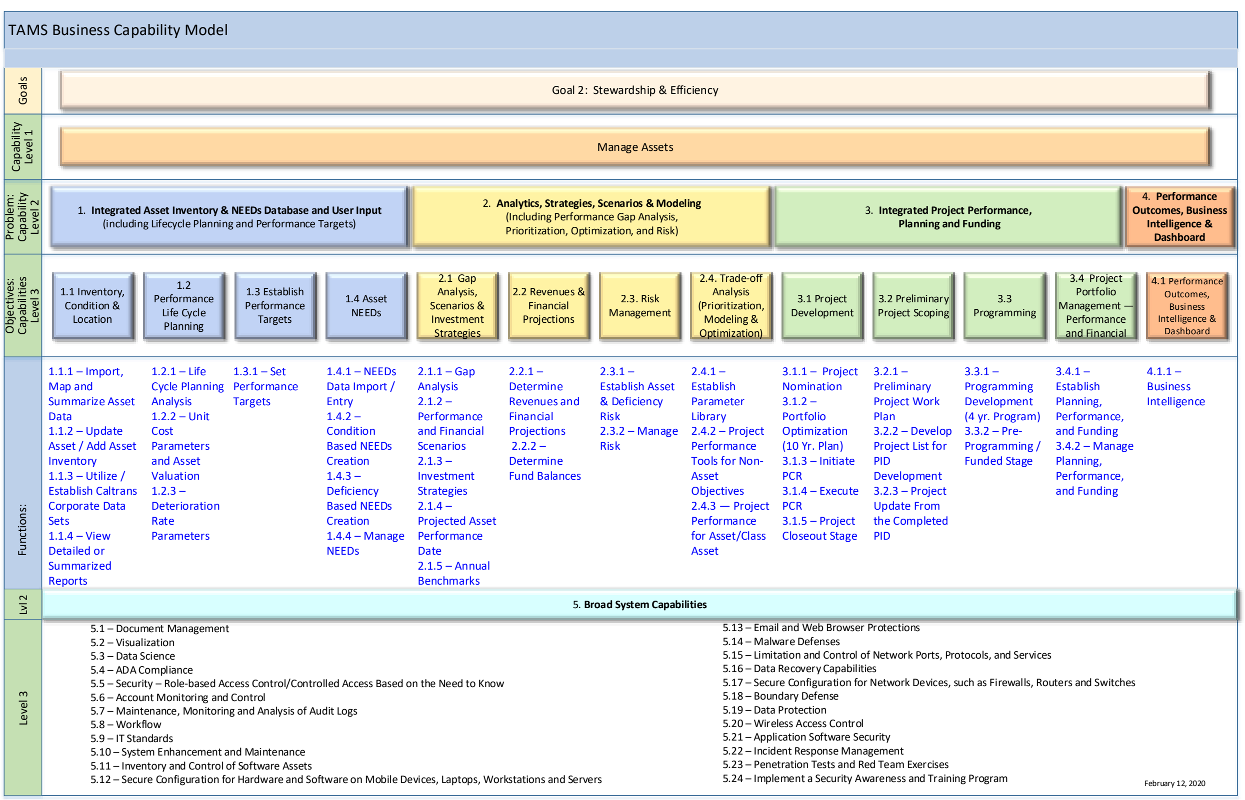
TAMS functionality, business process flows, and requirements are organized utilizing a Business Capability Model (TAMS BCM). This BCM ensures the complete coverage of Caltrans' organizational "skills" to manage asset performance.

This proposed information technology system will implement Federal and State requirements for a transportation asset management plan and provide an opportunity for improvements in asset performance decision support processes, in the following five major capability areas:

- **Integrated Asset Inventory, NEEDs Database, User Input Capabilities**, including lifecycle planning, performance targets and the following:
    - Manual and automated updates of Caltrans' and local partners' assets, NEEDs, location, and condition information in one centralized data repository.
    - Spatial visualization of system treatment and NEEDs, as well as planned and in-process projects.
    - Identification and selection of asset management criteria by funding program, asset class, etc.
- **Analytic, Strategies, Scenarios, Modeling Capabilities** including performance gap analysis, prioritization, optimization, risk and the following:
    - Prioritization and selection of Program projects using defined asset management criteria.
- **Integrated Project Performance, Planning, Funding Capabilities**, including:
    - Increased likelihood transportation agencies across the State will coordinate planning to maximize the impact of combined transportation improvement funding.
    - Statewide consistency in Project Initiation Document (PID) planning, estimating, and development.
    - A direct correlation of system NEEDs to specific project(s).
    - Use of financial investment analysis tools in project determination.
    - Better performance and financial management with real-time portfolio management.
- **Performance Outcomes, Business Intelligence, Dashboard Capabilities**, including:
    - More accurate and timely program performance and financial reporting to State and federal oversight agencies.
    - More accurate dashboards for business intelligence and decision support.
- **Broad System Capabilities**, including:
    - Document Management
    - Visualization
    - Data Science
    - ADA Compliance
    - Security – Role-based Access Control

- Account Monitoring and Control
- Maintenance, Monitoring and Analysis of Audit Logs
- Workflow
- IT Standards
- System Enhancements and Maintenance
- Inventory and Control of Software Assets
- Secure Configuration for Hardware and Software on Mobile Devices, Laptops, Workstations and Servers
- Email and Web Browser Protections
- Malware Defenses
- Limitation and Control of Network Ports, Protocols, and Services
- Data Recovery Capabilities
- Secure Configuration of Network Devices, such as Firewalls, Routers and Switches
- Boundary Defense
- Data Protection
- Wireless Access Control
- Application Software Security
- Incident Response Management
- Penetration Tests and Red Team Exercises
- Implement a Security Awareness and Training Program

Figure 1-1: TAMS Business Capability Model



The TAMS BCM is composed of the following layers (boxes) with an example provided for each layer shown below in Figure 1-2: Business Capability Model Layers.

Figure 1-2: Business Capability Model Layers

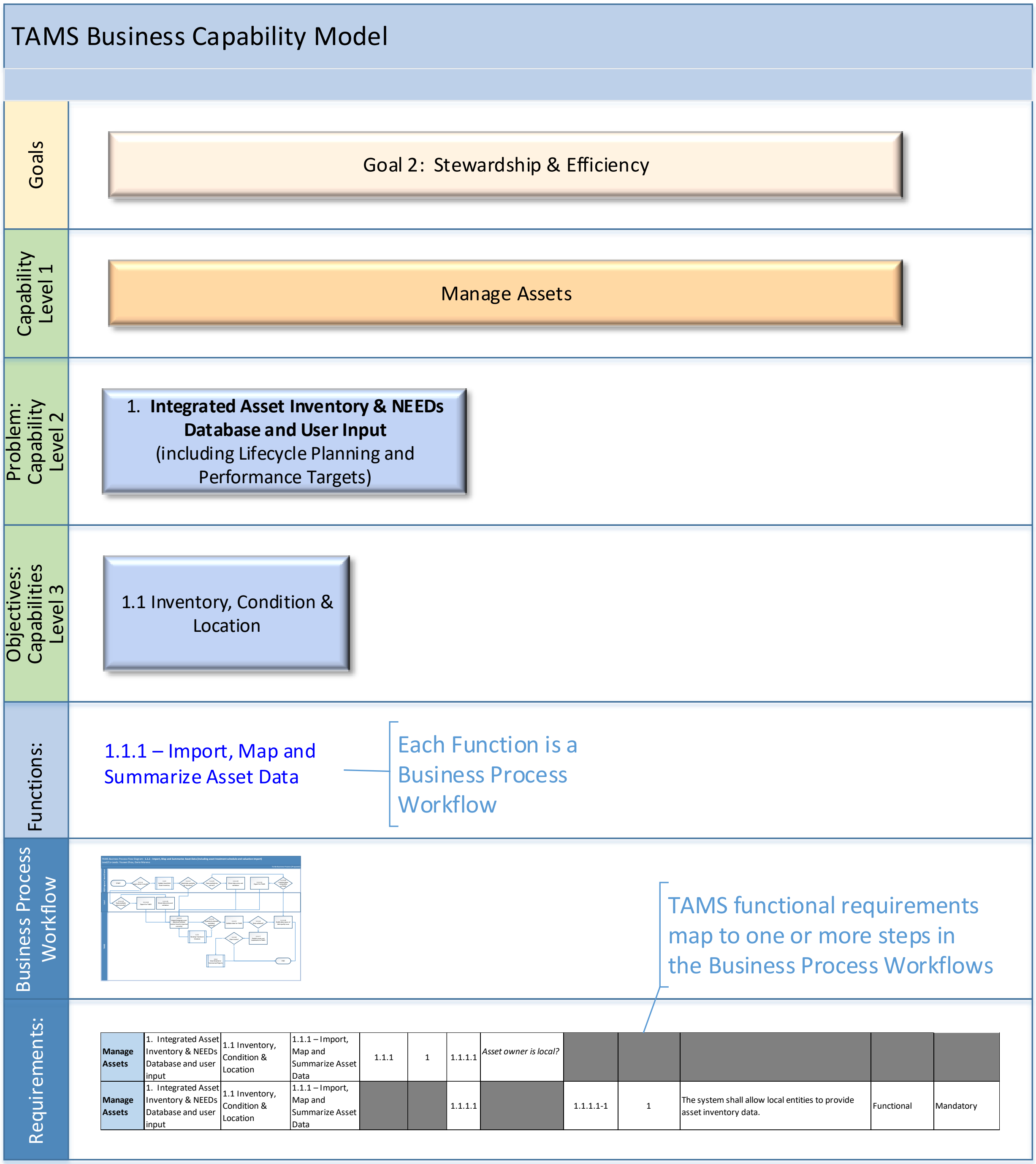
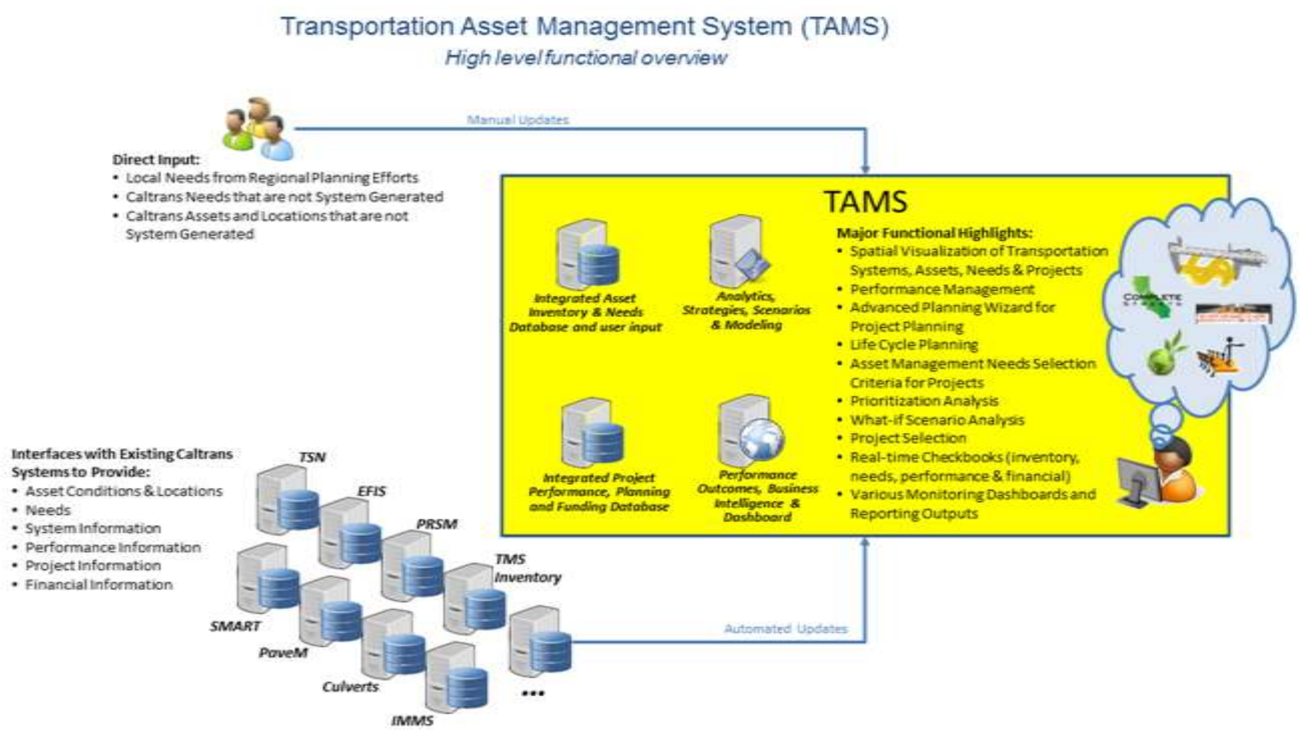


Figure 1-3: TAMS High-Level Functional Overview, below, shows the overview of TAMS with existing Caltrans systems interfaces, direct input options and TAMS major functional highlights.

Figure 1-3: TAMS High-Level Functional Overview



1.5.2. TAMS Solution Requirements

Exhibit 19: TAMS Requirements, contains the detailed Functional and Non-functional requirements for the proposed solution. Please note that requirements 5.5 through 5.24 are security requirements. Many of these security requirements address policy and processes and are related to hosting services.

1.5.3. Current and Emerging Computing Standards

Caltrans **Exhibit 27: 2020 Caltrans IT Hardware and Software Standards** address the hardware, software and IT operating practices to be used by Caltrans to ensure security, compatibility, connectivity and interoperability. The standards apply to the Department's on-prem IT environment and are applicable across Caltrans. These standards were approved in August 2019 and are subject to change. For SaaS standards, refer to **CLOUD COMPUTING – SOFTWARE AS A**

SERVICE (SaaS) GENERAL PROVISIONS and **CLOUD COMPUTING SERVICES SPECIAL PROVISIONS**.

1.6. Services to be Provided

The Contractor shall report to Caltrans' Contract Manager and will work collaboratively with the TAMS Project Team to achieve the Project's goals. The TAMS Project Team consists of Caltrans Information Technology staff, Director's Office of Asset Management staff, District Asset Management staff, State Asset Management staff, State contracted staff, and California Department of Technology staff allocated to working on the TAMS Project.

The Contractor shall provide a transportation asset management system (TAMS) and its related installation, configuration, data conversion/migration, system integration, implementation, and knowledge transfer services to improve the transportation asset management planning practices for Caltrans. The Contractor will be the Prime Contractor in performing the services to complete the range of required functionality and related services.

This contract will not replace existing asset management systems, such as those for pavement, bridge, etc. Rather, the TAMS solution will integrate with source asset systems and databases to achieve TAMP objectives.

The Contractor's solution must:

- Meet this project's objectives through the metrics and targets identified below
- Have the tools necessary to automate the creation and management of a transportation asset management plan meeting state and federal requirements
- Allow evaluation of performance that can be achieved with a defined budget as well as the identification of future funding needs associated with achieving defined performance objectives
- Identify and maintain individual SHS assets and NEEDs
- Identify and maintain bridge (SHS, NHS, and Local) assets and NEEDs
- Identify and maintain local partner NEEDs from regional and statewide planning efforts
- Provide a project nomination development and evaluation tool
- Utilize advanced analytics to support decisions including (examples from requirements):
  - Geospatial analysis to modify unit costs based on distance to project site
  - Determination of asset or deficiency NEED candidates for projects

    - Adjusting risk based on asset condition, socio-economic (impact to disadvantaged communities), economic (e.g., SB1 recall or COVID-19), environmental, and ecological factors
    - Determination of investment strategies based on deterioration models and future conditions
- Implement tools that will provide the information necessary to allow Caltrans to develop and prioritize projects across asset classes based on value and quantifiable performance improvements
    - Including tools to integrate with the existing asset management systems (per **Section 1.8 Project Phases below**)
    - Including tools to integrate with the existing corporate data systems (per **Section 1.8 Project Phases below**)
- Provide a Project Initiation Document assistant to facilitate project development and transfer to the Caltrans' Project Resourcing and Schedule Management (PRSM) system
- Implement tools to directly correlate how SHS NEEDs are being addressed by planned, on-going and completed projects
- Implement the tools and associated business processes to provide fiscal tracking for all available funding sources and projects
- Implement tools to provide spatial visualization and analysis of system assets, conditions, NEEDs, risk, and projects (throughout the project pipeline)

1.6.1. Timeline

The TAMS solution shall be implemented, through the resulting Contract, in three phases (see **Section 1.8 Project Phases below**):

Phase 1, Parity, is expected to last approximately one (1) year and shall include functionality to replace and decommission the current Asset Management Tool. Go-Live for Phase 1 should occur in approximately August or September of 2021 based on the Contract start date.

Phase 2, Enhanced Functionality, is expected to last another year and addresses the remaining functionality (see TAMS Business Capability Model to phase alignment in **Section 1.8 Project Phases**). Go-Live of Phase 2 is anticipated in approximately August or September of 2022. Phase 2 is divided into Phase 2a and 2b. The specific timing of Phase 2a and 2b may be proposed by the Contractor to fall within the indicated year of Phase 2.

Phase 3, Contractor Guided Configuration, is a period of stabilization. It is expected to last the remaining year of implementation and Final System Acceptance. One of the reasons for the extended timeframe is to provide time to go through a two-year planning cycle with associated plan updates. A bidder may propose an alternative timeline, but must justify the timeline to address the two-year planning cycle intent.

1.6.2. TAMS Project Objectives

The TAMS solution must attain the following overall project objectives. These objectives align with and do not replace TAMS functional or technical requirements. As decisions are made regarding project implementation priorities and tradeoffs, these TAMS project objectives should be referenced to ensure alignment. These objectives are identified in the TAMS PAL Stage gate 2, Alternative Analysis and will be part of the TAMS Post Implementation Evaluation Report (PIER) as required by SIMM 50.

- **INTEGRATE, MAP AND UTILIZE CALTRANS CORE ASSETS** (bridge, pavement, TMS and drainage) inventory and condition required information in one repository.
  a. Metric: Increase % inventory and condition detail for core assets in one system and mapped.
  b. Baseline: 0% of this metric in one system and mapped.
  c. Target: 100% available inventory and condition detail for core assets data in TAMS and mapped (with available geospatial location).
  d. Measurement Method: TAMS core asset quantities relative to program core asset systems of record quantities with valid inventory, condition and location data.
- **ESTABLISH CALTRANS NEEDs-BASED TREATMENT OPTIONS** based on each core asset, corridor, life cycle and optimization; for minimum of 3 treatments for condition/performance.
  a. Metric: Increase % of lifecycle NEEDs-based treatment options for core assets in one system.
  b. Baseline: 0% of this metric in one system (estimates exist within SHSMP)
  c. Target: 100% of approved available Caltrans' core assets lifecycle NEEDs-based treatment options in TAMS.
  d. Measurement Method: TAMS available and approved core assets lifecycle NEEDs-based treatment options in TAMS.
- **SET PERFORMANCE TARGETS** (as determined in analysis) for the four core asset classes to be used to evaluate project contributions towards programmatic accomplishments.
  a. Metric: Target exists for each asset class along with project and programmatic accomplishments.
  b. Baseline: 0 targets in one system (estimates exist within the SHSMP).
  c. Target: 100% of targets in TAMS and identified at quarterly, annual, 10-year time periods.

   d. Measurement Method: Target exists for each asset class consistent with SHSMP and TAMP.

- **ESTABLISH TRADE-OFF ANALYSIS AND PRIORITIZATION OF PROJECT** for Caltrans projects in TAMS.
   a. Metric: Increase % of trade-off analysis of projects based on condition, deterioration, life cycle schedules, unit costs, targets and other factors.
   b. Baseline: 0% of this metric in one system.
   c. Target: 2 years after go-live, 50% of project level trade-off analysis for Caltrans projects completed.
   d. Measurement Method: TAMS project trade-off analysis is prioritization of projects based on weighting of various performance and other elements for Caltrans project to factor into a monetized scoring.
- **ESTABLISH DEVELOPMENT OF PROJECT** based on selection NEEDs in a selected corridor and evaluated with Trade-off scores, scenarios, strategies and risk to inform the selection of NEED in TAMS.
   a. Metric: Increase % of NEEDs-based project nominations based on monetized scoring.
   b. Baseline: 0% of this metric in one system.
   c. Target: 2 years after go-live, NEEDs-based project nominations scoring for 50% of projects utilizing SHOPP and/or HM funding.
   d. Measurement Method: TAMS NEEDs-based project nominations for SHOPP and/or HM funded projects relative to overall SHOPP and/or HM projects. Depends on results achieved from MODA effort.
- **ESTABLISH PORTFOLIO COMMITMENT** based on project trade-off scores, portfolio scenarios, investment strategies and risk mitigation to inform the selection and commitment of portfolios in TAMS.
   a. Metric: Increase % of objectives-based project commitments based on monetized scoring.
   b. Baseline: 0% of this metric in one system.
   c. Target: 2 years after go-live, objectives-based project scoring for 50% of projects committed utilizing SHOPP and/or HM funding.
   d. Measurement Method: TAMS objectives-based project commitment for SHOPP and/or HM funded projects relative to overall SHOPP and/or HM projects. Dependent on available and approved objective-based measures (MODA).
- **ESTABLISH REPORTS AND DASHBOARDS** both historical and current asset, project and portfolio performance and funds monitoring throughout the TAMS lifecycle.
   a. Metric: Increase attainment of performance for extended costs through monitoring both performance and cost commitment, actual and forecast throughout TAMS.
   b. Baseline: 0% of this metric in one system from project nomination to project closeout.

c. Target: 1 year after project go-live, 80% of TAMS SHOPP and/or HM funding District nominated projects will have historical and current asset/project/portfolio information available for funding and performance.
d. Measurement Method: TAMS funding, portfolios, projects and assets with performance and cost data at identified points (to be determined) within the TAMS process. Only includes projects originally nominated by Districts within TAMS.

1.6.3. Description of Services

Delivery of the TAMS solution will include the following services from the Contractor. All services are as identified in this **Section 1.6.3 Description of Services** and its sub-sections. The Contractor services, based on execution methodology, may not follow these services in sequence or name.

The implementation services include all work required to prepare, modify, and configure the proposed solution to meet Caltrans requirements including the preparation and loading of data, system testing, applicable training, organizational change management, and go-live.

All services required to create the Contractor defined deliverables in **Exhibit 25: Deliverables Workbook** are to be provided as identified in **Exhibit 22: Narrative Response Items**.

The following sections defines an execution methodology and activities associated with the TAMS implementation. This execution methodology (e.g., Project Preparation, Scope Validation, Realization, Final Preparation, and Go-Live Support) should be seen as occurring one or more times within each TAMS Project Phase as defined in **1.8 Project Phases below (page 33)**. The Contractor may propose their own execution methodology to be described in **Exhibit 22: Narrative Response Items**, **22B-2 Implementation – Execution Methodology** but should ensure that the Contractor execution methodology includes the activities identified below.

To reduce confusion between the phases described in **Section 1.8 Project Phases** and the execution methodology outlined below, the execution methodology phases are referred to as Execution Iterations.

1.6.3.1. Project Preparation (SI Onboarding)

Contractor shall provide all necessary Project Initiation, Planning and Controlling (monitoring) project management services to include planning, administration, scheduling, controlling, tracking, and reporting on all Contractor-related activities throughout the term of the Contract.

The Contractor shall develop the project management Deliverables identified in the **Exhibit 25: Deliverables Workbook** and as defined by the approved Deliverable Expectations Documents (DEDs).

All approved deliverables must be managed under change control and must be updated as a part of each TAMS project phase (phase 1-3 as defined in **Section 1.8 Project Phases**).

This Execution Iteration provides initial planning and preparation for the project. Each project has its own unique objectives, scope, and priorities. The deliverables described in this Execution Iteration assist in completing the initiation and planning steps in an efficient and effective manner.

1. Finalize project management plans
2. Finalize project work breakdown structure (WBS), tasks, and schedule
3. Confirm and obtain project resources
4. Configure project collaboration space and project library
5. Create Project Library training material (may be utilized during project kick-off)
6. Create deliverable templates (e.g., MS Word, PowerPoint)
7. Obtain base solution environment components (sandbox environment at a minimum)
8. Initiate project governance
9. Initiate project oversight
10. Initiate organizational change management
11. Create Bill of Materials for all hardware and software (on-prem and/or SaaS) provisioning
12. Conduct kick-off (generally one for executive level and one for the project team)

The Contractor will provide project management services in accordance with the approved project management plans including, but not limited to:

1. Deliverable Expectations Document (DED) creation, submission, and remediation
2. Deliverable Acceptance Document (DAD) creation, submission, and remediation
3. Plan, organize, and facilitate regular project team meetings
4. Collect project status from Contractor project team
5. Create project status reports in documents and presentations
6. Provide project status reporting in meetings including Consultant project team, TAMS (Consultant and Caltrans) project team, TAMS project

management team, TAMS Steering Committee, TAMS IV&V, including California Department of Technology, and other oversight entities

7. Conduct kick-off meetings associated with TAMS phases and major work activities (e.g., requirements kick-off)
8. Create and regularly update the master project schedule
9. Manage the process for issues and risks capture, resolution, and disposition
10. Establish and manage the Contractor project team including hierarchy, reporting relationship, and project performance evaluations
11. Create and manage the project library
12. Establish, implement, and monitor the controls to ensure adherence of all Contractor services to approved project management plans

1.6.3.2. Scope Validation

The Contractor shall develop the solution analysis Deliverables identified in the **Exhibit 25: Deliverables Workbook** and as defined by the approved Deliverable Expectations Documents (DEDs).

The purpose of these services is to achieve a common understanding of how Caltrans intends to use the selected solution to support their business. These services focus on the rapid setup of the environment available for validation workshops with business users to confirm scope and determine delta requirements. These requirements will be realized in the next Execution Iteration to enhance the baseline provided by the COTS software.

1. Rapid provisioning of sandbox environment
2. Conduct technical analysis to determine the solution architecture, technical requirements (based on DOT standards) and data requirements (includes evaluation of existing Department systems and data)
3. Education of software functionality
4. Education of business processes and requirements (including legislative requirements)
5. Document business processes for solution
6. Refinement of requirements given the software capabilities and business processes
7. Conduct workshops demonstrating software functionality quickly configured to meet requirements
8. Identify gaps between configured software functionality and business/functional requirements

The Contractor will provide scope validation services in accordance with the TAMS phase and approved scope validation deliverables including, but not limited to:

1. Establishing a baseline understanding of the TAMS Functional and Non-Functional Requirements and existing business processes prior to configuring the solution, designing / developing solution components, and engineering TAMS business processes.
2. Identifying and providing workshops, training, and a sandbox environment to provide Caltrans' personnel with an understanding of the standard solution capabilities of the proposed software
3. Perform in-depth analyses, with Caltrans, of the TAMS Functional and Non-Functional Requirements and associated business processes in development of the TAMS to-be business processes and requirements
4. Update the TAMS Business Capability Model to ensure alignment with the to-be business processes and requirements
5. Perform change control for all TAMS Functional and Non-Functional Requirements and associated business processes not included in the to-be business processes and requirements
6. Ensure complete traceability of requirements from Contract to test scenarios and test scripts
7. Develop organizational change management planning including:
    a. Identifying TAMS stakeholders (including contractors, oversight, and local agencies);
    b. Understanding business process changes and progression from pre-system to TAMS process impacts by TAMS phase;
    c. Evaluating TAMS stakeholders' ability, readiness, and willingness for change;
    d. Identifying approaches to mitigate stakeholder ability, readiness, and willingness for change through communication, training, business process change, role/responsibility modifications, and system configuration modifications;
    e. Developing communications messaging for the TAMS phase (based on the above), multi-channel delivery approach, and identify required resources (technical and personnel);
8. Establish a contractor portal; a website to provide self-service functionality for the TAMS project team (State, Contractor, and oversight agencies)
9. Establish a stakeholder portal; a website to provide feedback, questions, concerns, training, user material, and other communications capabilities for customers and stakeholders of TAMS

1.6.3.3. Realization

The Contractor shall develop the solution Realization Deliverables identified in the **Exhibit 25: Deliverables Workbook** and as defined by the approved Deliverable Expectations Documents (DEDs).

The purpose of this Execution Iteration is to implement any of the business process delta requirements defined during the Scope Validation Execution Iteration. The team configures, develops, tests and documents the solution in a series of time-boxed iterations. Before the solution is released to the next Execution Iteration it is fully end-to-end integration tested and accepted by end users.

1. Design the solution
2. Configure the solution
3. Iterations will likely be defined by capabilities (e.g., asset repository handled as an individual sprint)
4. Test the solution
5. Prepare for training
6. Prepare for cutover (conduct dry-runs)

The Contractor will provide solution design services in accordance with the TAMS phase and approved solution design deliverables including, but not limited to:

1. Perform detailed solution architecture analysis to meet the approved to-be TAMS requirements including components, integrations, and allocation of requirements mapping to architecture components and integrations
2. Perform a detailed solution design including configuration and / or development options necessary to meet requirements. Design is to include these aspects, at a minimum:
    a. Database Design - The full data model and database design of the proposed TAMS Solution.
    b. Functional Design - All configuration items, data structures and any necessary processing rules described to the level of detail required to complete configuration and/or customization activities required to develop the TAMS Solution.
    c. Workflow Design - The Workflow Design shall detail the system workflows, the repeatable patterns of activities, the associated system functionality, and user roles that contribute to a workflow.
    d. User Roles and Data Access Design - Provides detailed information about the role-based access model the TAMS Solution will utilize for access control and will provide a comprehensive list and detailed

description of each user role, group, and the permissions and functions associated with each.

3. Configure and / or develop the solution interfaces and validate/refine the technical design of integrated solution components.
4. Develop train-the-trainer training material and conduct train-the-trainer sessions. NOTE: training includes both business processes surrounding the system as well as the specific system training for the TAMS phase.
5. Design, configure, and develop the data migration and conversion routines.
6. Configure queries and reports as identified in requirements. Dashboards as indicated by TAMS phase.
7. Under the direction of the Caltrans Software Quality Management (SQM) unit, Contractor shall be responsible for performing system testing of all components of the TAMS Solution, including documenting, planning, and certification based on the approved test plan.
   a. Testing is to include User Acceptance Testing.
   b. Testing is to include Load Testing. Contractor is to provide the necessary load testing service required to generate the load indicated in the test plan.

1.6.3.4. Final Preparation

The purpose of this Execution Iteration is to complete the cutover activities (including technical and load testing, end user training, system management and cutover rehearsal activities) to finalize our readiness to go-live. The Final Preparation Execution Iteration also serves to resolve all remaining critical issues. On successful completion of this Execution Iteration, users are using TAMS.

1. Execute go-live specific Organizational Change Management communications and readiness assessment
2. Execute transition activities
3. Execute training
4. Conduct cutover activities (including data integration for assets and migration of pipeline projects)

1.6.3.5. Go-Live Support

The purpose of this Execution Iteration is to move from a project-oriented, pre-production environment to live production operation and provide sustained support to business users to aid their transition into the new environment.

1. Conduct knowledge transfer sessions
2. Shadow Department IT while they conduct operations and maintenance activities

3. Resolve outstanding high-severity defects
4. Brief Caltrans service desk and Enterprise Architecture on TAMS
5. Review TAMS component procedures for receiving product or Systems Integrator support

1.7. Software-as-a-Services (SaaS) Subscription and Maintenance

Contractor shall confirm the use of all software components as identified in **Exhibit 18: Cost Workbook**.

1.7.1. SaaS Subscription

Contractor shall procure appropriate licenses and manage such licenses for all Third-Party Software and tools not managed by Caltrans.

Contractor shall ensure all Third-Party Software and tools have an active maintenance and support license agreement throughout the Contract term.

Contractor shall transfer licenses for all Third-Party Software and tools to Caltrans at Project Close-Out.

Contractor shall not knowingly propose or use a Third-Party Software component or tool when no commercially available maintenance support exists for the component for the term of the Contract.

Contractor shall certify software upgrades and security patches for any Third-Party Software or tool to support the TAMS Solution implementation.

1.7.2. SaaS Maintenance Services

The SaaS Maintenance shall include the following services:

1.7.2.1. Software Maintenance and Upgrades

Contractor will provide and install software maintenance updates, upgrades, and enhancements to ensure the application operates accurately and efficiently. Contractor will also make available application modifications and enhancements that are available to other SaaS users as described in **CLOUD COMPUTING – SOFTWARE AS A SERVICE (SaaS) GENERAL PROVISIONS**, Section 32.

Software updates, upgrades, and enhancements must be coordinated with Caltrans to ensure that software can be tested by Caltrans prior to being released to TAMS users. Contractor will provide Caltrans with three (3) days prior notice of any times that the System will be unavailable due to non-emergency maintenance or Enhancements. Contractor will schedule any such times that the System will be unavailable outside of normal usage hours (6:00 am to 7:00

pm, Pacific Time). In the event of unscheduled and unforeseen times that the System becomes unavailable for any reason, except as otherwise prohibited by law, Contractor will immediately notify Caltrans and cooperate with department's reasonable requests for information regarding the System being unavailable (including causes, effect on the System, and estimated duration).

1.7.2.2. Data Security

Contractor is responsible for maintaining a secure computing environment supporting the hosted application. The Contractor will manage the applications, TAMS data, and infrastructure according to the security requirements described in the **CLOUD COMPUTING SERVICES SPECIAL PROVISIONS**, including but not limited to Section 4 SaaS and Data Security.

1.7.2.3. Backup and Recovery

Contractor is responsible for data backup and recovery services including off-site data storage.

Contractor is responsible for providing a Backup and Recovery Plan for the application and data to Caltrans during the first month after the SaaS Subscription and Maintenance Services becomes effective. The Backup and Recovery Plan must be tested by the Contractor at least annually according to the schedule described in the Plan.

1.7.2.4. Disaster Recovery

The Contractor is responsible for providing a Disaster Recovery Plan to Caltrans during the first month after the SaaS Subscription and Maintenance Services becomes effective. The Disaster Recovery Plan must be tested by the Contractor at least annually according to the schedule described in the Plan. Additional requirements are detailed in the **CLOUD COMPUTING SERVICES SPECIAL PROVISIONS**, Disaster Recovery/Business Continuity.

Notwithstanding the Force Majeure provisions contained herein, Contractor shall be responsible for providing disaster recovery SaaS if Contractor experiences or suffers a disaster. Contractor shall take all necessary steps to ensure that Caltrans shall not be denied access to the SaaS for more than 72 hours in the event there is a disaster impacting any Contractor infrastructure necessary to provide the SaaS. Contractor shall maintain the capability to resume provisions of the SaaS from an alternative location and via an alternative telecommunications route in the event of a disaster that renders the Contractor's primary infrastructure unusable or unavailable. See Table 1-3: TAMS Disaster Recovery Metrics for the TAMS RPO and RTO specified for Disaster Recovery/Business Continuity.

Table 1-3: TAMS Disaster Recovery Metrics

DR Measure	Metric	Explanation
Recovery Point Objective (RPO)	72 hours	The point in time to which Data can be recovered when service is restored after an interruption. The Recovery Point Objective is expressed as a length of time between the interruption and the most proximate backup of Data immediately preceding the interruption.
Recovery Time Objective (RTO)	72 hours	The period of time within which information technology services, systems, applications and functions must be recovered following an unplanned interruption.

If Contractor fails to restore the data and SaaS within the Recovery Point Objective (RPO) and Recovery Time Objective (RTO), respectively, Caltrans may declare Contractor to be in default of this Agreement.

1.7.2.5. Warranty Support

The Contractor is responsible for resolving software defects or configuration errors, as well as any resulting issues, at no additional cost. Caltrans will notify Contractor of the issue, who will then diagnose and resolve the issue. Caltrans is responsible for communicating issue resolution to all affected users. Additional details are described in **CLOUD COMPUTING – SOFTWARE AS A SERVICE (SaaS) GENERAL PROVISIONS**, Section 13, Warranty.

1.7.2.6. TAMS Project User Support

During the execution of this Contract, TAMS Project User Support is to be provided by the Contractor including:

1. Answering software or process questions
2. Diagnosis and resolution of system or data errors
3. Caltrans users may request support services by phone, email, and any additional means mutually agreed upon by Caltrans and Contractor.

Incident Priorities

Requests will be prioritized by Caltrans according to the following priority levels:

Table 1-4: TAMS Incident Request Priorities

Priority Level	Definition	Service Level
1 - Critical	Mission critical business process(es) unable to function - The System is not functioning and there is no workaround that is acceptable to Caltrans, thereby preventing an agency or user from performing a mission critical business function(s).	Contractor must respond within 4 hours and must resolve the support request within 1 business day.
1 - High	Significant impact to mission critical business process(es) – A major problem impedes the ability to perform mission critical business function(s) due to major functionality not working. A temporary work-around that is acceptable to Caltrans is available.	Contractor must respond within 4 hours and must resolve the support request within 3 business days.
3 - Medium	Not able to accomplish all functions - Minor function(s) not working causing non-critical work to back up.	Contractor must respond within 2 business days and must resolve the support request within 2 weeks.
4 - Low	Inconvenience – The system is causing a minor disruption in the way tasks are performed, but does not stop workflow. Able to accomplish all functions, but not as efficiently as normal. May include cosmetic issues - especially in constituent facing applications.	Contractor must respond within 5 business days and resolve the support request within 4 weeks.

Hours of support

Contractor will be available to provide support services during Caltrans business hours: 8:00 am – 5:00 pm (Pacific Time), Monday through Friday excluding State holidays.

Support Level Review

Contractor will provide Caltrans monthly reports detailing all support requests received. For each support request, the report will list Caltrans requester, Caltrans priority, date/time received, date/time resolved, the amount of time to resolve, nature of the request, the resolution and the Caltrans person who approved the resolution.

Contractor will meet with Caltrans, as needed, to review the reports and recognize areas of excellence and identify areas of improvement. Consistent failure (defined as three or more months in a rolling twelve-month period) to meet the support standards may be considered cause for the State to terminate the contract.

Contractor or SaaS provided standard SaaS Subscription and Maintenance Services will begin upon successful completion of the Implementation Services in this Contract or Contract Termination, whichever occurs first.

1.7.3. User Management

Caltrans may suspend or terminate (or direct Contractor to suspend or terminate) an end user’s access to SaaS in accordance with Caltrans’ policies.

Contractor may suspend an end user’s access to SaaS immediately in response to an act or omission that reasonably appears to jeopardize the security or integrity of Contractor’s SaaS or the network(s) or facilities used to provide the SaaS. Suspension will be to the minimum extent, and of the minimum duration, required to prevent or end the security issue. The suspension will be lifted immediately once the breach is cured. Contractor may suspend an end user’s access to SaaS in response to a material breach by end user of any terms of use s/he has agreed to in connection with receiving the SaaS. Contractor will immediately notify Caltrans of any suspension of end user access to SaaS.

1.7.4. Service Levels

Caltrans retains the right to use a Third Party to validate Contractor’s performance in meeting agreed upon service levels.

1.7.4.1. System Availability

Contractor represents and warrants that the Software as a Service (SaaS) will be performed in a professional manner consistent with industry standards reasonably applicable to such SaaS.

System Availability includes both application or module availability and data availability. System Availability does not include general Internet unavailability beyond the control of Contractor including State network unavailability.

Contractor represents and warrants that the System will be available at least 98% of the time in any given month during normal usage hours of 6:00 am to 7:00 pm (Pacific Time), Monday through Friday, excluding State holidays. This means that the outage or Downtime percentage will be not more than 2% during normal usage hours, not including previously agreed upon maintenance, or downtime out of Contractor's control.

Example:

There are 19 workdays in a calendar month (excluding one state holiday). The System was unavailable twice, for one hour and for three hours.

Monthly availability would be calculated as:

19 days X 13 hours = 247 normal usage hours

247 normal usage hours – 4 unavailable hours = 243 available hours

$$\text{System Availability} = \frac{\text{243 available hours}}{\text{247 normal usage hours}} = 98.38\%$$

Credit:

If the System availability falls below 98% in any month, not including previously agreed upon maintenance or downtime, Contractor shall provide Caltrans with a credit according to the table below.

AVAILABILITY PERCENTAGE	CREDIT PERCENTAGE OF ANNUAL SAAS LICENSING AND MAINTENANCE COST
98.00% to 100.00%	0.000%
96.00 % to 97.99%	0.417%
93.00% to 95.99%	0.833%
90.00% to 92.99%	1.250%
Below 90.00%	1.667%

If the monthly System Availability averages less than 98% for three (3) or more months in a rolling twelve-month period, the State may terminate the contract for material breach in accordance with the Termination for Default provision in the Cloud Computing – Software as a Service (SaaS) General Provisions.

1.7.4.2. System Responsiveness Warranty

Contractor warrants SaaS performance to adhere to the mutually agreed performance identified in the accepted test plan deliverable(s) over the term of this contract and optional contract years. Contractor will determine the root cause of performance degradation and perform capacity remediation to improve performance in alignment with the accepted test plan load testing exit criteria. The Contractor may present data, processes, or usage outside of the accepted, or reasonably expected, system design to Caltrans for resolution through cessation of said practices or proposed additional services.

Where performance cannot be remedied through additional capacity (e.g., network, storage or processing), Contractor must modify the architecture, as needed, to meet performance objectives identified in the test plan deliverable(s) load testing exist criteria.

1.7.5. Modifications and Support Services

During this contract, Caltrans may request additional technical services. These may be one-time services or system enhancements. If these services are requested by Caltrans, the Unanticipated Task process and funds will apply. Technical Services include, but are not limited to:

- Generating ad hoc reports
- Creating Dashboards
- Importing data
- Creating new or modified standard reports
- Extending or modifying data elements
- Creating new or modified screens
- Adding or modifying system logic or functionality
- Adding or modifying analytics

Post-Implementation Services may be exercised as either an **Unanticipated Tasks (See 1.9)** or as an amendment to this contract.

1.8. Project Phases

Caltrans envisions implementation of the TAMS solution to be a phased approach based on phase-specific criteria for completion.

Figure 1-4: TAMS Phases

			TAMS Business Capabilities														
			1.0 Integrated Asset Inventory & Needs Database with User Input				2.0 Analytics, Strategies, Scenarios & Modeling				3.0 Integrated Project Performance, Planning & Funding				4.0 Performance Outcomes, Business Intelligence	5.0 Broad System Capabilities (abridged)	
			1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	5.X	5.3
TAMS Phase	Funding Program(s)	Asset(s)	Inventory, Condition & Location	Performance Life Cycle Planning	Performance Targets	Asset Needs	Gap Analysis, Scenarios & Modeling	Revenues & Financial Projections	Risk Management	Trade-off Analysis	Project Development	Preliminary Project Scoping	Programming	Project Portfolio Management	Performance Outcomes, Business Intelligence & Dashboard	Includes 5.1-5.24	Data Science
0 - Project Initiation, Planning and Management																	
1 - Parity	SHOPP HM Minor A & B	4 Core (Bridges, Pavement, TMS, Culverts)	X		X				X (Assets)		X	X	X		X (AM Dashboards)	X	
2a - Implement Supplemental Asset		+1 Supplemental	X		X				X (Assets)		X	X	X			X	
2b - Enhanced Functionality			X	X	X	X	X	X	X (Everything else)	X	X	X	X	X	X (Additional)	X	X
3 - Contractor Guided Configuration	+1 TBD	+1 TBD	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Key: Black X = Initial Implimentation; Shaded X = Existing Functionality (carry forward)

1.8.1. Phase 0 – Project Initiation, Planning and Management

Activities in this phase will be completed throughout the life of the contract and will cross all phases.

Figure 1-5: TAMS Phase 0

			TAMS Business Capabilities														
			1.0 Integrated Asset Inventory & Needs Database with User Input				2.0 Analytics, Strategies, Scenarios & Modeling				3.0 Integrated Project Performance, Planning & Funding				4.0 Performance Outcomes, Business Intelligence	5.0 Broad System Capabilities (abridged)	
			1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	5.X	5.3
TAMS Phase	Funding Program(s)	Asset(s)	Inventory, Condition & Location	Performance Life Cycle Planning	Performance Targets	Asset Needs	Gap Analysis, Scenarios & Modeling	Revenues & Financial Projections	Risk Management	Trade-off Analysis	Project Development	Preliminary Project Scoping	Programming	Project Portfolio Management	Performance Outcomes, Business Intelligence & Dashboard	Includes 5.1-5.24	Data Science
0 - Project Initiation, Planning and Management																	

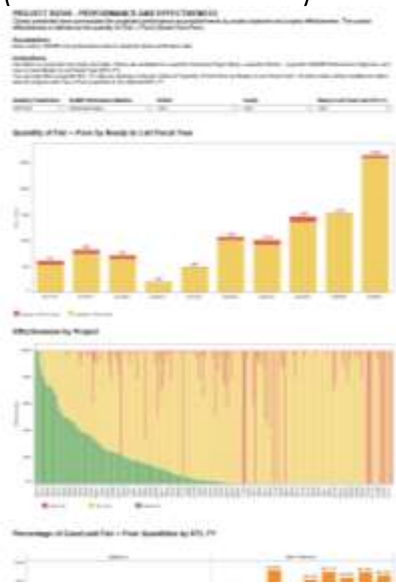
1.8.2. Phase 1 – Maintain existing functionality (Parity)

Contractor will provide functionality that will replace the existing Caltrans' Asset Management Tool system functionality as outlined below. In addition to parity with the existing Asset Management Tool functionality, Risk Management for Assets and replication of existing Tableau dashboards is included in this phase. Existing Asset Management dashboards to be replicated in TAMS include:

- Project Book Dashboards
  - SHOPP Ten-Year Project Book Summary
    This dashboard summarizes project costs and counts by activity type, region, and work phase.

  - Performance and Effectiveness
    This dashboard summarizes projected performance accomplishments by project objective and project effectiveness. Project effectiveness is defined as the quantity of (Fair + Poor) /

(Good + Fair + Poor).



- Quarter to Quarter Performance Comparison
  This dashboard compares performance objective quantities across multiple quarters.
- Project Performance Changes
  This dashboard compares project level performance data across multiple quarters.
- Pavement Treatment Distribution by District
  This dashboard summarizes the distribution of pavement treatments (Rehab, CAPM, or Preventive) by district. District project-level breakdowns are presented in charts and tables.
- Activity Detail Summary
  This dashboard summarizes quantities of activities for all projects in a quarterly Project Book, with a breakdown by Ready to List Fiscal Year (RTL FY).

- Asset Management Tool Dashboards
  - SHOPP Draft Project Book Data Checks
    This dashboard provides an overview of State Highway System (SHS) SHOPP projects that are planned or programmed over the 10-year plan period. The dashboard includes a list of projects that need one or more corrections to data, support/capital ratios, and a draft project book.
  - SHOPP Draft Fact Sheet
    This dashboard provides a draft of the Project Book Financial Fact Sheet.
  - SHOPP Project Earned Value Analysis
    This dashboard provides a project earned value analysis for the projects in the last 5 years of the 10-Year State Highway System (SHS) SHOPP Project Book.

- HM Data Checks
  This dashboard provides an overview of HM projects that are planned or on the CFD. The dashboard includes a list of projects that need one or more corrections to data, and a list of all HM projects in the AM Tool.

Figure 1-6: TAMS Phase 1 - Parity

			TAMS Business Capabilities														
			1.0 Integrated Asset Inventory & Needs Database with User Input				2.0 Analytics, Strategies, Scenarios & Modeling				3.0 Integrated Project Performance, Planning & Funding				4.0 Performance Outcomes, Business Intelligence	5.0 Broad System Capabilities (abridged)	
			1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	5.X	5.3
TAMS Phase	Funding Program(s)	Asset(s)	Inventory, Condition & Location	Performance Life Cycle Planning	Performance Targets	Asset Needs	Gap Analysis, Scenarios & Modeling	Revenues & Financial Projections	Risk Management	Trade-off Analysis	Project Development	Preliminary Project Scoping	Programming	Project Portfolio Management	Performance Outcomes, Business Intelligence & Dashboard	Includes 5.1-5.24	Data Science
1 - Parity	SHOPP HM Minor A & B	4 Core (Bridges, Pavement, TMS, Culverts)	X		X				X (Assets)		X	X	X		X (AM Dashboards)	X	

Table 1-5: TAMS Phase 1 - Detail

<table>
<tr><th>Program</th><th>Asset</th><th>Interfaces / Integration</th><th>Capabilities</th></tr>
<tr>
<td>SHOPP
HM
Minor A
Minor B</td>
<td>Bridge
Pavement
TMS
Culverts / Drainage</td>
<td>Asset Inventory, Condition, and Location</td>
<td>
Integrated Asset Inventory & NEEDs Database

Inventory, Condition, & Location

Import, Map and Summarize Asset Data
Update Asset/Add Asset Inventory
Utilize / Establish Caltrans Corporate Data Sets
View Detailed or Summarized Reports
Internal/External Direct Input

NEEDs from Regional Planning Efforts
Caltrans NEEDs that are not system generated
Caltrans Assets and Locations that are not system generated

Performance Targets

Set Performance Targets

Analytics, Strategies, Scenarios & Modeling

Risk Management (Assets only)

Establish Asset & Deficiency Risk
Manage Risk

</td>
</tr>
</table>

Program	Asset	Interfaces / Integration	Capabilities

			• Integrated Project Performance, Planning and Funding Database
			  ○ Project Development
			    ▪ Project Nomination
			    ▪ Portfolio Optimization (10 yr. Plan)
			    ▪ Initiate PCR
			    ▪ Execute PCR
			    ▪ Project Closeout Stage
			  ○ Preliminary Project Scoping
			    ▪ Preliminary Project Work Plan
			    ▪ Develop Project List for PID Development
			    ▪ Project Update from the Completed PID
			  ○ Programming
			    ▪ Programming Development (4 yr. Program)
			    ▪ Project Development – Pre-Programming / funded Stage
			• Performance Outcomes, Business Intelligence & Dashboard
			  ○ Performance Outcomes, Business Intelligence & Dashboard
			    ▪ Business Intelligence
			• Broad System Capabilities
			  ○ All except 5.3, Data Science

1.8.3. Phase 2 – Build on Phase 1 with enhanced Functionality & One Additional Asset

Contractor in Phase 2a will introduce one new asset to the capabilities of Phase 1.

Figure 1-7: TAMS Phase 2a - Additional Asset

			TAMS Business Capabilities														
			1.0 Integrated Asset Inventory & Needs Database with User Input				2.0 Analytics, Strategies, Scenarios & Modeling				3.0 Integrated Project Performance, Planning & Funding				4.0 Performance Outcomes, Business Intelligence	5.0 Broad System Capabilities (abridged)	
			1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	5.X	5.3
TAMS Phase	Funding Program(s)	Asset(s)	Inventory, Condition & Location	Performance Life Cycle Planning	Performance Targets	Asset Needs	Gap Analysis, Scenarios & Modeling	Revenues & Financial Projections	Risk Management	Trade-off Analysis	Project Development	Preliminary Project Scoping	Programming	Project Portfolio Management	Performance Outcomes, Business Intelligence & Dashboard	Includes 5.1-5.24	Data Science
2a - Implement Supplemental Asset		+1 Supplemental	X		X				X (Assets)		X	X	X			X	

Table 1-6: TAMS Phase 2a - Additional Asset - Detail

Program	Asset	Interfaces / Integration	Capabilities
• Same as Phase 1	• TBD	• TBD	• Same as Phase 1

In Phase 2b, Contractor will deliver additional functionality to the programs and assets previously executed.

In addition to the previously delivered dashboards, a total of fifty (50) additional Tableau dashboards are requested incorporating the following capabilities and data implemented in the previous Phase 1 and this Phase 2b.

Figure 1-8: TAMS Phase 2b - Enhanced Functionality

			TAMS Business Capabilities														
			1.0 Integrated Asset Inventory & Needs Database with User Input				2.0 Analytics, Strategies, Scenarios & Modeling				3.0 Integrated Project Performance, Planning & Funding				4.0 Performance Outcomes, Business Intelligence	5.0 Broad System Capabilities (abridged)	
			1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	5.X	5.3
TAMS Phase	Funding Program(s)	Asset(s)	Inventory, Condition & Location	Performance Life Cycle Planning	Performance Targets	Asset Needs	Gap Analysis, Scenarios & Modeling	Revenues & Financial Projections	Risk Management	Trade-off Analysis	Project Development	Preliminary Project Scoping	Programming	Project Portfolio Management	Performance Outcomes, Business Intelligence & Dashboard	Includes 5.1-5.24	Data Science
2b - Enhanced Functionality			X	X	X	X	X	X	X (Everything else)	X	X	X	X	X	X (Additional)	X	X

Table 1-7: TAMS Phase 2b - Enhanced Functionality - Detail

Program	Asset	Interfaces / Integration	Capabilities

• Same as Phases 1 & 2a	• Same as Phases 1 & 2a	• Same as Phases 1 & 2a	• Integrated Asset Inventory & NEEDs Database
			  o Performance Life Cycle Planning
			    ▪ Life Cycle Planning Analysis
			    ▪ Unit Cost Parameters and Asset Valuation
			    ▪ Deterioration Rate Parameters
			  o Asset NEEDs
			    ▪ NEEDs Data Import / Entry
			    ▪ Condition based NEEDs Creation
			    ▪ Deficiency based NEEDs Creation
			    ▪ Manage NEEDs
			• Analytics, Strategies, Scenarios & Modeling
			  o Gap Analysis, Scenarios and Modeling
			    ▪ Gap Analysis

Program	Asset	Interfaces / Integration	Capabilities
			▪ Performance and Financial Scenarios ▪ Investment Strategies ▪ Projected Asset Performance Data ▪ Annual Benchmarks o Revenues and Financial Projections ▪ Determine Revenues and Financial Projections ▪ Determine Fund Balances o Risk Management (all but assets) ▪ Establish Asset & Deficiency Risk ▪ Manage Risk o Trade-off Analysis ▪ Establish Parameter Library ▪ Analysis and Tools Library ▪ Projected Asset class / Asset Performance Tool • Integrated Project Performance, Planning and Funding Database o Project Portfolio Management ▪ Establish Planning, Performance and Funding ▪ Manage Planning, Performance and Funding • Performance Outcomes, Business Intelligence & Dashboard o Performance Outcomes, Business Intelligence & Dashboard ▪ Business Intelligence • Broad System Capabilities o All

1.8.4. Phase 3 – Contractor Guided Configuration

Contractor will work alongside Caltrans to implement one (1) new funding program and one (1) new asset incorporating all previously implemented functionality (Knowledge Transfer). Dashboards are to be updated to incorporate the new funding program and asset. In addition to the previously delivered dashboards, a total of five (5) additional Tableau dashboards are to be configured by Caltrans under contractor guidance.

Figure 1-9: TAMS Phase 3 - Contractor Guided Configuration

			TAMS Business Capabilities														
			1.0 Integrated Asset Inventory & Needs Database with User Input				2.0 Analytics, Strategies, Scenarios & Modeling				3.0 Integrated Project Performance, Planning & Funding				4.0 Performance Outcomes, Business Intelligence	5.0 Broad System Capabilities (abridged)	
			1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	5.X	5.3
TAMS Phase	Funding Program(s)	Asset(s)	Inventory, Condition & Location	Performance Life Cycle Planning	Performance Targets	Asset Needs	Gap Analysis, Scenarios & Modeling	Revenues & Financial Projections	Risk Management	Trade-off Analysis	Project Development	Preliminary Project Scoping	Programming	Project Portfolio Management	Performance Outcomes, Business Intelligence & Dashboard	Includes 5.1-5.24	Data Science
3 - Contractor Guided Configuration	+1 TBD	+1 TBD	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Key: Black X = Initial Implimentation; Shaded X = Existing Functionality (carry forward)																	

Table 1-8: TAMS Phase 3 - Contractor Guided Configuration - Detail

Program	Asset	Interfaces / Integration	Capabilities
• TBD	• TBD	• TBD	• Same as Phases 1 & 2

1.9. Unanticipated Tasks

If additional work must be performed, which was wholly unanticipated and is not specified in the SOW, but which, in the opinion of both parties, is necessary to the successful accomplishment of the general scope of work outlined, a work order authorization will be prepared to define tasks to be accomplished. The work authorization form or Task Accomplishment Plan (TAP) will be provided to the Bidder by the Caltrans' Project Manager and must be executed by the Caltrans' Contract Manager.

The Agreement value will include ten (10) percent of the total Agreement amount for unanticipated tasks, contracted on an as-needed basis, and shall be optional throughout the term of the Agreement. Work for unanticipated tasks will be assigned and agreed to in writing by the Bidder and the State via a work authorization and a revised project schedule before the work can commence. The costs for unanticipated tasks shall not exceed the Bidder's original costs for unanticipated tasks, and the total expenditures for unanticipated tasks shall not exceed the total amount set aside for unanticipated tasks.

1.10. Deliverables

Deliverables will be incorporated into the final contract based on the Bidder's proposal, response to narratives and **Exhibit 25: Deliverables Workbook**.

Deliverables must include all work efforts to define, configure, test, and implement the TAMS solution based on the contractor's approach methodology (agile or waterfall).

2. Payments and Invoicing

Payment for services performed under this Agreement shall be made in accordance with the State of California's Prompt Payment Act (Government Code section 927 et seq.).

Invoices shall be submitted not more frequently than monthly, in arrears, not later than 30 days after acceptance of the deliverable DAD(s). Invoices must include:

- State approved Deliverables Acceptance Document (DAD);
- Task Accomplishment Plan, as applicable;
- Agreement number; and
- A certification statement signed by a company official, attesting to the accuracy of the invoice data.

Invoices may be submitted electronically via email or by mail. Invoices submitted electronically shall be emailed to: Melissa.Thompson@dot.ca.gov.

Electronic submissions must:

1. Be submitted individually. Caltrans will not accept multiple invoices submitted in a single email.
2. Contain the following in the Subject line:
   - Company Name
   - Agreement number
   - Invoice number
   - Deliverable number(s)
3. Be in PDF format and include all of the supporting documentation as required in this Agreement.

Invoices submitted by mail shall be sent directly to the following address. Hard copies must be submitted in triplicate and include all of the supporting documentation as required in this Agreement.

California Department of Transportation

Attn: Melissa Thompson (MS 8)

1530 12th Street

Sacramento, CA 95814

3. HOLDBACKS

Caltrans will withhold a percentage of each approved invoice, in the form of Holdbacks (as described below). Caltrans will withhold, as the Holdback, 30 percent of the gross charges associated with each Payment Milestone. Invoice for the Holdback amounts shall be submitted by Contractor upon Final System Acceptance by Caltrans.

4. RESPONSIBILITIES OF THE CONTRACTOR

The Contractor will act as Prime Contractor under this Agreement and comply with the following:

- In addition to identifying personnel proposed to work under this Agreement, the Contractor shall also identify its Subcontractor affiliation(s), as applicable.
- All work products and deliverables shall be provided in a format compatible with the Caltrans' document standards. The Contractor shall upgrade versions of its content creation software (e.g., MS Word, MS Excel, MS Project, etc.), if needed and at no cost to the State, to maintain compatibility with Caltrans' standard applications.
- All work products and deliverables shall be stored on the State document repository. The most current version of all work products and deliverables shall be continuously available for State review at all times.
- The Contractor shall receive all project communications and has the authority to act on all aspects of the services. The Contractor will review the Agreement and associated Agreement documents with the State Contract Manager to ensure understanding of the responsibilities of both parties prior to submission of the Project Management plans.
- Prior to expiration of the Agreement, the Contractor shall return all State property, including security badges, computing assets, and requested work products, to the State Contract Manager.
- As part of this Agreement, the Contractor (data custodian) shall be responsible for all costs incurred by the State (data owner) due to any and every security incident resulting from the Contractor's failure to perform or negligent or willful acts of its staff, which results in an unauthorized disclosure, release, access, review, or destruction; or loss, theft or misuse of an information asset. The Contractor shall notify Caltrans immediately by telephone call and email upon the discovery of breach of security of personal information, sensitive information, or confidential information (PSCI) in computerized form if the PSCI was, or is reasonably

believed to have been, acquired by an unauthorized person, or within two hours by email of the discovery of any suspected security incident, intrusion or unauthorized use or disclosure of PSCI in violation of this Agreement, this provision, the law, or potential loss of confidential data affecting this Agreement. If the State determines that notice to the individual(s) whose data has been lost or breached is appropriate, the Contractor will bear any and all costs associated with the notice or any mitigation selected by the State. These costs include, but are not limited to, consultant time, material costs, postage, media announcements, and other identifiable costs associated with the breach or loss of data.

- The Contractor shall comply with all applicable State policies including, but not limited to (State Administrative Manual 5300-5399, State Information Management Manual procedures, and Caltrans' security practices including, but not limited to, its Acceptable Use Policy, Confidentiality and Non-Disclosure Policy.
- All the Contractor-owned or managed laptops, Ultra books, net books, tablets, Smart phones and similar devices, if allowed by the State Contractor Manager, shall be encrypted using commercial third-party encryption software. The encryption software shall meet the level standards of National Institute of Standards and Technology (NIST), Federal Information Processing Standards (FIPS) Publication 140-2, Security Requirements for Cryptographic Modules. Additionally, anti-virus and anti-malware software shall be used and kept up to date along with software patches of supported versions. The Caltrans' Information Security Office shall have the right to audit the Contractor-owned devices connected to State networks.
- If the Contractor use of removable media storage devices (e.g., Universal Serial Bus [USB] thumb drives, disk tapes, micro SD, SD cards, CD/DVD, etc.) is allowed in writing by the State Contract Manager, all electronic files stored on the removable media storage device used to store State information shall be encrypted using a commercial third-party encryption software. The encryption software shall meet the standards set forth in NIST FIPS 140-2. Information stored on approved removable storage devices shall not be copied to any unencrypted computer (e.g., desktop, smart phone or laptop) not connected to State network. Any personally identifiable information, personal health information, or other confidential information shall be stored on appropriately secured State network file shares or document repositories.

5. Responsibilities of the State

Caltrans shall provide:

- A Contract Manager (includes authorized designee) to provide Contractor with direction, assistance with issues related to the contract, and payment of invoices. The Contract Manager will review the Agreement and associated documents with the Contractor to ensure understanding of the responsibilities of both parties.
- A Project Manager who shall be responsible for identifying the necessary and appropriate Caltrans representatives that will be made available to the Contractor in a timely manner to allow the creation of the deliverable described in this Agreement.
- Access to resources and applicable project documentation as necessary for the Contractor to complete the tasks described herein.
- Workspace and limited network and internet access for Caltrans business purposes only. Any special requirements (e.g., reprographic services, mobile computing equipment (laptop, tablet, phone), locking cabinet, huddle room, smart whiteboard, projector, etc.) shall be identified in this **Exhibit 22: Narrative Response Items**.
- Access to Caltrans staff and management, offices and operation areas, as required, to complete the tasks and activities defined under this Agreement.

6. Contractor Staff

The Contractor shall ensure that a State-approved number of appropriately qualified and trained personnel are employed and available at all times to provide timely services required under the Contract.

The Contractor shall ensure staff continuity and retention throughout the implementation of TAMS.

6.1. Key Personnel

The Contractor must provide Key Personnel as described below. For purposes of this Contract, the term "Key Personnel" refers to Contractor personnel deemed by Caltrans to be essential to the Contractor's satisfactory performance of the requirements contained in this Contract. Please note that all listed Key Personnel are expected to be available through <u>all</u> implementation phases. Please do not provide Key Personnel with a utilization rate significantly lower than Additional Personnel (see 6.2, Additional Personnel below). A low ratio of Key Personnel to Additional Personnel staffing may negatively impact all Key Personnel evaluation scores.

Key Personnel are identified below. One (1) individual can serve in more than one (1) role if: (a) the Contractor can demonstrate that the individual can successfully carry out all responsibilities within the identified timeframe and the project quality and success will not be impacted; and (b) Caltrans provides prior approval. The Sharing of roles is NOT recommended for the following Key Personnel:

1. Project Manager
2. Functional Lead
3. Data Scientist
4. Technical Lead

At a minimum, the Contractor shall provide staff, with the appropriate experience and qualifications, for the following State-identified Key Personnel. Where "large-scale" and "similar scope and complexity" is utilized for Key Personnel qualification, a similar project to TAMS must be identified according to one or more of the following criteria:

1. Client organization size of 20,000 employees or more;
2. Client industry (e.g., department of transportation, electricity transmission and distribution utility, gas pipeline utility, etc.);
3. Quantity of linear assets managed greater than 50,000 lane miles of pavement;
4. Quantity of assets in excess of 13,000 bridges/tunnels, or 212,000 culverts, or 19,000 TMS elements;
5. Project budget greater than $15 million in total contract dollars; or
6. Asset project portfolio spending in excess of $5 billion annually.

Table 6-1: Key Personnel, Description, and Qualification

Key Personnel	Description	Qualifications
Project Manager	• Accountable for the overall execution of the project and delivery of products and services with required functionality and quality • Accountable for the attainment of TAMS established goals, objectives, and targets • Responsible for the day-to-day communications	• A minimum of five (5) years of experience in leading large-scale IT system integration projects with similar scope and complexity • Previous experience following the proposed project management methodology for a minimum of one (1) project

Key Personnel	Description	Qualifications
	between Caltrans and Contractor • Responsible for day-to-day contact with Contractor sub-contractors • Responsible for project management activities, work products, and all deliverables • Responsible for effective meeting facilitation and documentation • Accountable for creating the master project schedule and managing execution utilizing MS Project • Accountable for the project management deliverables • Accountable for the content of status reports • Accountable and responsible for reporting project status at multiple levels including project, TAMS Steering Committee, Project Management Office, IT Governance (to include IT Executive Council and Enterprise Architecture Committee), and, as necessary oversight entities including IV&V, California Department of Technology, California State Transportation Agency,	• Current Project Management Certification (one of): o PMI Program Management Professional (PgMP)® o PMI Project Management Professional (PMP)® o PMI Agile Certified Practitioner (PMI-ACP)® AND Project Management Professional (PMP)® o Five years (minimum) experience Project Managing the implementation of the proposed product(s) **Exhibit 21.1.1: Project Manager – Qualifications Form**

Key Personnel	Description	Qualifications
	and the California Transportation Commission • Accountable for all deliverable quality (project management and execution) • Accountable for the formal submission of deliverables and status reports and manages the review and approval process for the Contractor • Accountable for coordinating activities with the Caltrans' Project Management Team including Caltrans resource identification, resource scheduling, and resource feedback	
Project Controller	• Responsible for creating the master project schedule and managing execution • Responsible for maintaining the master project schedule and the project management deliverables • Responsible for the regular development of status reports • Responsible for the formal submission of deliverables and status reports and manages the review and approval process for the Contractor	• Expert in Microsoft Project for developing and maintaining project schedules including tasks, resources, baseline schedule (effort and duration), task predecessors and critical path, tracking actual progress (actual completion date, forecast completion date and percent complete), and managing resources. Evidenced by (one of): o Managing Projects with Microsoft

Key Personnel	Description	Qualifications
	• Responsible for invoice processing coordination between Contractor and Caltrans • Responsible for coordinating activities with the Caltrans' Project Management Team including Caltrans resource identification, resource scheduling, and resource feedback	Project (Exam 74-343, recently retired) o MS Project 3rd Party Certification (e.g., IIL Orange Belt) o Three years (minimum) of managing project(s) utilizing Microsoft Project • Proficient in Microsoft Office Applications including Outlook, Excel, PowerPoint, Word, and Visio. Evidenced by sample work products, training, or relevant certifications • Current Project Management Certification (one of): o PMI Program Management Professional (PgMP)® o PMI Project Management Professional (PMP)® o PMI Certified Associate in Project Management (CAPM)® o PMI Agile Certified Practitioner (PMI-ACP)® AND Project Management Professional (PMP)® o PMI Scheduling Professional (PMI-SP)® o Two years (minimum) experience performing similar project support tasks

Key Personnel	Description	Qualifications
		Exhibit 21.1.2: Project Controller – Qualifications Form
Functional Lead	• Accountable for overall requirements management • Responsible for requirements traceability from the Contract through testing and training completion • As applicable, responsible for translating requirements to proposed implementation methodology (e.g., User Stories) • Responsible for resolving requirement ambiguity with Caltrans and Contractor and documenting change and initiating change control. • Responsible for developing, documenting, and validating functional requirements and non-functional (technical) requirements • Responsible for allocation of requirements to specific phases and releases • Responsible to identify requirements not in alignment with TAMS established goals, objectives, and targets	• A minimum of two (2) years of experience on large-scale IT system integration projects with similar scope and complexity • Previous experience following the proposed project management methodology for a minimum of one (1) project • Example (minimum one (1) and maximum of two (2)) of written material created wholly or predominantly by the proposed Functional Lead • Desirable: Using Micro Focus Application Life Cycle Management (ALM/Quality Center) for managing requirements • Desirable: Using Micro Focus ALM or JIRA for Agile Management • Desirable: Using Microsoft Visio for business process flow diagramming • Current business process/agile Certification (one of): o PMI Professional in Business Analysis (PMI-PBA)®

Key Personnel	Description	Qualifications
	• Responsible for identifying and communicating functional alignment of requirements to software functional and configuration capabilities • Accountable for business process management • As applicable, responsible for translating business process flows to proposed implementation methodology (e.g., User Stories) • Responsible for resolving business process flow ambiguity with Caltrans and Contractor and documenting change and initiating change control. • Responsible for developing, documenting, and validating business process flows • Responsible for allocation of business process flows to specific phases and releases • Responsible to identify business process flows not in alignment with TAMS established goals, objectives, and targets established	o Association of Business Process Management Professionals, Certified Business Process Professional o OMG Certified expert in BPM™ 2 (OCEB™ 2); Intermediate or higher o Three (3) years (minimum) experience as the Functional Lead for the implementation of the proposed product(s) **Exhibit 21.1.3: Functional Lead – Qualifications Form**

Key Personnel	Description	Qualifications
	• Responsible for identifying and communicating business process flow alignment of requirements to software functional and configuration capabilities	
Data Scientist	• Accountable for data definition, usage and analysis in support of data collection, machine learning, decision support, predictive analytics, and dashboards • Responsible (primary) for Trade-off Analysis and Prioritization of Projects (TAMS objective) • Responsible to provide visualization options including reasons for selecting specific options (pro/con analysis) • Responsible for the utilization of both structured (e.g., asset inventory, census, etc.) and unstructured data (e.g., vulnerability studies, freight mobility plans, system plans, regional plans, etc.) in analysis and decision support • Responsible for transportation asset management specific	• A minimum of five (5) years of experience in performing data scientist activities with similar scope and complexity • Current Data Scientist Certification (one of): o Certified Analytics Professional Program Certified Analytics Professional (CAP®) o Three (3) years (minimum) experience performing Data Science responsibilities for the implementation of the proposed product(s) **Exhibit 21.1.4: Data Scientist – Qualifications Form**

Key Personnel	Description	Qualifications
	decision support including, but not limited to, risk modeling, asset life cycle planning, and investment scenario analysis • Responsible for the utilization of multiple data science methodologies including statistics, text analytics, algorithms, numerical optimization, geospatial analysis, and machine learning • Responsible to provide "data wrangling" skills including data integration, preparation and reshaping • Responsible for the utilization of coding in support of "data wrangling" including those tools proposed in the solution (e.g., Python, Jupyter Notebook, or R) • Responsible for the identification and communication of data governance risks and issues • Responsible to operationalize analytics and machine learning models into the production solution • Responsible to work with business stakeholders to articulate, define and	

Key Personnel	Description	Qualifications
	characterize business problems that can be solved through data science • Responsible to deploy monitoring, measuring and reporting processes to document the project's capability, progress and business value • Responsible to the Functional Lead for the identification, definition, delivery, and validation of data science categorized requirements	
Data and Integration Lead	• Accountable for the delivery of technology and processes for both integration and data availability in support of TAMS goals/objectives • Responsible for collaborating with Project Managers, Data Scientist, Functional Lead and Technical Lead to ensure Caltrans requirements are met through the integration and data availability in support of the TAMS requirements • Responsible for establishing and maintaining sustainable integration technologies and processes recognizing the significant system movement (upgrades	• A minimum of three (3) years of experience in performing data or integration activities with similar scope and complexity **Exhibit 21.1.5: Data and Integration Lead**

Key Personnel	Description	Qualifications
	and replacements) at Caltrans • Responsible for the data migration and integration to meet requirements of TAMS including consulting for integration of both technologies and processes for existing Caltrans' systems, databases, and documents to the TAMS solutions • Responsible for quality assurance technologies and processes to assist with assurance of appropriate data to meet TAMS requirements	
Technical Lead	• Accountable for the TAMS system architecture, technical design and the technical implementation • Responsible for defining and documenting network, security, and server specifications for off-premise and on-premise TAMS components • Responsible to ensure that policies, standards, and procedures related to infrastructure, security, configuration, and code (where applicable) are established, documented,	• A minimum of three (3) years of experience in performing technical lead activities with similar scope and complexity **Exhibit 21.1.6: Technical Lead – Qualifications Form**

Key Personnel	Description	Qualifications
	communicated, validated, and enforced • Accountable for the traceability of requirements through the implementation phases/activities with both the positive confirmation of requirements and unit testing (or methodology equivalent activity identified by the Contractor) • Responsible for the implementation of functional, data science and data integration requirements. • Responsible for the definition and management of all pre-production and production TAMS environments • Responsible for the development of transition documentation and training required to conduct production cutover activities • Responsible for the maintenance and operations documentation/training materials necessary for the sustainable operations, maintenance and support of the TAMS	

Key Personnel	Description	Qualifications
	solution including both on-premise and off-premise components.	
Quality Assurance Lead	• Accountable for the TAMS meeting, or exceeding, established quality goals and objectives. • Responsible for validation and certification of requirements from the Contract through testing completion • Responsible for requirements quality control definition, establishment and validation throughout the TAMS project • Responsible for the planning and execution of all testing, including the facilitation (defect logging and reporting) of user acceptance testing (or methodologically equivalent activity for accepting the system for production go-live) • Responsible for the creation of test scripts and scenarios fully traced to the validation of each TAMS functional and non-functional requirement • Responsible for the validation of all identified defects no matter the resolution/mitigation	• A minimum of three (3) years of experience in performing quality assurance activities with similar scope and complexity • Desirable: Using Micro Focus Application Life Cycle Management (ALM/Quality Center) for managing requirements • Desirable: Using Micro Focus ALM or JIRA for Agile Management **Exhibit 21.1.7: Quality Assurance Lead – Qualifications Form**

Key Personnel	Description	Qualifications
	including system training, business process training (OCM/BPM), data quality (integration or data migration), or data science • Responsible for testing in support, and specific to, multiple TAMS roles including, but not limited to, TAMS Asset Managers (District and HQ), TAMS Administrators/Asset Performance Managers (Directors' Office of Asset Management), TAMS Project Managers, TAMS Planners, TAMS Programs (SB1, HM, SHOPP, etc.), TAMS dashboard consumers • Responsible for collaborating with the TAMS BPM Contractor to ensure business process validation required beyond TAMS system testing	
Training and OCM Lead	Training • Accountable for the training of the TAMS solution required for meeting, or exceeding, established goals and objectives. (User training in support of activities specifically required for attaining TAMS goals and objectives)	• A minimum of three (3) years of experience in performing training activities with similar scope and complexity • A minimum of five (5) years of experience in performing Organizational Change Management activities (applying OCM

<table>
<tr><th>Key Personnel</th><th>Description</th><th>Qualifications</th></tr>
<tr><td></td><td>

Responsible for the planning and execution of all TAMS train-the-trainer functional and technical training
Responsible for training in support, and specific to, multiple TAMS roles including, but not limited to, TAMS Asset Managers (District and HQ), TAMS Administrators/Asset Performance Managers (Directors' Office of Asset Management), TAMS Project Managers, TAMS Planners, TAMS Programs (SB1, HM, SHOPP, etc.), TAMS dashboard consumers
Responsible for collaborating with the TAMS BPM Contractor to ensure business process training alignment beyond TAMS solution implementation training
Responsible for the creation of all training material in support of train-the-trainer AND end user training
Responsible to ascertain the effectiveness of train-the-trainer training
Responsible to ascertain the effectiveness of end

</td><td>principles, methods, and techniques) with similar scope and complexity (three (3) or more functional areas) on one (1), or more, large-scale project

Exhibit 21.1.8: Training Lead – Qualifications Form</td></tr>
</table>

Key Personnel	Description	Qualifications
	user functional training delivered by Caltrans OCM • Accountable for organizational change management related to the TAMS solution implementation phases including transformational, operational, and technical impacts • Responsible to identify Stakeholders • Responsible to assess stakeholder engagement and incorporate mitigation activities in OCM plan • Responsible for the communications of the TAMS vision • Responsible for the development of communication and organizational change management methodology, plans, and techniques. • Responsible for assessing TAMS solution impact on Caltrans' culture, organizational structure, processes, positions, roles, and responsibilities • Responsible to assess change resistance based on TAMS solution impact • Responsible to develop change resistance	

Key Personnel	Description	Qualifications
	mitigation plans including communications, training, and recommendations (business process and user experience) • Responsible for OCM governance establishment and policy management	

6.2. Additional Personnel

The Contractor shall ensure that additional, appropriately qualified and trained non-key personnel are employed and available at all times to timely provide the services required under the Contract. Non-key personnel, referred to as Additional Personnel, shall be persons that have relevant domain knowledge as appropriate for such job title classifications.

7. Key Personnel Replacement Addition/Deletion/Substitution

The Contractor shall not add, delete and/or substitute Key Personnel without the prior written consent of the State Contract Manager and consent shall not be unreasonably withheld. The Contractor shall make every reasonable effort to provide suitable substitute staff. The additional and/or substitute staff shall meet all minimum qualifications and shall be approved in writing by the State prior to substitute staff beginning work.

The Contractor must commit to the continuing availability and participation of the staff filling the Key Personnel roles, to the extent of the Contractor's control, for the duration of the Project or for their proposed period of involvement (as defined in the Project Schedule). Except in the case of a leave of absence, sickness, death, termination or resignation of employment or association, or other circumstances outside the reasonable control of Contractor, the individuals designated to fill any of the Key Personnel roles in Contractor's RFP Response shall not be removed by Contractor from performing their assigned tasks during the period of performance for each such individual as described in Contractor's RFP Response without the prior written approval of State. The Caltrans Contract Manager reserves the right to approve or deny all of the Contractor's proposed replacement project team members designated to fill any one of the Key Personnel roles. Any of these proposed replacement staff must have the same or higher-level skills and experience as those qualifications stated in the RFP. Contractor must request approval of replacement staff designated to fill any one of the Key Personnel roles from the Caltrans Contract Manager in writing at least ten (10) State business days before they are scheduled to begin work on the project and such replacement staff shall not start on the Project without the Caltrans Contract Manager's written approval.

7.1. Requests to Add Staff

The Contractor shall submit an Add, Delete or Substitute Staff Request Form; a completed Key Personnel Qualifications, and Reference forms from the RFP. The request and the completed documents shall be provided to the State Contract Manager for review. The State will provide approval or denial of the request within ten (10) business days after receipt of the documents.

7.2. Requests to Substitute Staff

The Contractor shall submit an Add, Delete or Substitute Staff Request Form; a completed Key Staff Qualifications, and Reference forms from the RFP. The request and the completed documents shall be provided to the State Contract Manager for review. The State will provide approval or denial of the request and related materials within ten (10) business days after receipt of the documents.

7.3. Requests to Delete Staff

The Contractor shall submit an Add, Delete or Substitute Staff Request Form, to the State Contract Manager for review. The State will provide approval or denial of the request within the (10) business days after receipt of this document.

If the addition, substitution and/or deletion does not increase the total cost of the Agreement OR modify the scope of work to be completed under the Contract, an amendment may not be required to make this change to the Agreement.

8. Submission Format, and Acceptance of Deliverables

8.1. Format

Contractor will use a Deliverable Expectations Document (DED), **SOW Attachment 2, DED Template**, to secure approval from the TAMS Project Management and the State Contract Manager for format and content of deliverables.

All deliverables shall be provided in a format compatible with the Caltrans Project Management Office standard and approved by the State Contract Manager. In all cases, the Contractor shall verify application compatibility with the State Contract Manager prior to creation or delivery of any electronic documentation. All interim diagrams, charts, or other graphics inserted into deliverables shall be provided in the original file format used for their creation. An example might be a Microsoft Visio process flow inserted into a document; the original Visio source file shall also be provided electronically. Any deviations to these standards shall be approved by the State Contract Manager.

Hardcopy deliverables shall be on standard 8 ½" x 11" paper. Electronic versions shall be stored in a State designated central repository and remain the sole property of the State. The delivery media shall be compatible with the State storage devices.

8.2. Acceptance of Deliverables

All concluded work shall be submitted for review and acceptance or rejection utilizing the process defined in the Contract Management Plan. Acceptance by the Caltrans Contract Manager shall be through the use of the Deliverable Acceptance Document (DAD), **SOW Attachment 3, DAD Template**. The Contractor shall provide an approved DAD, which will be signed by the Contractor and Caltrans Contract Manager upon acceptance of a deliverable. Signed acceptance is required from the Caltrans Contract Manager before processing an invoice for payment. Deliverables rejected by the Caltrans Contract Manager will be governed by the Corrective Action Plan process detailed and mutually accepted in the Contract Management Plan. For the Contract Management Plan itself and, in the event agreement cannot be reached within the Contract Management Plan deliverable, the Corrective Action Plan process detailed below will prevail.

8.3. Final System Acceptance

Project work and deliverables that involve software programs, as well as any implementation or installation activities, are subject to acceptance testing under the terms of this Agreement. Acceptance testing is intended to ensure that the services acquired under this Agreement result in successful implementation and continued satisfactory levels of performance. The projects and services acquired shall conform to Caltrans' requirements in this Agreement, while meeting performance standards and warranties.

Acceptance testing shall be in accordance with the Caltrans approved Test Planning, including completion certification by the State Contract Manager and the Contractor that each deliverable meets the contract requirements.

If the Contractor's solution does not meet the defined solution requirements (**Exhibit 19: TAMS Requirements**), Caltrans may reject the final delivered system. Major discrepancies that will substantially delay receipt and acceptance of the system will be sufficient cause for rejection of the Contractor solution. Failure to satisfy the requirements of any test is considered a defect, and the system will be subject to rejection. Any rejected software package may be offered again for retest provided all noncompliance has been corrected.

If a defect within the system is detected during the Final Acceptance Period, Caltrans shall document the failure. The Contractor shall be required to research, document and correct the source of failure. Once corrective measures are taken, Caltrans shall monitor the point of failure until a consecutive thirty (30) calendar day period free of defects is achieved.

The Final Acceptance Period is ninety (90) business days following delivery of all project phases and approval of all deliverables. Final System Acceptance of the solution will not occur until successful completion of the Final Acceptance Period per exit criteria defined in the Caltrans approved Test Planning.

9. Corrective Action Plan

Caltrans shall be the sole judge of the acceptability of all work performed and all work products produced by the Contractor. Should the work performed or products produced by the Contractor fail to meet the contract requirements, the following process will be employed, except as superseded by other binding processes:

Caltrans shall notify the Contractor in writing within five (5) business days after deliverable submission with associated DAD or other repeating or significant events (e.g., significant missed schedule commitment, poor intermediate work products such as meeting agendas or notes, etc.) Deliverable problems will be identified and the specific inadequacies and/or failures in the services performed and/or the products produced by the Contractor will be identified by Caltrans in a written notice.

The Contractor shall, within five (5) business days after written deliverable rejection notice, respond to Caltrans by submitting a detailed explanation describing precisely how the identified services and/or products actually adhere to and satisfy all applicable requirements, and/or a proposed corrective action plan to address the specific inadequacies and/or failures in the identified services and/or products.

Caltrans shall, within five (5) business days after receipt of the Contractor detailed explanation and/or proposed corrective action plan, notify the Contractor in writing whether it accepts or rejects the explanation and/or plan. If Caltrans rejects the explanation and/or plan, the Contractor will submit a revised corrective action plan within three (3) business days of notification of rejection.

Caltrans shall, within three (3) business days of receipt of the revised corrective action plan, notify the Contractor in writing whether it accepts or rejects the revised corrective action plan proposed by the Contractor.

If a Contractor project component or deliverable is rejected three (3) times by Caltrans, the Cure Notice process will follow.

Any work that needs corrections shall be at the Contractor's sole cost and expense.

10. INFORMATION AND DATA OWNERSHIP

All information and data stored by the California Department of Transportation (this includes all public transportation entities including cities, counties, Metropolitan Planning Organization (MPO), and Regional Transportation Planning Agency (RTPA), California State Transportation Agency (CalSTA), and California Transportation Commission (CTC) in the State of California that may use this system) using the service provider's system(s) remains the property of the State. As such, the service provider agrees to not scan, capture or view such information or data unless expressly authorized by the appropriate representatives of the State of California. Prior to the release of any information or data belonging to the State of California to any law enforcement agency, the service provider must notify and gain the express approval of the California Department of Technology and the California Department of Justice.

11. TRANSITION PERIOD

For ninety (90) calendar days prior to expiration date of this Contract, or upon termination or conclusion of services as notified by the State, the contractor must provide to the State a copy of all State data stored in the service providers system in format determined by the State. The Transition Period is defined as the date from notification of termination of services to the date of successful validation of data completeness and format delivered to the State which shall be ninety (90) calendar days. The Transition Period may be modified through written agreement between the Contractor and Contract Manager. Upon acceptance of this data by the State of California, the Contractor shall purge the data from any and all of its systems and backups and provide the State confirmation that such steps have occurred within thirty (30) calendar days of the Transition Period end date. The Contractor may optionally set a date, Transition Data Freeze Period, of up to ten (10) business days prior to data delivery during which no data modifications or system access will be possible. During the Transition Period, but excluding the Data Freeze Period, computing services and data usage shall continue to be made available to the State without alteration.

Failure to comply with any of these terms may be grounds for termination for default.

12. PROBLEM ESCALATION

The parties acknowledge and agree that certain technical and/or project-related problems or issues may arise, and that such matters shall be brought to the State's attention.

Problems or issues shall normally be reported in regular status reports or in-person meetings. However, there may be instances where the severity of the problem justifies escalated reporting. To this extent, the State Contract Manager in charge shall determine the level of severity and notify the appropriate state personnel. The state personnel notified, and the time period taken to report the problem or issue shall be at a level commensurate with the severity of the problem or issue. The details of problem/issue identification, escalation and State personnel in the escalation path will be addressed in the Issue Management Plan.

14. Scope of Work, Attachments

Attachment 1, Sample Task Accomplishment Plan (TAP)

Attachment 2, Deliverables Expectations Document (DED) Template

Attachment 3, Deliverables Acceptance Document (DAD) Template

15. SOW Attachment 1, Sample Task Accomplishment Plan

CONTRACTOR NAME:			
CONTRACT NUMBER:		TAP NUMBER:	
DELIVERABLE TITLE:			
DELIVERABLE START DATE:		DELIVERABLE END DATE:	
LIST THE CONTRACTOR ASSIGNED TO DELIVERABLE(S):			
COST OF DELIVERABLE(S) (each if multiple)	$		
The State will pay the agreed deliverable cost, but not more than the agreed cost shown on the TAP.			
DESCRIPTION OF TASKS:			
DESCRIPTION OF DELIVERABLE(S):			
ACCEPTANCE CRITERIA:			

Task Accomplishment Plan (TAP) has been reviewed and agreed upon and all deliverables associated with this TAP will be performed in accordance with the TAP and the provisions of Contract Number XXXX.

AUTHORIZED AND APPROVED:

CONTRACTOR OFFICIAL PRINT & SIGN, NAME/ DATE	TAMS PROJECT MANAGER PRINT & SIGN, NAME / DATE

16. SOW Attachment 2, DED Template

Introduction to the Deliverable Expectations Document

The Deliverable Expectations Document (DED) provides a basis for the development and submission of the resulting deliverable. A DED is a tool used to avoid miscommunication, ensuring that the state and Contractor (or other participating parties) possess a mutual understanding of content and scope. They should be developed throughout the project and mutually agreed to prior to any work associated with each deliverable begins.

A DED is typically a short document. It identifies the scope, content, entrance criteria, acceptance criteria, and development schedule for the deliverable. The DED should contain enough information for the state to have a full understanding of the product that the Contractor will deliver. The content of the DED should focus on the end product, which is the deliverable, and not the process to get there.

The following template provides the suggested structure for the DED.

Deliverable Expectation Document

[Additional supporting documentation can be attached to this document or referenced as necessary.]

Completing the table below by providing the following information:

Deliverable # and Name – Provide the Deliverable number and name associated with this DED.

Deliverable Completion Date – Provide the date the deliverable will be completed and submitted for review.

Deliverable Owner – Provide the name of the resource responsible for the development of the deliverable.

Deliverable # / Name:	
Deliverable Completion Date:	
Deliverable Owners:	

Deliverable Overview

[Describe the purpose of the deliverable and how it fits within the overall objectives of the project. This should be at a high-level and provide context for the deliverable in relation to other project activities or deliverables. Include a description of the scope of the deliverable and ensure that it is consistent with what is described in the contract's Statement of Work.]

Example: The User Acceptance Testing (UAT) Scripts and Results deliverable will document the test conditions, scripts, and execution results of UAT for the delivered product, and include the defects and fixes identified during testing. This deliverable must demonstrate how the acceptance criteria detailed in this document have been satisfied. It will include all of the test scripts executed, and the number, type, resolution, and status of defects identified during the UAT process. Successful delivery of the UAT results, and confirmation that the associated acceptance criteria have been satisfied, will allow the project to validate that business objectives have been met. The project will be able to move forward with production readiness activities to implement the delivered product.

Deliverable Outline or Contents

[Provide a detailed outline of the contents of the deliverable. This may include a table of contents and/or a list of items that will be provided in the deliverable. Include detailed descriptions of each section of each document to be included. If available, provide a sample or template for the deliverable.]

Example: The UAT Results deliverable will include the following components:

Executive Summary – The Executive Summary will provide an overview of the UAT Results Deliverable.

Assumptions and Constraints – This section will include any assumptions and constraints associated with test execution activities and the preparation of this deliverable. All assumptions and constraints are subject to the terms of the contract and mutual agreement between the state and the Contractor.

UAT Scripts – This section will include the inventory of all UAT scripts.

UAT Results – This section will list the test script execution results from UAT and will include the following –

Execution results for all test scripts, including the expected and actual results for each step and the associated defects, if applicable.

A list of test script executions that did not pass and the defect number(s) associated with these test scripts.

UAT Defects – This section will list the defects that have been identified and logged during UAT execution and will include the following:

A detailed list of all defects that includes a description, the associated test script, status, severity, and priority.

All open defects as of the submission date of the deliverable must include a proposed resolution and approved workaround.

Deliverable Entrance Criteria

[List any major prerequisites that must be completed before initiating development of this deliverable. This may include any deliverable that must be completed prior to initiating the development of this deliverable, or any other dependencies that may exist.]

Example: The UAT execution activities are dependent on the completion of the following:

Approval of the Master Test Plan.

Completion of unit, integration, and system testing.

Establishment of a UAT environment.

Deliverable Acceptance Criteria

[List specific acceptance criteria for the deliverable, including critical success factors, required artifacts or documents, quality measures, content metrics, and/or adherence to standards.]

Example: Acceptance of the UAT Scripts and Results deliverable is based on the following criteria:

All content described in this document has been provided.

There is a test script provided for each business requirement.

All defects have been resolved. For open defects, the state and Contractor have mutually agreed to the proposed resolution and the workaround.

Suggested Skills or Knowledge

[Suggest any specific skills or knowledge that may help staff actively participate in the development of the deliverable and/or in the review of the deliverable. Do not identify specific people or roles.]

Example: Participants of UAT execution activities should be knowledgeable of the following:

Master Test Plan

Business requirements

Deliverable Schedule

[Complete the table below and provide the deliverable development schedule. List all activities necessary to complete the deliverable. Include the activity name, start date, end date, and the expected resource assigned to complete the work.

If the team maintains a project schedule that contains this information, it is appropriate to provide an extract or a screenshot of the project schedule instead of completing the table. In this instance, planned and baselined dates should be included. If there are differences between planned and baselines dates, a justification should be provided to explain the variance and also identify known impacts to downstream activities.]

Example:

Activity Name	Start Date	End Date	Resource Name(s)
Identify UAT Scenarios	02/14/19	02/23/19	John Smith
Identify the UAT Participants	02/14/19	02/23/19	Jane Doe
Create UAT Scripts	02/24/19	03/03/19	John Smith
Prepare the Test Data	03/04/19	03/13/19	John Smith
Execute the UAT Scripts and Record Results	03/14/19	04/20/19	Jane Doe
Resolve Open Defects	04/21/19	05/03/19	John Smith
Prepare Deliverable	04/21/19	05/03/19	Jane Doe
UAT Scripts and Results Complete and Submitted	05/04/19	05/04/19	Jane Doe

Signatures

This DED was completed according to contract requirements of [Agreement Number]:

Approved by (State signature)	Position Title	Date
Approval Acknowledged by (Contractor signature)	Position Title	Date

17. SOW Attachment 3, DAD Template

Sample

(Contractor Logo)

Contractor Name:

Customer: California Department of Transportation

Project:

Contract Number:

Deliverable Title:

Deliverable Completion Date:

Total Cost of Deliverable (with holdback):

Total Cost of Deliverable (without holdback):

Acceptance Criteria (from DED):

California Department of Transportation:

☐ Deliverable Accepted – no revisions or modifications are required.

☐ Deliverable Conditionally Accepted - Revisions or modifications below are required before final acceptance.

1.
2.

☐ Deliverable is Rejected – Deficiencies are noted below:

1.
2.

Signatures

This Deliverable is accepted in accordance with contract requirements of [Agreement Number]:

Approved by (State signature)	Position Title	Date
Approval Acknowledged by (Contractor signature)	Position Title	Date

18. SOLICITATION FORMS

The following exhibits and attachments, of Part 2 of the solicitation are the forms the Bidder must complete and return with Final Proposal, including administrative forms, qualification forms, bid requirement responses and all exhibits/attachments discussed in Part 1.

Exhibit 1: STD 213, Standard Agreement Sample

STATE OF CALFIORNIA
DEPARTMENT OF TECHNOLOGY
STATWIDE TECHOLOGY PROCUREMENT
STANDARD AGREEMENT
TECH 213 (NEW 12/2018)

	REGISTRATION NUMBER
PURCHASING AUTHORITY NUMBER (if applicable)	AGREEMENT NUMBER

1. This Agreement is entered into between the Contracting Agency and the Contractor named below:

CONTRACTING AGENCY NAME
California Department of Transportation (Caltrans)

CONTRACTOR NAME
TBD

2. The term of this Agreement is: Start Date: 10/30/2020 or upon CDT approval

End Date: 10/30/2023 with two one-year optional extensions

3. The maximum amount of this Agreement is: $TBD

4. The parties agree to comply with the terms and conditions of the following exhibits which are by this reference made a part of the Agreement:

EXH	TITLE	PAGES
	*Cloud Computing Software as a Service (SaaS) General Provisions rev 06/07/2019)	
	*Cloud Computing Special Provisions for SaaS rev 03/01/2018	
A	Statement of Work(SOW) and SOW Attachments 1, 2, 3	
18	Cost Workbook	
19	TAMS Requirements	
22	Narrative Response Requirements	
25	Deliverables Workbook	

Items shown with an asterisk (*) are hereby incorporated by reference and made part of this agreement as if attached hereto. These documents can be viewed at https://www.dgs.ca.gov/PD/Resources/Page-Content/Procurement-Division-Resources-List-Folder/Model-Contract-Language

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CONTRACTOR		**Department of Technology, Statewide Technology Procurement Use Only**
CONTRACTOR NAME *(If other than an individual, state whether a corporation, partnership, etc.)*		
CONTRACTOR AUTHORIZED SIGNATURE ☐	DATE SIGNED	
PRINTED NAME AND TITLE OF PERSON SIGNING		

ADDRESS		
STATE OF CALIFORNIA		
CONTRACTING AGENCY NAME Caltrans		
CONTRACTING AGENCY AUTHORIZED SIGNATURE ☐	DATE SIGNED	
PRINTED NAME AND TITLE OF PERSON SIGNING		
CONTRACTING AGENCY ADDRESS		Exempt per_

Exhibit 2: Intent to Bid

Submit to: Department of Technology, Statewide Technology Procurement

Procurement Official: Emily Klahn Emily.Klahn@state.ca.gov

We (the Bidder) (select all appropriate responses below):

1. ☐ Intend to submit a bid **or** ☐ Do not intend to submit a bid
2. ☐ Have completed Exhibit 3, Confidentiality Statement and have included with the Intent to Bid submittal
3. ☐ Have completed Exhibit 30, Follow-On Contract Certification and have included with the Intent to Bid submittal
4. ☐ Have reviewed the Conceptual Discussion section of the RFP and by checking this box are requesting to participate in a Conceptual Discussion with the State
5. By checking the box below, agree to comply, without exceptions, to the general provisions below:

   ☐ Agree to the SaaS General Provisions located at: https://www.dgs.ca.gov/-/media/Divisions/PD/PTCS/OPPL/Model-Language/CLOUDCOMPUTING_SaaSGPs-ADA.pdf?la=en&hash=718FE3BFA75ABB6357016BB81BDACBC49D6BF376

   ☐ Agree to the Cloud Computing Special Provisions for SaaS located at: https://www.dgs.ca.gov/-/media/Divisions/PD/PTCS/OPPL/CLOUDCOMPUTINGSERVICESSPECIALPROVISIONS_18_0301.docx?la=en&hash=D15B144C86A54D492E4E19AE810F7F35EA8D171F

The individual to whom all information regarding this solicitation shall be transmitted is:

Name: Title:

Address:

Phone Number: Email:

Sincerely,

Apply signature

Name and Title

Bidder Name

Exhibit 3: Confidentiality Statement

As an authorized representative or corporate officer of the company name below, I have the authority to bind the company contractually, and I agree that all persons employed by this company will adhere to the following policy:

All information belonging to the California Department of Technology (CDT) or its affiliated agencies is considered sensitive and confidential and cannot be disclosed to any person or entity that is not directly approved to participate in the work required to execute this Agreement.

I certify that I will keep all project information including (but not limited to) information concerning the planning, processes, development or procedures of the project, and all communication with CDT or its affiliates related to any procurement process, confidential and secure. I will not copy, give or otherwise disclose such information to any other person unless CDT has on file a Confidentiality Statement signed by the other person(s), and the disclosure is authorized and necessary for the project. I understand that the information to be kept confidential includes, but is not limited to, specifications, administrative requirements, terms and conditions, concepts and discussions, as well as written and electronic materials. I further understand that if I leave this project before it ends, I must still keep all project information confidential. I agree to follow any instructions provided by the project relating to the confidentiality of project information.

I fully understand that any unauthorized disclosure I make may be basis for civil and/or criminal penalties. I agree to advise the Contract Manager immediately in the event of an unauthorized disclosure, inappropriate access, misuse, theft or loss of data.

I warrant that if my company is awarded the Contract, it will not enter into any agreements or discussions with a third party concerning such materials prior to receiving written confirmation from the State that such third party has an agreement with the State similar in nature to this one.

All materials provided for this Project, except where explicitly stated will be promptly returned or destroyed, as instructed by an authorized CDT representative. If the materials are destroyed and not returned, a letter attesting to their complete destruction, which documents the destruction procedures, must be sent to the Contract Manager before payment can be made for services rendered. In addition, all copies or derivations, including any working or archival backups of the information, will be physically and/or electronically destroyed within five (5) calendar days immediately following either the end of the Contract period or the final payment, as determined by the contracting Agency/state entity.

All personnel assigned to this project shall be provided a Confidentiality Statement and will be expected to sign and return it to the State's project manager before beginning work on this project.

Bidder Representative Name:

Title:

Bidder Company Name:

Phone Number:

Email:

Address:

Signature:

Date:

Exhibit 4: Response to Administrative Requirements

The Bidder must indicate agreement to each of the RFP Requirements identified below. By checking the box the Bidder affirms that it understands the requirement and agrees to comply with the requirements.

RFP Part 1 Section:

☐ 3.1 Ability to Perform

☐ 3.2 Primary Bidder

☐ 3.3 Subcontractors

☐ 3.4 Amendment

☐ 3.5 Financial Responsibility Information

☐ 3.6 General Provisions

☐ 3.7 Commercial General Liability

☐ 3.8 Worker's Compensation/Employer's Liability

☐ 3.9 Administrative Requirements Document

☐ 3.10 Cover Letter

☐ 3.11 STD 213, Standard Agreement Sample

☐ 3.12 Statement of Work

☐ 3.13 Confidentiality Statement

☐ 3.14 Secretary of State Certification

☐ 3.15 Seller's Permit

☐ 3.16 Payee Data Record (STD 204)

☐ 3.17 Iran Contracting Act of 2010

☐ 3.18 California Civil Rights Laws

☐ 3.19 Bonds and other Security Documents

☐ 3.20 Socioeconomic Programs

☐ 3.21 Productive Use Requirements

☐ Appendix A, Statement of Work in its entirety

☐ Exhibit 23, TAMS Project Phasing

☐ Exhibit 26, SaaS Security Practice

☐ Exhibit 27, 2020 Caltrans IT Hardware and Software Standards

Exhibit 5: Bidder Declaration GSPD 05-105

ATTACH THE BIDDER DECLARATION GSPD-05-105 AS **EXHIBIT 5**.

The Bidder Declaration GSPD-05-105 and its instructions are available as a fill and print PDF at: https://www.documents.dgs.ca.gov/dgs/fmc/gs/pd/gspd05-105.pdf

Exhibit 6: Secretary of State Certification

ATTACH THE SOS Certifications as **EXHIBIT 6**.

The required document(s) may be obtained through the California Secretary of State, Certification and Records Unit at (916) 657-5448 or through the following website: https://businesssearch.sos.ca.gov/.

Exhibit 7: Workers' Compensation Certificate

The undersigned in submitting this document hereby certifies the following:

I am aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with such provisions before commencing the performance of the work of this contract.

______________________________ ______________________

Signature & **Date**

____

Name and Title (Print or Type)

____

Street Address

____

City, State, ZIP code

____

Firm Name

Exhibit 8: Cover Letter Form

Bidder's Company Legal Name:

Bidder's Company Address:

Indicate Yes or No for Agreement with each of the following items:

The proposal response is the bidder's binding offer, good for 180 calendar days from scheduled contract award date, as noted in section 2.3, KEY ACTION DATES. **Choose an item.**

The bidder agrees to the terms and conditions of this solicitation and accepting responsibility as the prime contractor if awarded the contract resulting from this solicitation. **Choose an item.**

The bidder agrees that the bidder has available staff with the appropriate skills to complete the contract for all services as described in this solicitation and SOW. **Choose an item.**

This form is signed by an individual who is authorized to bind the bidding firm contractually. The individual's name must also be typed, and include the title or position that the individual holds in the firm. An unsigned proposal may be rejected. **Choose an item.**

Provide email and phone number of the person signing the letter:

Apply signature of authorized individual of the Bidder:

Name:

Title:

Date signed:

Exhibit 9: Payee Data Record

ATTACH A COPY OF STD. 204, PAYEE DATA RECORD TO THIS **EXHIBIT**.

Refer to the following website link to obtain the appropriate form. Payee Data Record (STD 204) for information:
http://www.documents.dgs.ca.gov/dgs/fmc/pdf/std204.pdf

Exhibit 10: Iran Contracting Act of 2010

IRAN CONTRACTING ACT

(Public Contract Code § 2202-2208)

Prior to bidding on, submitting a proposal or executing a contract or renewal for a State of California contract for goods or services of $1,000,000 or more, a vendor must either: a) certify it is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services ("DGS") pursuant to Public Contract Code § 2203(b) and is not a financial institution extending twenty million dollars ($20,000,000) or more in credit to another person, for 45 calendar days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or b) demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code § 2203(c) or (d).

To comply with this requirement, please insert your vendor or financial institution name and Federal ID Number (if available) and complete **one** of the options below. Please note: California law (Public Contract Code § 2205) establishes penalties for providing false certifications, including civil penalties equal to the greater of $250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts.

OPTION #1 - CERTIFICATION

I, the official named below, certify I am duly authorized to execute this certification on behalf of the vendor/financial institution identified below, and the vendor/financial institution identified below is **not** on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars ($20,000,000) or more in credit to another person/vendor, for 45 calendar days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

Vendor Name/Financial Institution (Printed):	Federal ID Number (or n/a):
By (Authorized Signature):	
Printed Name and Title of Person Signing:	
Date Executed:	Executed in

Exhibit 10: Iran Contracting Act of 2010, continued.

OPTION #2 – EXEMPTION

Pursuant to Public Contract Code sections 2203(c) and (d), a public entity may permit a vendor/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enters into or renews, a contract for goods and services.

If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

Vendor Name/Financial Institution (Printed):	Federal ID Number (or n/a)
By (Authorized Signature)	
Printed Name and Title of Person Signing:	Date Executed:

Exhibit 11: California Civil Rights Laws Certification

Pursuant to Public Contract Code section 2010, if a bidder or proposer executes or renews a contract over $100,000 on or after January 1, 2017, the bidder or proposer hereby certifies compliance with the following:

1. CALIFORNIA CIVIL RIGHTS LAWS: For contracts over $100,000 executed or renewed after January 1, 2017, the contractor certifies compliance with the Unruh Civil Rights Act (Section 51 of the Civil Code) and the Fair Employment and Housing Act (Section 12960 of the Government Code); and

2. EMPLOYER DISCRIMINATORY POLICIES: For contracts over $100,000 executed or renewed after January 1, 2017, if a Contractor has an internal policy against a sovereign nation or peoples recognized by the United States government, the Contractor certifies that such policies are not used in violation of the Unruh Civil Rights Act (Section 51 of the Civil Code) or the Fair Employment and Housing Act (Section 12960 of the Government Code).

CERTIFICATION

<table>
<tr><td>I, the official named below, certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Proposer/Bidder Firm Name (Printed)</td><td>Federal ID Number</td></tr>
<tr><td colspan="2">By (Authorized Signature)</td></tr>
<tr><td colspan="2">Printed Name and Title of Person Signing</td></tr>
<tr><td>Date Executed</td><td>Executed in the County and State of</td></tr>
</table>

Exhibit 12: Disabled Veteran Business Enterprise (DVBE) Declarations

A copy of the STD. 843, Disabled Veteran Business Enterprise Declarations and its instructions is available as a fill and print PDF at:
https://www.documents.dgs.ca.gov/dgs/fmc/gs/pd/pd_843.pdf

Exhibit 13: Bidding Preferences and Incentives

ALL BIDDERS: COMPLETE ALL SECTIONS BELOW AND SUBMIT WITH YOUR PROPOSAL.

1. SMALL BUSINESS PREFERENCE:

Bidder must check the appropriate box from the choices below.

☐ I am a DGS certified Small Business and claim the Small Business Preference. My DGS Small Business certification number is: ______________

☐ I have recently filed for DGS Small Business preference but have not yet received certification, but I am claiming the Small Business preference.

☐ I am not a DGS certified Small Business, but 25% or more of the revenue from the award will go to DGS certified Small Business Subcontractors performing a Commercially Useful Function and therefore I am claiming the preference. *Bidder must complete and submit Exhibit 6: GSPD-05-105 Bidder Declaration, indicating the percentage of the revenue that will be received by each DGS certified Small Business Subcontractor. The form can also be found at the following link:* https://www.documents.dgs.ca.gov/dgs/fmc/gs/pd/gspd05-105.pdf

☐ I am not claiming the DGS Small Business preference.

2. DVBE INCENTIVE:

Bidder must check the appropriate box from the choices below.

☐ I am a DGS certified DVBE. A copy of my STD. 843 form is attached.

☐ I have recently filed for DGS DVBE certification but have not yet received certification.

☐ I am not a DGS certified DVBE, but a percentage of the revenue will be going to DGS certified DVBE Subcontractors performing a Commercially Useful Function, and therefore I am claiming the DVBE incentive.

Bidder must submit a complete Exhibit 6: GSPD-05-105, Bidder Declaration, indicating the percentage of the revenue that will be received by each DGS certified DVBE Subcontractor. Bidder must also submit an Exhibit 8, STD 843 DVBE Declarations, for each DVBE Subcontractor, signed by the DVBE owner/manager. The form can be found on the following link: https://www.documents.dgs.ca.gov/dgs/fmc/gs/pd/pd_843.pdf

☐ I am not claiming the DVBE incentive.

Exhibit 13: Bidding Preferences and Incentives, continued

3. TARGET AREA CONTRACT PREFERENCE ACT (TACPA):

The Bidder shall check the appropriate box or boxes from the choices below.

- ☐ I am not claiming the TACPA preference.
- ☐ I am claiming the TACPA bidding preference. https://www.documents.dgs.ca.gov/dgs/fmc/pdf/std830.pdf

Name of Bidder: ______________________________

Signature and Date: ______________________________

Exhibit 14: Commercially Useful Function (CUF) Certification

Bidder Name: ______________________________

Subcontractor Name (submit one form for each SB/DVBE): _____

Mark all that apply:
DVBE: ☐ Small Business: ☐ Micro Business: ☐ N/A: ☐

All certified small business, micro business, and/or DVBE Contractors, subcontractors or suppliers must meet the commercially useful function requirements under Government Code Section 14837 (for SB), Military and Veterans Code Section 999 (for DVBE), and Title II California Code of Regulations, Section 1896.4 and 1896.62.

Answer questions 1-5 below, as they apply to your company for the goods and/or services being acquired in this solicitation. A California certified SB, MB, or DVBE business must be deemed to perform a Commercially Useful Function by meeting **ALL** of the following CUF requirements for Contract/Purchase Order (PO) award consideration.

1.	Is responsible for the execution of a distinct element of the resulting Contract.	Yes ☐	No ☐
2.	Carries out its obligation by actually performing, managing, or supervising the work involved.	Yes ☐	No ☐
3.	Performs work that is normal for its business services and functions.	Yes ☐	No ☐
4.	Is responsible, with respect to products, inventories, materials, and supplies required for the contract, for negotiating price, determining quality and quantity, ordering, installing, if applicable, and making payment. If this is a SERVICE with **NO** goods involved, check **N/A** and go to #5.	Yes ☐	No ☐ or N/A ☐
5.	Is not further subcontracting a portion of the work that is greater than that expected to be subcontracted by normal industry practices.	Yes ☐	No ☐

If the answer to any of the five (5) questions is “NO” except for #4 when marked with “N/A”, may result in your proposal being deemed non-responsive.

The bidder must provide a written statement below detailing the role, services and goods the subcontractor(s) will provide to meet the commercially useful function requirement. If the bidder is not claiming a Small Business or DVBE, indicate “Not claiming a preference” in the box below.

At the State’s option prior to award, bidders may be required to submit additional written clarifying information.

By signing this form, the undersigned bidder certifies that the Certified Small Business or DVBE satisfies the Commercially Useful Function requirement, and will provide the role, services, and/or goods stated above.

Bidder Signature:	
Bidder Printed/Typed Name and Title:	

Exhibit 16: Responsibility Certification

By signing and submitting this certification, the bidder is providing the certification as set out below:

A. The Bidder certifies to the best of its knowledge and belief that the Bidder, the Bidder's subcontractor(s) or any personnel related to the Contract to be awarded are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any state or federal agency.

____

Company Name

____

Name and Title of Authorized Representative that can bind the company

____

Signature

Exhibit 17: STD 830 TACPA Preference Request

A copy of the *STD 830 TACPA Preference Request* and its instructions is available as a fill and print PDF at: https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Request-a-Target-Area-Contract-Preference

Exhibit 18: Cost Workbook*

*Posted as a separate document on the Cal eProcure website.

Exhibit 19: TAMS Requirements*

*Posted as a separate document on the Cal eProcure website.

Exhibit 20: Bidder Qualifications

Bidders may use multiple projects to meet the minimum total experience required for this project. A separate form must be completed for each project cited.

<table>
<tr><td>1</td><td colspan="4">Bidder:</td></tr>
<tr><td>2</td><td colspan="4">Project Name:</td></tr>
<tr><td>3</td><td colspan="4">Company Name of Bidder’s reference:</td></tr>
<tr><td>4</td><td colspan="4">Contact Name and Title, Email Address and Telephone Number of Bidder’s reference:</td></tr>
<tr><td>5</td><td colspan="4">Project Start Date (MM/DD/YYYY):</td></tr>
<tr><td>6</td><td colspan="4">Project End Date (MM/DD/YYYY):</td></tr>
<tr><td>7</td><td colspan="4">Project Description:</td></tr>
<tr><td>8</td><td colspan="4">Was the Bidder that performed the work the Primary Contractor? Yes ___ No ___</td></tr>
<tr><td>9</td><td colspan="4">Did the Bidder complete the project? Yes ☐ No ☐ On-going ☐</td></tr>
<tr><td>10</td><td colspan="4">Project Contract Amount: $</td></tr>
<tr><td>11</td><td colspan="4">For each mandatory experience listed below, check “Yes” if the total experience was met on this referenced project; check “No” if none of the experience was met on this referenced project; or check “Partial” if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of “Experience gained on this referenced project” and describe the Bidder’s role and responsibilities performed on the project in the “Description of services provided” field.</td></tr>
<tr><th>Number</th><th>Classification</th><th>Mandatory Experience</th><th>Total Experience Required</th><th>Experience gained on this cited Project Satisfaction Rating</th></tr>
<tr><td rowspan="2">12</td><td>M</td><td>Three years of experience providing large scale system integration services which include: asset management, analytics, SaaS with data integration for on-premise systems.</td><td>3 years</td><td>Yes ☐
No ☐
Partial ☐

Yr.___ Mo.___</td></tr>
<tr><td colspan="4">Description of services provided:</td></tr>
</table>

13	DS	Additional points will be awarded for each year of experience cited in response to Item 12 that is for a government transportation agency (Federal, State, or MPO/RTPA). Points will be awarded for up to 3 years of experience with a government transportation agency.	1 years	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of services provided:			

Exhibit 20.1: Bidder Reference Form

- To Be Completed by the Bidder –

Bidder's Name:

Bidder's Contact Person:

Subcontractor that provided the services (if other than the Bidder):

Today's Date:

Contact Person's Phone Number:

Company/Organization providing Reference:

Customer Contact Person:

Address (Street, City, State, and Zip Code):

Phone Number:

Email Address:

Dates of Project (start and end):

Project Name and Description:

Click or tap here to enter text.

Bidder or Subcontractors Involvement:

Click or tap here to enter text.

- To Be Completed by the Client/Customer Reference–

Client/Customer Name:

Customer Contact Person:

Address (Street, City, State, and Zip Code):

Phone Number:

Email Address:

Dates of Project (start and end):

Project Name and Description:

Click or tap here to enter text.

Dollar Amount of Contractor's Work under This Contract:

Bidder or Subcontractors Involvement:

Click or tap here to enter text.

---

1. Rate the ability of the vendor to ensure quality in project deliverables (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

2. Rate the ability of the vendor to deliver system change management (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

3. Rate the ability of the vendor to deliver organizational change management (OCM) (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

4. Rate the ability of the vendor in delivering training (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

5. Rate the ability of the vendor in delivering implementation (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

6. Rate the ability of the vendor to provide qualified staff (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

7. Rate the vendor in resolving issues in a timely manner (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

8. Rate the vendor in completing the project on time (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

9. Rate the vendor in completing the project within budget (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

10. Rate the overall performance and satisfaction with the vendor during this engagement (Please check one option)

    ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

Certification:

I hereby certify that I have made a diligent effort to ascertain the facts concerning the representations made herein and, to the best of my knowledge and belief all information is accurate.

Client/Customer Reference Signature:

Printed Title of Reference:

Date Signed:

Bidder's Signature:

Printed Title of Bidder Contact:

Date Signed:

Exhibit 21: Key Staff Qualifications Form - Instructions

The Bidder must complete **Exhibit: 21.1.1** through **Exhibit: 21.1.8** with the qualifying project information for <u>each</u> key staff used to meet the minimum experience required for this project. A separate Exhibit must be completed for each project used to meet the minimum mandatory requirements for each key staff.

Exhibits 21.1.1 – 21.1.8 will be used by the State to evaluate key staff's qualifications. The Bidder must specify the required experience in the pertinent row for each requirement in Exhibit 21.1.X. Use additional forms as needed to complete each response. The State may contact references listed on Exhibit 21.1.X to verify the information provided by the Bidder. Any conflicting information may result in the bid being deemed non-responsive.

All dates must be in MM/DD/YYYY format.

All experience must have occurred within the last seven (7) years prior to the RFP release date.

The reference contact name(s) must be a representative of the company for which the project was developed. References from another contractor or contracting company are not acceptable.

Box 1, Bidder: Provide the company name of the Bidder submitting the proposal.

Box 2, Key Staff Name: Provide the name of the Bidder's proposed key staff for this project.

Box 3, Staff's Referenced Project Name: Provide the project name for key staff's referenced project.

Box 4, Company Name of key staff's reference: Provide the company name of the key staff's reference.

Box 5, Contact Information of staff's reference: Identify the contact information for whom the project was completed. Enter the name, title, e-mail address, and phone number for the reference contact for the project. By submitting a proposal, the Bidder declares that the reference person identified is/was employed by the company identified in box 4. This reference must be the same person identified in the Bidder's Key Staff Reference Forms (**Exhibit: 21.2**).

Provide the name of the individual from the company that received services from the key staff. Employee references are not acceptable.

Boxes 6 and 7, Staff Start Date and End Date: Provide the start and end dates <u>the key staff worked</u> on the cited project using MM/DD/YYYY format.

Box, 8, Project Description: Provide a brief description of the nature of the Bidder's cited project. The description should include those elements that are similar to the State's project as described in the solicitation.

Box 9, Project Contract Amount: Provide the dollar amount in currency format of the project contract value.

Box 10, Instructions for documenting the years of experience gained from the project cited.

Note: It is the Bidder's responsibility to ensure that each minimum experience requirement is met in full and addressed in the staff qualification forms in order for the State to determine compliance to the requirements. If the State cannot determine that the years of experience for each of the minimum experience requirements has been met, the Bidder's proposal may be deemed non-response.

Exhibit 21.1: Staff Qualifications Summary Table

Complete this Staff Qualifications Summary Table section to assist the bidder in validating staff qualifications and assisting the State in evaluation.

Enter one row in the table below for EACH Qualifications Form submitted by the bidder. As one Key Staff may have multiple forms to account for multiple projects, please ensure a row is completed for EACH Staff Qualifications Form.

Each row in the two tables below corelate by Index number. The first table summarizes the Staff Qualification Form while the second table summarizes mandatory experience requirements. Rows may be added to both tables below to include ALL Staff Qualification Forms submitted.

Index	Key Staff Name (box 2)	Exhibit #	TAMS Role	Company Name (box 4)	Reference Provided (Y/N)
Sample	John Doe	21.1.1	Project Manager	WeDoItRight Consultants	Y
Sample	John Doe	21.1.1	Project Manager	WeDoItRight Consultants	Y
1					
2					
3					

Each row in the table below correlates to each row in the table above. In the table below, indicate how the Key Staff meet the Key Staff Qualification identified. Please note that each Exhibit 21.1.1 – 21.1.8 has different mandatory experience requirements.

Index	Key Staff Name (box 2)	10	11	12	13	14	15
Sample	John Doe	3 yrs.		Cert			
Sample	John Doe	2 yrs.	1 project				
1							
2							
3							

Exhibit 21.1.1: Project Manager – Qualifications Form

The Bidder may use multiple projects to meet the total experience required for each mandatory experience and, if applicable, desirable experience. **A separate form must be completed for each project cited and follow instruction in Part 1, Section 4.1.3, Staff Qualifications.**

1	**Bidder:**	
2	**Key Staff Name:**	
3	**Staff's Referenced Project Name:**	
4	**Company Name (of staff's reference):**	
5	**Contact Name, Email Address and Telephone Number (of Staff's Reference):**	
6	**Staff Start Date (MM/DD/YYYY):**	
7	**Staff End Date (MM/DD/YYYY):**	
8	**Project Description:**	
9	**Project Contract Amount:**	
	For each mandatory experience and, if applicable, desirable experience listed below, check "Yes" if the total years of experience was met on this referenced project; check "No" if none of the experience was met on this referenced project; or check "Partial" if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of "Experience gained on this referenced project" and describe the Staff's role and responsibilities performed on the project in the "Description of services provided" field.	

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
10	M	Leading large-scale IT system integration projects with similar scope and complexity	**5 years**	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of services provided that meet this experience requirement:			
11	M	Previous experience following the proposed project management methodology for a minimum of one (1) project	**1 project**	Yes ☐ No ☐
	Description of services provided that meet this experience requirement:			

<table>
<tr><th>Number</th><th>Classification</th><th>Mandatory Experience
Staff Name:
Project Name:</th><th>Total Experience Required</th><th>Experience gained on this cited Project</th></tr>
<tr><td rowspan="2">12</td><td>M</td><td>Current Project Management Certification (<u>one of</u>):
• PMI Program Management Professional (PgMP)®
• PMI Project Management Professional (PMP)®
• PMI Agile Certified Practitioner (PMI-ACP)® AND Project Management Professional (PMP)®
• Five years (minimum) experience Project Managing the implementation of the proposed product(s)</td><td>Certificate

or

5 years</td><td>Certificate: ____________
No.__________

or

Yes ☐
No ☐
Partial ☐

Yr.___ Mo.___</td></tr>
<tr><td colspan="4">Description of certificate or experience provided that meet this experience requirement:</td></tr>
<tr><td colspan="4">Total Maximum Points Possible:</td><td></td></tr>
</table>

Exhibit 21.1.2: Project Controller – Qualifications Form

The Bidder may use multiple projects to meet the total experience required for each mandatory experience and, if applicable, desirable experience. **A separate form must be completed for each project cited and follow instruction in Part 1, Section 4.1.3, Staff Qualifications.**

1	**Bidder:**	
2	**Key Staff Name:**	
3	**Staff's Referenced Project Name:**	
4	**Company Name (of staff's reference):**	
5	**Contact Name, Email Address and Telephone Number (of Staff's Reference):**	
6	**Staff Start Date (MM/DD/YYYY):**	
7	**Staff End Date (MM/DD/YYYY):**	
8	**Project Description:**	
9	**Project Contract Amount:**	
	For each mandatory experience and, if applicable, desirable experience listed below, check "Yes" if the total years of experience was met on this referenced project; check "No" if none of the experience was met on this referenced project; or check "Partial" if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of "Experience gained on this referenced project" and describe the Staff's role and responsibilities performed on the project in the "Description of services provided" field.	

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
10	**M**	Expert in Microsoft Project for developing and maintaining project schedules including tasks, resources, baseline schedule (effort and duration), task predecessors and critical path, tracking actual progress (actual completion date, forecast completion date and percent complete), and managing resources. Evidenced by (one of): • Managing Projects with Microsoft Project (Exam 74-343, recently retired) • MS Project 3rd Party Certification (e.g., IIL Orange Belt) • Three years (minimum) of managing project(s) utilizing Microsoft Project	**Certificate** **or** **3 years**	Certificate: ____________ No.__________ or Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of certificate or experience provided that meet this experience requirement:			

<table>
<tr><th>Number</th><th>Classification</th><th>Mandatory Experience
Staff Name:
Project Name:</th><th>Total Experience Required</th><th>Experience gained on this cited Project</th></tr>
<tr><td rowspan="2">11</td><td>M</td><td>Proficient in Microsoft Office Applications including Outlook, Excel, PowerPoint, Word, and Visio. Evidenced by sample work products, training, or relevant certifications</td><td>Certificate
or
Training
or
Work Products</td><td>Provide Below</td></tr>
<tr><td colspan="4">Provide certificate (name and membership number), training, or work products (attachment or reference) utilized to meet this experience requirement:</td></tr>
<tr><td rowspan="2">12</td><td>M</td><td>Current Project Management Certification (one of):
PMI Program Management Professional (PgMP)®
PMI Project Management Professional (PMP)®
PMI Certified Associate in Project Management (CAPM)®
PMI Agile Certified Practitioner (PMI-ACP)® AND Project Management Professional (PMP)®
PMI Scheduling Professional (PMI-SP)®
Two years (minimum) experience performing similar project support tasks</td><td>Certificate
or
2 years</td><td>Certificate: ____________
No.__________
or
Yes ☐
No ☐
Partial ☐
Yr.___ Mo.___</td></tr>
<tr><td colspan="4">Description of certificate or experience provided that meet this experience requirement:</td></tr>
<tr><td colspan="4">Total Maximum Points Possible:</td><td></td></tr>
</table>

Exhibit 21.1.3: Functional Lead – Qualifications Form

The Bidder may use multiple projects to meet the total experience required for each mandatory experience and, if applicable, desirable experience. **A separate form must be completed for each project cited and follow instruction in Part 1, Section 4.1.3, Staff Qualifications.**

1	**Bidder:**	
2	**Key Staff Name:**	
3	**Staff's Referenced Project Name:**	
4	**Company Name (of staff's reference):**	
5	**Contact Name, Email Address and Telephone Number (of Staff's Reference):**	
6	**Staff Start Date (MM/DD/YYYY):**	
7	**Staff End Date (MM/DD/YYYY):**	
8	**Project Description:**	
9	**Project Contract Amount:**	
	For each mandatory experience and, if applicable, desirable experience listed below, check "Yes" if the total years of experience was met on this referenced project; check "No" if none of the experience was met on this referenced project; or check "Partial" if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of "Experience gained on this referenced project" and describe the Staff's role and responsibilities performed on the project in the "Description of services provided" field.	

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
10	**M**	A minimum of two (2) years of experience on large-scale IT system integration projects with similar scope and complexity	**2 years**	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of services provided that meet this experience requirement:			
11	**M**	Previous experience following the proposed project management methodology for a minimum of one (1) project	**1 project**	Yes ☐ No ☐
	Description of services provided that meet this experience requirement:			

<table>
<tr><th>Number</th><th>Classification</th><th>Mandatory Experience
Staff Name:
Project Name:</th><th>Total Experience Required</th><th>Experience gained on this cited Project</th></tr>
<tr><td rowspan="2">12</td><td>M</td><td>Example (minimum one (1) and maximum of two (2)) of written material created wholly or predominantly by the proposed Functional Lead</td><td>1 work product</td><td>Provide Below</td></tr>
<tr><td colspan="4">Provide work product(s) (attachment or reference) utilized to meet this experience requirement:</td></tr>
<tr><td rowspan="2">13</td><td>DS</td><td>Using Micro Focus Application Life Cycle Management (ALM/Quality Center) for managing requirements</td><td>1 project</td><td>Yes ☐
No ☐</td></tr>
<tr><td colspan="4">Description of services provided that meet this experience requirement:</td></tr>
<tr><td rowspan="2">14</td><td>DS</td><td>Using Microsoft Visio for business process flow diagramming</td><td>1 project</td><td>Yes ☐
No ☐</td></tr>
<tr><td colspan="4">Description of services provided that meet this experience requirement:</td></tr>
<tr><td rowspan="2">15</td><td>M</td><td>Current business process/agile Certification (one of):
PMI Professional in Business Analysis (PMI-PBA)®
Association of Business Process Management Professionals, Certified Business Process Professional
OMG Certified expert in BPM™ 2 (OCEB™ 2); Intermediate or higher
Three (3) years (minimum) experience as the Functional Lead for the implementation of the proposed product(s)</td><td>Certificate
or
3 years</td><td>Certificate:
____
No.__________
or
Yes ☐
No ☐
Partial ☐
Yr.___ Mo.___</td></tr>
<tr><td colspan="4">Description of certificate or experience provided that meet this experience requirement:</td></tr>
<tr><td colspan="4">Total Maximum Points Possible:</td><td></td></tr>
</table>

Exhibit 21.1.4: Data Scientist – Qualifications Form

The Bidder may use multiple projects to meet the total experience required for each mandatory experience and, if applicable, desirable experience. **A separate form must be completed for each project cited and follow instruction in Part 1, Section 4.1.3, Staff Qualifications.**

1	**Bidder:**	
2	**Key Staff Name:**	
3	**Staff's Referenced Project Name:**	
4	**Company Name (of staff's reference):**	
5	**Contact Name, Email Address and Telephone Number (of Staff's Reference):**	
6	**Staff Start Date (MM/DD/YYYY):**	
7	**Staff End Date (MM/DD/YYYY):**	
8	**Project Description:**	
9	**Project Contract Amount:**	
	For each mandatory experience and, if applicable, desirable experience listed below, check "Yes" if the total years of experience was met on this referenced project; check "No" if none of the experience was met on this referenced project; or check "Partial" if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of "Experience gained on this referenced project" and describe the Staff's role and responsibilities performed on the project in the "Description of services provided" field.	

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
10	M	A minimum of five (5) years of experience in performing data scientist activities with similar scope and complexity	**5 years**	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of services provided that meet this experience requirement:			
11	M	Current Data Scientist Certification (one of): • Certified Analytics Professional Program Certified Analytics Professional (CAP®) • Three (3) years (minimum) experience performing Data Science responsibilities for the implementation of the proposed product(s)	**Certificate** **or** **3 years**	Certificate: ____________ No.__________ or Yes ☐

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
				No ☐ Partial ☐ Yr.___ Mo.___
	Description of certificate or experience provided that meet this experience requirement:			
Total Maximum Points Possible:				

Exhibit 21.1.5: Data and Integration Lead – Qualifications Form

The Bidder may use multiple projects to meet the total experience required for each mandatory experience and, if applicable, desirable experience. **A separate form must be completed for each project cited and follow instruction in Part 1, Section 4.1.3, Staff Qualifications.**

1	**Bidder:**	
2	**Key Staff Name:**	
3	**Staff's Referenced Project Name:**	
4	**Company Name (of staff's reference):**	
5	**Contact Name, Email Address and Telephone Number (of Staff's Reference):**	
6	**Staff Start Date (MM/DD/YYYY):**	
7	**Staff End Date (MM/DD/YYYY):**	
8	**Project Description:**	
9	**Project Contract Amount:**	
	For each mandatory experience and, if applicable, desirable experience listed below, check "Yes" if the total years of experience was met on this referenced project; check "No" if none of the experience was met on this referenced project; or check "Partial" if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of "Experience gained on this referenced project" and describe the Staff's role and responsibilities performed on the project in the "Description of services provided" field.	

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
10	M	A minimum of three (3) years of experience in performing data or integration activities with similar scope and complexity	**3 years**	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of services provided that meet this experience requirement:			
Total Maximum Points Possible:				

Exhibit 21.1.6: Technical Lead – Qualifications Form

The Bidder may use multiple projects to meet the total experience required for each mandatory experience and, if applicable, desirable experience. **A separate form must be completed for each project cited and follow instruction in Part 1, Section 4.1.3, Staff Qualifications.**

1	**Bidder:**	
2	**Key Staff Name:**	
3	**Staff's Referenced Project Name:**	
4	**Company Name (of staff's reference):**	
5	**Contact Name, Email Address and Telephone Number (of Staff's Reference):**	
6	**Staff Start Date (MM/DD/YYYY):**	
7	**Staff End Date (MM/DD/YYYY):**	
8	**Project Description:**	
9	**Project Contract Amount:**	
	For each mandatory experience and, if applicable, desirable experience listed below, check "Yes" if the total years of experience was met on this referenced project; check "No" if none of the experience was met on this referenced project; or check "Partial" if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of "Experience gained on this referenced project" and describe the Staff's role and responsibilities performed on the project in the "Description of services provided" field.	

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
10	**M**	A minimum of three (3) years of experience in performing technical lead activities with similar scope and complexity	**3 years**	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of services provided that meet this experience requirement:			
Total Maximum Points Possible:				

Exhibit 21.1.7: Quality Assurance Lead – Qualifications Form

The Bidder may use multiple projects to meet the total experience required for each mandatory experience and, if applicable, desirable experience. **A separate form must be completed for each project cited and follow instruction in Part 1, Section 4.1.3, Staff Qualifications.**

1	**Bidder:**	
2	**Key Staff Name:**	
3	**Staff's Referenced Project Name:**	
4	**Company Name (of staff's reference):**	
5	**Contact Name, Email Address and Telephone Number (of Staff's Reference):**	
6	**Staff Start Date (MM/DD/YYYY):**	
7	**Staff End Date (MM/DD/YYYY):**	
8	**Project Description:**	
9	**Project Contract Amount:**	
	For each mandatory experience and, if applicable, desirable experience listed below, check "Yes" if the total years of experience was met on this referenced project; check "No" if none of the experience was met on this referenced project; or check "Partial" if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of "Experience gained on this referenced project" and describe the Staff's role and responsibilities performed on the project in the "Description of services provided" field.	

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
10	M	A minimum of three (3) years of experience in performing quality assurance activities with similar scope and complexity	**3 years**	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of services provided that meet this experience requirement:			
11	DS	Using Micro Focus Application Life Cycle Management (ALM/Quality Center) for managing requirements	**1 project**	Yes ☐ No ☐
	Description of services provided that meet this experience requirement:			

<table>
<tr><th>Number</th><th>Classification</th><th>Mandatory Experience
Staff Name:
Project Name:</th><th>Total Experience Required</th><th>Experience gained on this cited Project</th></tr>
<tr><td rowspan="2">12</td><td>DS</td><td>Using Micro Focus ALM or JIRA for Agile Management</td><td>1 project</td><td>Yes ☐
No ☐</td></tr>
<tr><td colspan="4">Description of services provided that meet this experience requirement:</td></tr>
<tr><td colspan="3">Total Maximum Points Possible:</td><td colspan="2"></td></tr>
</table>

Exhibit 21.1.8: Training and OCM Lead – Qualifications Form

The Bidder may use multiple projects to meet the total experience required for each mandatory experience and, if applicable, desirable experience. **A separate form must be completed for each project cited and follow instruction in Part 1, Section 4.1.3, Staff Qualifications.**

1	**Bidder:**	
2	**Key Staff Name:**	
3	**Staff's Referenced Project Name:**	
4	**Company Name (of staff's reference):**	
5	**Contact Name, Email Address and Telephone Number (of Staff's Reference):**	
6	**Staff Start Date (MM/DD/YYYY):**	
7	**Staff End Date (MM/DD/YYYY):**	
8	**Project Description:**	
9	**Project Contract Amount:**	
	For each mandatory experience and, if applicable, desirable experience listed below, check "Yes" if the total years of experience was met on this referenced project; check "No" if none of the experience was met on this referenced project; or check "Partial" if fewer than the total years of the experience was met on this referenced project. If partial or total experience was met (checked), enter the years and/or months of "Experience gained on this referenced project" and describe the Staff's role and responsibilities performed on the project in the "Description of services provided" field.	

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
10	**M**	A minimum of three (3) years of experience in performing training activities with similar scope and complexity	**3 years**	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___
	Description of services provided that meet this experience requirement:			
11	**M**	A minimum of five (5) years of experience in performing Organizational Change Management activities (applying OCM principles, methods, and techniques) with similar scope and complexity (three (3) or more functional areas) on one (1), or more, large project	**5 years**	Yes ☐ No ☐ Partial ☐ Yr.___ Mo.___

Number	Classification	Mandatory Experience Staff Name: Project Name:	Total Experience Required	Experience gained on this cited Project
	Description of services provided that meet this experience requirement:			
Total Maximum Points Possible:				

Exhibit 21.2: Staff Reference Form

- To Be Completed by the Bidder –

Bidder's Name:

Bidder's Key Staff Person:

Subcontractor that provided the services (if other than the Bidder):

Today's Date:

Company/Organization providing Reference:

Customer Contact Person:

Address (Street, City, State, and Zip Code):

Phone Number:

Email Address:

Dates of Project (start and end):

Project Name and Description:

Click or tap here to enter text.

- To Be Completed by the Client/Customer Reference–

Client/Customer Name:

Customer Contact Person:

Address (Street, City, State, and Zip Code):

Phone Number:

Email Address:

Dates of Project (start and end):

Project Name and Description:

Click or tap here to enter text.

Dollar Amount of Contractor's Work under This Contract:

Bidder or Subcontractors Involvement:

Click or tap here to enter text.

---

1. Using the ratings below, how would you rate the individual's overall performance on this project? (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

2. Using the ratings below, how would you rate the individual's effectiveness at communicating (orally and in writing) with project members and stakeholders? (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

3. Using the ratings below, how would you rate the individual's effectiveness in dealing with conflicting priorities? (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

4. Using the ratings below, how would you rate the individual's skills related to their job specialty (Circle One)? (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

5. Using the ratings below, how would you rate the deliverables on this project from this individual? (Please check one option)

☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

6. Using the ratings below, how would you rate this project completeness and was it on-time and within budget? (Please check one option)

   ☐ Unsatisfactory (0) ☐ Satisfactory (2) ☐ Excellent (3)

Certification:

I hereby certify that I have made a diligent effort to ascertain the facts concerning the representations made herein and, to the best of my knowledge and belief all information is accurate.

Client/Customer Reference Signature:

Printed Title of Reference:

Date Signed:

Bidder's Signature:

Printed Title of Bidder Contact:

Date Signed:

Exhibit 22: Narrative Response Items

Bidder must include with its proposal, a description of Bidder's understanding of the project and Bidder's role and approach to accomplish project implementation (including system configuration, testing, and training), maintenance and operations (M&O) objectives, meet timelines, and complete project deliverables. Each item's response should not exceed the indicated number of pages. See **RFP Part 1, Section 4.2.1, Narrative Response Requirements** for complete instructions and **RFP Part 1, Section 7.3.1.7, Narrative Response Evaluation** for criteria to be utilized in evaluation.

The Narrative Response is divided in two sections:

22A. Product

22B. Implementation

The Product section shall focus on the proposed product(s) themselves and is to expand on the functional and non-functional requirements with a cohesive description of the product technology and functionality.

The Implementation section shall focus on the implementation services and is in response to the Statement of Work.

22A-1 Product – Functional Requirements (20 Pages) (MS)

Utilizing the TAMS Business Capability Model for organization, describe the functionality provided in the proposed solution. Note that all functionality described here must be included in services provided.

Include a summary of final requirements disposition in the following table format. Note that duplicate requirements exist within the context of multiple business process flows. Duplicates <u>should</u> be counted. Additionally, do not count requirement criteria. These requirement criteria are indicated by a letter following the requirement number.

Table 19-1: Functional Requirements Summary

Response Code	Total Requirements	Mandatory	Mandatory Optional	Optional
Out of the Box	A + B + C	A	B	C
Configuration (<17 hours)				
Major Configuration (>17 hours)				
Customization (with Description)				
Unable to Meet				

Response Code	Total Requirements	Mandatory	Mandatory Optional	Optional
TOTAL				

22A-2 Product – Compliance with Caltrans' Hardware and Software Standards (5 pages) (MS)

List and describe positive compliance with Caltrans' hardware and software standards. For example, this shall minimally indicate compliance with client workstations used by Caltrans.

22A-3 Product – Architectural Description and Drawings (20 pages) (MS)

Provide logical and physical architectural drawings for the proposed solution. The TAMS Logical Architecture shall indicate the context of the TAMS in relationship to Caltrans' and Contractor facilities and the broader connectivity between the two (or more) domains. For SaaS offerings, indicate the cloud vendor, instance utilized (e.g., AWS GovCloud, Azure Government, Google Cloud Platform FedRAMP, etc.), and regions.

Provide a physical architectural drawing of the proposed solution only where the proposed solution relates to Caltrans. The TAMS Physical Architecture shall provide the proposed TAMS solution including all proposed on-premise components.

Describe the proposed products and/or services. This is to include all on-premise hardware and software required for the solution. At a minimum this should list the Software-as-a-Service. **Do NOT include pricing information here in response to this question**.

Responses must include:

1. Item quantity
2. Item name
3. Potentially utilize existing Caltrans' licensing (i.e., describe if it is the bidders' intent to utilize licenses potentially owned by Caltrans already)
4. Item functional description
5. Item functional relationship to other items (e.g., relies on, dependent for, etc.)
6. License type (e.g., named user, concurrent user, enterprise)
7. License term
8. TAMS Business Capability Model relationship (BCM level 3 fit to one or more capabilities)
9. Architectural "abilities" to include:

a. Accessibility – Platform accessibility utilizing multiple clients (browser and devices) and assistive technology (e.g., screen readers, visual contract, etc.)
b. Scalability – Horizontal (adding capacity through additional components) and vertical (adding capacity through larger components) scaling options to include data volume, analytical and user scalability options
c. Interchangeability – Utilize multiple components to provide functionality, including support for 3rd party products (e.g., Tableau for visualization, Esri for mapping, etc.)
d. Flexibility – Configurable to meet changing business needs (i.e., use of business rules engine, configuration for new assets, etc.)
e. Availability – Includes resilience options to ensure long-term system usability (i.e., Recovery Time Objective and Recovery Point Objective)
f. Reliability – High availability including service levels and recovery objectives
g. Maintainability – Knowledge, skills, and abilities required to maintain the system including ongoing activities such as adding assets, defining planning periods, adding goals and objectives, etc.
h. Interoperability – Receive from and provide information to existing Caltrans' systems
i. "Securability" – Certifications and the specific level of certification received for the proposed solution for SaaS. Including compliance with the Caltrans' **Exhibit 26: Software as a Service (SaaS) Security Practice: SP 2017-01**

22A-4 Product – Information Architecture (10 pages) (MS)

Exhibit 24: Conceptual TAMS Information Architecture contains a possible TAMS Information Architecture designed by Gartner to meet the TAMS functional requirements. The State understands that there are likely NO products that currently meet all of the broad vision provided in the TAMS Information Architecture. Our goal is to evaluate what is available in the market.

Given the TAMS Information Architecture and the data model of the proposed product(s), compare and contrast both models. Please address these specific topics:

1. Information Model Entity Inventory – What TAMS Information Model entities (e.g. NEED, Project, Life Cycle Plan, etc.) are provided within the proposed solution and product(s)?

2. Information Model Relationships – What relationships (e.g., NEED to Project, etc.) are provided within the proposed solution and product(s)?
3. Common Entities – What common entities (e.g., Documents, Location, Risks, etc.) are provided within the proposed solution and product(s)?

22A-5 Product – Maintenance and Support (3 pages) (MS)

Describe your maintenance and support options and specific services. If several SaaS or on-premise systems are provided, then please describe maintenance and support for each. **Do NOT include pricing information here in response to this question**.

Minimum aspects to be included:

1. Item name – correlated to the Architecture Description above
    a. Maintenance model – describe the maintenance model(s) available to resolve incidents and problems:
        i. Maintenance service classifications – describe the types of services offered
        ii. Maintenance service levels – describe the response levels for each maintenance service classification (i.e., days to response or service resolution)
    b. Enhancement model – describe the enhancement model(s) available to change or enhance the item:
        i. Enhancement service classifications – describe the types of enhancement services offered
        ii. Enhancement service levels – describe the response levels available for each enhancement service classification

22A-6 Product – Marketing Material (20 pages) (DS)

Attach additional marketing material to be considered in the context of your proposal. The evaluation team is unlikely to search the Internet or follow links to find reference material. This marketing material is to be focused on the software product and/or software services. All marketing material shall be sequentially numbered. Handwritten page numbering is acceptable.

A transmittal cover page in the following format is to be included at the front of the marketing material. For each provided item, the “disposition” must be indicated as one of the following:

- Proposed, Included – The marketing material describes functionality specifically included in the proposal

- Informational – White papers or implementation stories providing information on how the product was implemented or utilized, but is not specifically included in the product(s) or services proposed.
- Optional – The marketing material is for products not specifically included in the proposal but may be of interest to Caltrans.

Table 19-2: Product Marketing Material Transmittal

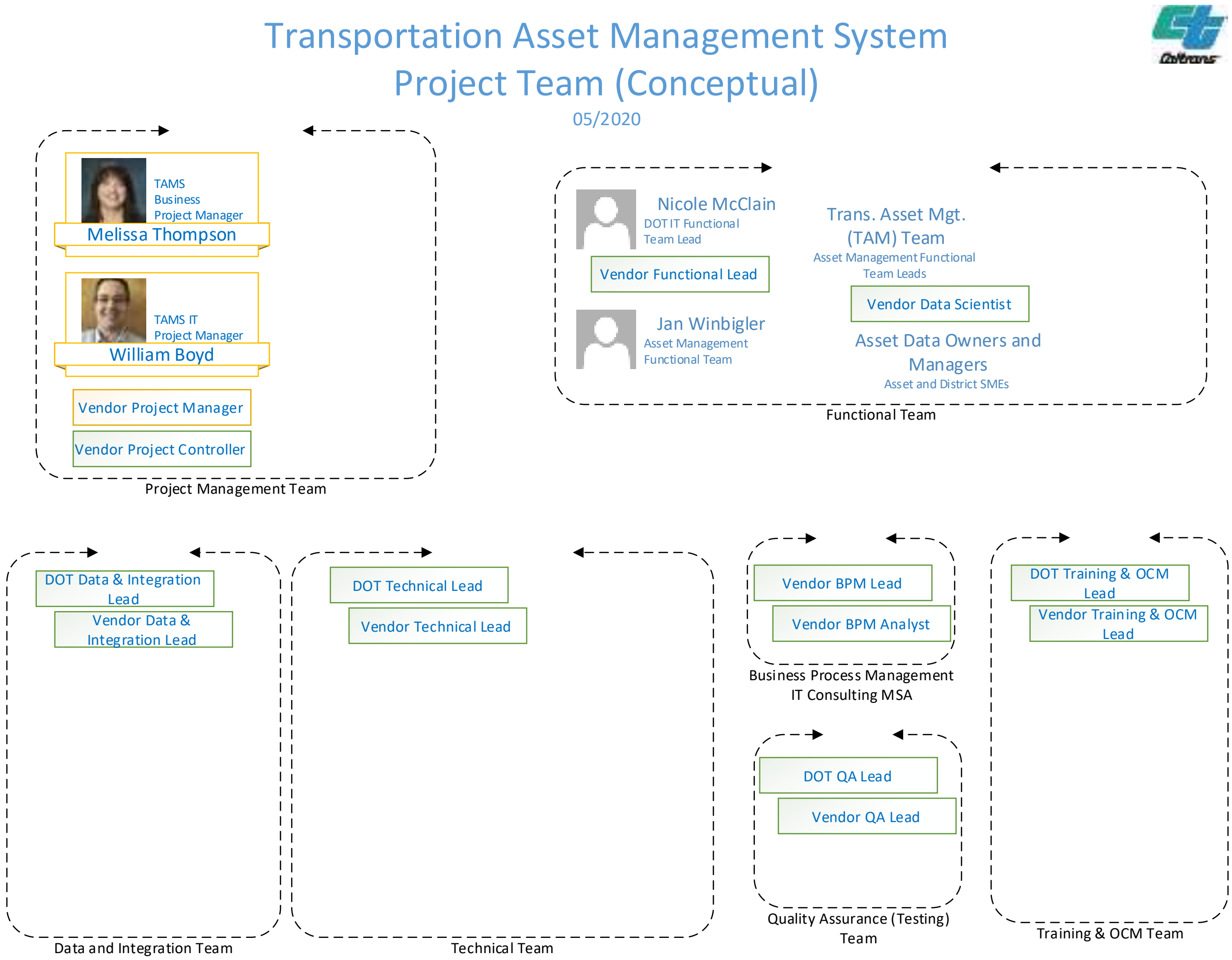
Index	Material Title	Disposition	Number of Pages
1	Product X Marketing Brochure	Proposed, Included	5
2	White Paper	Informational	2
3	Product Y Marketing Brochure	Optional	1

22B-1 Implementation – TAMS Project Management Methodology (20 pages) (MS)

Considering the TAMS timeline, staffing, objectives, project phases, and deliverables; describe in detail the proposed project management methodology. The description shall provide specifics for the TAMS project management activities including:

1. Methodology Utilized – Project Management methodology utilized (e.g., CA-PMF, PMBOK5, etc.)
2. Staffing – Names, roles, and team membership of the proposed staff included in the TAMS project (inclusive of 6.1 Key Personnel and 6.2 Additional Personnel). Additional Personnel may be indicated by generic names (e.g., Business Analyst 1). The response must include a completed organization chart such as the one provided here (optional to utilize this

format):



3. Project Office Approach – Approach to working with other project management and project oversight entities including:
    a. TAMS Sponsors
    b. TAMS Steering Committee
    c. TAMS IV&V
    d. California Department of Technology
    e. TAMS BPM Contractor
    f. TAMS Information Architecture and Data Quality Project
4. Project Management Deliverables – deliverables (as defined in **Exhibit 25: Deliverables Workbook**) produced by TAMS phase
5. Work Site Approach – Define and describe your approach to on-premise and remote work. How is on-site work to be identified and communicated to Caltrans? Are limits applied to on-site work by trips, hours, or other metric?
6. Requests for the State – Include office space, badge access, computer resources, copiers, materials, conference room(s), projection boards, or any other request for State resources

7. Proposed TAMS Work Breakdown Structure (WBS) inclusive of BOTH project management and execution. The WBS shall include a minimum of three levels beginning with the phases (see **Section 1.8 Project Phases above**):
    a. Phase 0 – Project Initiation, Planning and Management
    b. Phase 1 – Maintain existing functionality (Parity)
    c. Phase 2 – Build on Phase 1 with enhanced Functionality & One Additional Asset
    d. Phase 3 – Contractor Guided Configuration

22B-2 Implementation – Execution Methodology (5 pages) (MS)

Describe the proposed execution methodology <u>exclusive of</u> (not considering) the proposed TAMS solution staffing, timeline, objectives, and phases. This may be a white paper or other standard material describing the proposed execution methodology while ensuring completion of services identified in Section 1.6.3 Description of Services (page 21). This execution methodology should <u>not</u> include the project management methodology.

22B-3 Implementation – TAMS Solution Implementation Overview (15 pages) (MS)

Considering the TAMS timeline, staffing, objectives, project phases, execution methodology, and deliverables; describe in detail the proposed implementation. The description shall utilize the described Execution Methodology (above) and provide specifics for the TAMS solution implementation including:

1. Phases – description and justification of proposed phase scope
2. Timeline – relative time, including serial or parallel execution, for completion of TAMS phases
3. Staffing – names and roles of the specific staff included in the TAMS phase
4. Deliverables – deliverables (as defined in **Exhibit 25: Deliverables Workbook**) produced by TAMS phase
5. Crosswalk or Mapping – reference **section 1.6.3 Description of Services** to map the proposed methodology to the TAMS services requested
6. Objectives – approach and milestones indicating attainment of the provided TAMS Project Objectives including:
    a. **INTEGRATE, MAP AND UTILIZE CALTRANS CORE ASSETS**
    b. **ESTABLISH CALTRANS NEEDs-BASED TREATMENT OPTIONS**
    c. **SET PERFORMANCE TARGETS**
    d. **ESTABLISH TRADE-OFF ANALYSIS AND PRIORITIZATION OF PROJECT**
    e. **ESTABLISH DEVELOPMENT OF PROJECT**
    f. **ESTABLISH PORTFOLIO COMMITMENT**

g. **ESTABLISH REPORTS AND DASHBOARDS**

22B-4 Implementation – TAMS Project Objective Attainment (2 pages) (MS)

Describe each TAMS Project Objective (enumerated above and in **1.6.2 TAMS Project Objectives**) and how the product(s) and services provided will measure the metric identified and meet the target. Please provide a specific positive or negative affirmation of target attainment within the resulting Contract. Include quality control, organization change management, or data quality measures to be provided to ensure project objective attainment.

22B-5 Implementation – Testing and System Acceptance (3 pages) (MS)

The TAMS solution addresses a 10-year planning cycle with multiple cycles imbedded within the 10-year planning period. Provide the testing and system acceptance approach to be utilized to ensure:

1. Testing coverage and validation for the 10-year and other planning cycles (e.g., PID, TAMP, SHSMP, etc.)
2. Phase acceptance approach to ensure intermediate system acceptance
3. Assuring Final System Acceptance of the solution within the Contract Period

22B-6 Implementation – Information Architecture and Data Quality Management Plan (4 pages) (MS)

Exhibit 24: Conceptual TAMS Information Architecture contains a possible TAMS Information Architecture designed by Gartner to meet the TAMS functional requirements. **Exhibit 28: TAMS Data Quality Management Plan** contains details of a data quality assessment carried out by Gartner and 1Spatial.

The State understands that there are likely NO products that currently meet all of the broad vision provided in the TAMS Information Architecture. Our goal is to evaluate what is available in the market.

Given the TAMS Information Architecture and the data model of the proposed product(s), please address these specific implementation topics:

1. Given the issues and risks identified in the Information Architecture, what are some mitigation activities:
    a. Recommended for Caltrans
    b. Included in the proposed solution
    c. Addressing parallel activities (system upgrades, implementations, etc.)

2. Given the Data Quality Management Plan, what are some mitigation activities and deliverables:
    a. Recommended to Caltrans
    b. Included in the proposed solution
    c. Addressing data quality during ingestion by TAMS
    d. Addressing data quality of data created by TAMS

22B-7 Implementation – Organizational Change Management (10 pages) (MS)

Please describe your approach and specific tasks and deliverables to ensure project success through Organizational Change Management (as identified for the Training and OCM Lead in Table 6-1: Key Personnel, Description, and Qualification beginning on page 45):

1) Accountable for organizational change management related to the TAMS solution implementation phases including transformational, operational, and technical impacts
2) Responsible to identify Stakeholders
3) Responsible to assess stakeholder engagement and incorporate mitigation activities in OCM plan
4) Responsible for the communications of the TAMS vision
5) Responsible for the development of communication and organizational change management methodology, plans, and techniques.
6) Responsible for assessing TAMS solution impact on Caltrans' culture, organizational structure, processes, positions, roles, and responsibilities
7) Responsible to assess change resistance based on TAMS solution impact
8) Responsible to develop change resistance mitigation plans including communications, training, and recommendations (business process and user experience)
9) Responsible for OCM governance establishment and policy management

This narrative response must specifically identify Contractor responsibilities and Caltrans responsibilities associated with each task identified. Please ensure alignment with your narrative response to 22B-3 Implementation – TAMS Solution Implementation Overview (15 pages) (MS).

22B-8 Implementation – Marketing Material (10 pages) (DS)

Attach additional marketing material to be considered in the context of your proposal. The evaluation team is unlikely to search the Internet or follow links to find reference material. This marketing material is to be related to the implementation services. All marketing material shall be sequentially numbered. Handwritten page numbering is acceptable.

A transmittal cover page in the following format is to be included at the front of the marketing material. For each provided item, the "disposition" must be indicated as one of the following:

- Proposed, Included – The marketing material describes services specifically included in the proposal
- Informational – White papers or implementation stories providing information on how the services have been performed, but is not specifically included in the services proposed.
- Optional – The marketing material is for services not specifically included in the proposal but may be of interest to Caltrans.

Table 19-3: Implementation Marketing Material Transmittal

Index	Material Title	Disposition	Number of Pages
1	Implementation Marketing Brochure	Proposed, Included	5
2	White Paper	Informational	2
3	Implementation Marketing Brochure	Optional	1

Exhibit 23: TAMS Project Phasing

			TAMS Business Capabilities														
			1.0 Integrated Asset Inventory & Needs Database with User Input				2.0 Analytics, Strategies, Scenarios & Modeling				3.0 Integrated Project Performance, Planning & Funding				4.0 Performance Outcomes, Business Intelligence	5.0 Broad System Capabilities (abridged)	
			1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	5.X	5.3
TAMS Phase	Funding Program(s)	Asset(s)	Inventory, Condition & Location	Performance Life Cycle Planning	Performance Targets	Asset Needs	Gap Analysis, Scenarios & Modeling	Revenues & Financial Projections	Risk Management	Trade-off Analysis	Project Development	Preliminary Project Scoping	Programming	Project Portfolio Management	Performance Outcomes, Business Intelligence & Dashboard	Includes 5.1-5.24	Data Science
0 - Project Initiation, Planning and Management																	
1 - Parity	SHOPP HM Minor A & B	4 Core (Bridges, Pavement, TMS, Culverts)	X		X				X (Assets)		X	X	X		X (AM Dashboards)	X	
2a - Implement Supplemental Asset		+1 Supplemental	X		X				X (Assets)		X	X	X			X	
2b - Enhanced Functionality			X	X	X	X	X	X	X (Everything else)	X	X	X	X	X	X (Additional)	X	X
3 - Contractor Guided Configuration	+1 TBD	+1 TBD	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Key: Black X = Initial Implimentation; Shaded X = Existing Functionality (carry forward)

Exhibit 24: Conceptual TAMS Information Architecture

*Posted as a separate document on the Cal eProcure website.

Exhibit 25: Deliverables Workbook

*Posted as a separate document on the Cal eProcure website.

Caltrans does not have a strong background in Agile methodology but is open to all proposals. If a vendor does propose an agile approach to implementation, Caltrans limited experience should be taken into consideration.

Contractor must complete and include in their proposal, **Exhibit 25: Deliverables Workbook**. The workbook contains 5 tabs:

1. Instructions – The Instructions tab provides instructions to completing all tabs in the workbook.
2. Define Deliverable – The Define Deliverable tab contains a list of topics, sub-topics and content that is requested for the project. The Contractor will complete the worksheet by identifying the deliverable that will contain the content. Every Content row must be contained within at least ONE deliverable.
3. Define Phase – The Define Phase tab contains the project phases (see **Section 1.8 Project Phases above**). The Bidder will complete the worksheet by providing the deliverables required in each phase.
4. Define Dependencies – The Define Dependencies tab will identify the dependencies for each deliverable. The Bidder will complete this worksheet by identifying each deliverable and all applicable dependencies.
5. RASIC – The RASIC tab is a roles and responsibilities matrix for Contractor and State staff. The Bidder will complete this tab based on their proposed staffing plan to complete the identified deliverables.

Exhibit 26: Software as a Service (SaaS) Security Practice: SP 2017-01

*Posted as a separate document on the Cal eProcure website.

Exhibit 27: 2020 Caltrans IT Hardware and Software Standards

*Posted as a separate document on the Cal eProcure website.

Exhibit 28: TAMS Data Quality Management Plan

*Posted as a separate document on the Cal eProcure website.

Exhibit 29: TAMS Glossary

*Posted as a separate document on the Cal eProcure website.

Exhibit 30: Follow-on Contract Certification

All Respondents must complete Exhibit 30: Follow-on Contract Certification per instruction from Part 1, section 2.4.4.1. Follow-on Contract Certification and list each Caltrans' contract within the past five (5) years and justify why each of these contracts are or were not in conflict with the General Provisions for SaaS and include it with Intent to Bid submittal. Complete a new sheet for each Caltrans contract. If you have not held a Caltrans contract in the past five (5) years you must still complete Exhibit 30: Follow-on Contract Certification answering the applicable questions on the form and submit it with your Offer.

The General Provisions for SaaS are available at the following website: https://www.dgs.ca.gov/-/media/Divisions/PD/PTCS/OPPL/Model-Language/CLOUDCOMPUTING_SaaSGPs-ADA.pdf?la=en&hash=718FE3BFA75ABB6357016BB81BDACBC49D6BF376

Consultant's Name Consultant's Name	Phone (###) ###-####
Email: Consultant Email.	

Signature: ______________________________

I certify that my firm has identified all Caltrans' contracts within the past five (5) years, and that these contracts are or were not in conflict with General Provisions Section 38: Follow-on Contracts.

Caltrans Contract for each new Contract		
Caltrans Contract/Project Name Contract/Project Name		
Caltrans Contract Number Contract Number	Dates of Service (begin and end) Begin dates- End dates	Cost of Services Cost
Contractors Roles: Contractor Roles		
Contractors Key Staff Name and Roles: Key staff Name and Roles		
Caltrans Contact Person and Role Caltrans Contact and Role	Caltrans Phone Caltrans Phone	Caltrans Email Caltrans Email
Caltrans Divisions or Districts worked with: Caltrans District or Division		
Description of Contractors Services Provided: Services provided		
Description of Caltrans Meetings attended: Meetings attended		

Respondent’s justification for why the services provided Caltrans do not represent a follow-on contract as defined by the SaaS General Provisions, Section 38 for this procurement. Click or tap here to enter text.