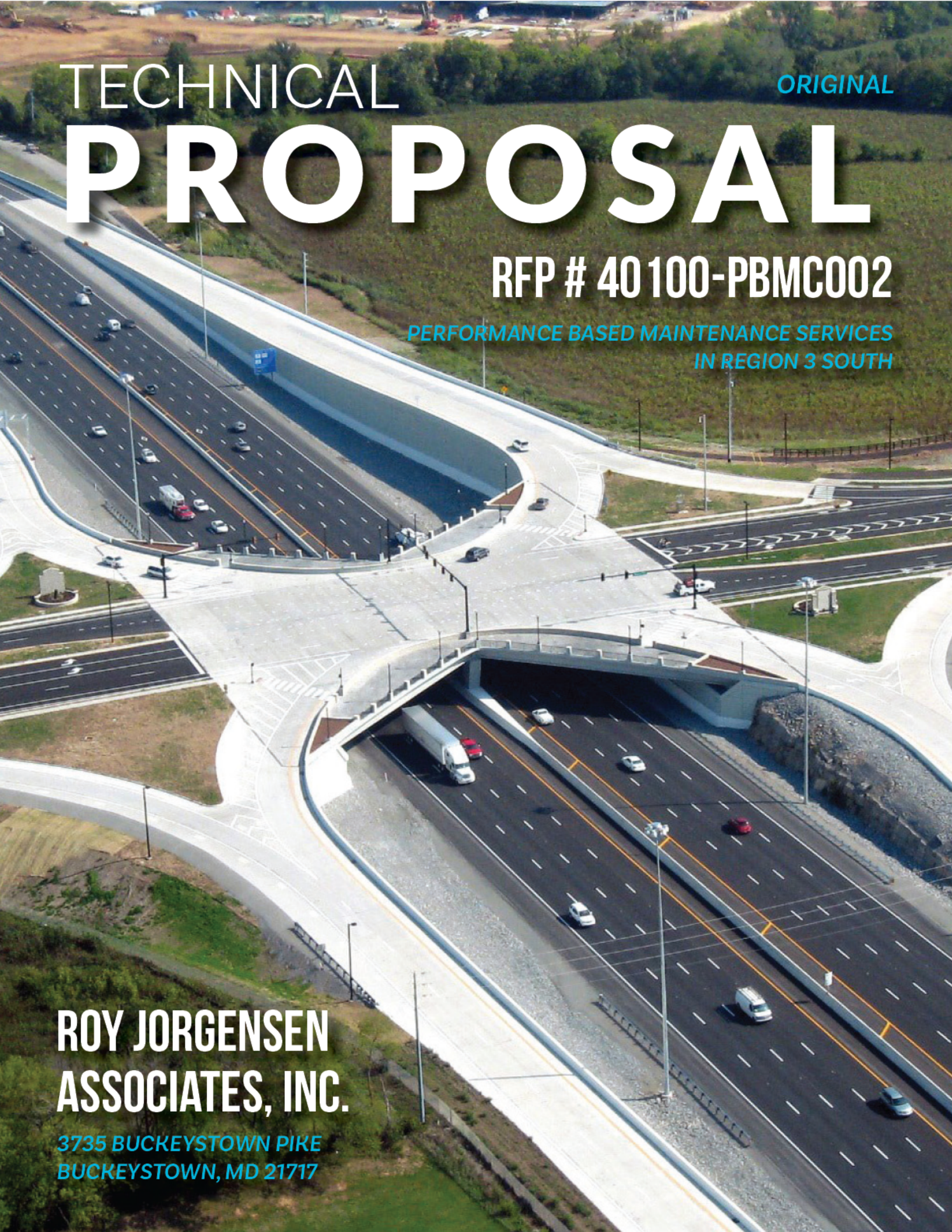


TECHNICAL

PROPOSAL

ORIGINAL

RFP # 40100-PBMC002

PERFORMANCE BASED MAINTENANCE SERVICES
IN REGION 3 SOUTH

ROY JORGENSEN
ASSOCIATES, INC.

3735 BUCKEYSTOWN PIKE
BUCKEYSTOWN, MD 21717

RESPONSE PAGE#	GENERAL QUALIFICATIONS AND EXPERIENCE	RESPONDENT RESPONSE
See Respondent Response Column	Detail the name, e-mail address, mailing address, telephone number, and facsimile number, if applicable, of the person the State should contact regarding the response.	Mr. Abe Henningsgaard, Vice President Roy Jorgensen Associates, Inc. 3735 Buckeystown Pike, Buckeystown, MD 21717 Phone: 904-445-8129; Fax: 301-874-2876
See Respondent Response Column	Describe the Respondent's form of business (i.e., individual, sole proprietor, corporation, non-profit corporation, partnership, limited liability company) and business location (physical location or domicile).	Roy Jorgensen Associates, Inc. is an S-Type Corporation headquartered in Buckeystown Maryland. There are numerous project and business offices located throughout the United States.
See Respondent Response Column and Section B4 Page 14	Briefly describe how long the Respondent has been providing the goods or services required by this RFP.	Jorgensen was founded in 1961 and incorporated in 1969 in Maryland. From 1961 until the late 1990s it was an engineering consulting and facilities maintenance firm providing services to the public and private sectors. Beginning in the 1990s, Jorgensen began providing highway maintenance and operations services to states on a contract basis. Additional information regarding Jorgensen' experience and past projects similar to the requirements of this RFP can be found in Section B.4 of the Technical Response.
See Respondent Response Column	Describe the Respondent's number of employees, client base, and location of offices.	Currently Jorgensen employees approximately 1,044 employees consisting of various types of engineers, accountants, maintenance technicians, IT technicians, and business support staff. Jorgensen's client base consists of state highway agencies, public works departments and private companies who own large infrastructure complexes. Office Locations: Throughout Florida, Virginia, Texas, Colorado, and Maryland.
See Respondent Response Column	Provide a statement of whether there have been any mergers, acquisitions, or change of control of the Respondent within the last ten (10) years. If so, include an explanation providing relevant details.	There have been no mergers, acquisitions, or change of control of the Firm within the past 10 years.
See Respondent Response Column	Provide a statement of whether the Respondent or, to the Respondent's knowledge, any of the Respondent's employees, agents, independent contractors, or subcontractors, involved in the delivery of goods or performance of services on a contract pursuant to this RFP, have been convicted of, pled guilty to, or pled nolo contendere to any felony. If so, include an explanation providing relevant details.	To the Respondent's knowledge, there have been no Jorgensen employees, agents, independent contractors, or subcontractors, involved in the delivery of goods or performance of services on a contract pursuant to this RFP, have been convicted of, pled guilty to, or pled nolo contendere to any felony.
See Respondent Response Column	Provide a statement of whether, in the last ten (10) years, the Respondent has filed (or had filed against it) any bankruptcy or insolvency proceeding, whether voluntary or involuntary, or undergone the appointment of a receiver, trustee, or assignee for the benefit of creditors. If so, include an explanation providing relevant details.	During the last ten (10) years, the Roy Jorgensen Associates, Inc. has not filed (or had filed against it) any bankruptcy or insolvency proceeding, whether voluntary or involuntary, or undergone the appointment of a receiver, trustee, or assignee for the benefit of creditors. If so, include an explanation providing relevant details.
See Respondent Response Column	Provide a statement of whether there is any material, pending litigation against the Respondent that the Respondent should reasonably believe could adversely affect its ability to meet contract requirements pursuant to this RFP or is likely to have a material adverse effect on the Respondent's financial condition. If such exists, list each separately, explain the relevant details, and attach the opinion of counsel addressing whether and to what extent it would impair the Respondent's performance in a contract pursuant to this RFP. NOTE: All persons, agencies, firms, or other entities that provide legal opinions regarding the Respondent must be properly licensed to render such opinions. The State may require the Respondent to submit proof of license for each person or entity that renders such opinions.	To the Respondent's knowledge there is no pending litigation against the Roy Jorgensen Associates, Inc. that the Respondent should reasonably believe could adversely affect its ability to meet contract requirements pursuant to this RFP or is likely to have a material adverse effect on the Respondent's financial condition.

RESPONSE PAGE#	GENERAL QUALIFICATIONS AND EXPERIENCE	RESPONDENT RESPONSE
See Respondent Response Column	Provide a statement of whether there are any pending or in progress Securities Exchange Commission investigations involving the Respondent. If such exists, list each separately, explain the relevant details, and attach the opinion of counsel addressing whether and to what extent it shall impair the Respondent's performance in a contract pursuant to this RFP. NOTE: All persons, agencies, firms, or other entities that provide legal opinions regarding the Respondent must be properly licensed to render such opinions. The State may require the Respondent to submit proof of license for each person or entity that renders such opinions.	There are no pending, or in progress Securities Exchange Commission investigations involving the Roy Jorgensen Associates, Inc.
See Respondent Response Column and Section B5, Page 18 of Technical Proposal	Provide a statement of whether the Respondent intends to use subcontractors to meet the Respondent's requirements of any contract awarded pursuant to this RFP, and if so, detail: (a)the names of the subcontractors along with the contact person, mailing address, telephone number, ande-mail address for each; (b)a description of the scope and portions of the goods each subcontractor involved in the delivery of goodsor performance of the services each subcontractor shall perform; and (c)a statement specifying that each proposed subcontractor has expressly assented to being proposed asa subcontractor in the Respondent's response to this RFP.	Roy Jorgensen will use subcontractors for this Project. The Jorgensen Team contacted and met in person (Meet and Greet in Nashville) with the key subcontractors supporting our proposal. The subcontractor team will be integral to our resident organization and will provide key services to several areas including Tier 2 & 3 asphalt, Tier 2 concrete, drain cleaning, sweeping, traffic services, mowing and litter. The detailed list is provided in Section B5 Page 23 of Technical Proposal.
See Respondent Response Column	Provide a statement and any relevant details addressing whether the Respondent is any of the following: 1.is presently debarred, suspended, proposed for debarment, or voluntarily excluded from coveredtransactions by any federal or state department or agency; 2.has within the past three (3) years, been convicted of, or had a civil judgment rendered against thecontracting party from commission of fraud, or a criminal offence in connection with obtaining,attempting to obtain, or performing a public (federal, state, or local) transaction or grant under apublic transaction; violation of federal or state antitrust statutes or commission of embezzlement,theft, forgery, bribery, falsification or destruction of records, making false statements, or receivingstolen property; 3.is presently indicted or otherwise criminally or civilly charged by a government entity (federal, state,or local) with commission of any of the offenses detailed above; and 4.has within a three (3) year period preceding the contract had one or more public transactions(federal, state, or local) terminated for cause or default.	1. Jorgensen is not presently debarred, suspended, proposed for debarment, or voluntarily excluded from covered transactions by any federal or state department or agency. 2. During the past three (3) years, Jorgensen has not been convicted of or had a civil judgment rendered against the contracting party from commission of fraud, or a criminal offence in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property. 3. Jorgensen is not presently indicted or otherwise criminally or civilly charged by a government entity with commission of any of the offenses detailed above. 4. Within the past three (3) years, Jorgensen has not had any public transactions terminated for cause or default.

I Douglas W. Selby attest and confirm the above statements are true.

Douglas W. Selby, President, Roy Jorgensen Associates, Inc.

II. TECHNICAL PROPOSAL

B.1 UNDERSTANDING OF THE STATE'S REQUIREMENTS AND PROJECT SCHEDULE

Roy Jorgensen Associates, Inc ("Jorgensen") is pleased to submit our technical proposal for the Tennessee Department of Transportation ("TDOT") RFP #40100-PBMC0002 REGION 3 SOUTH Proposal for Performance-Based Maintenance Services.

WHY JORGENSEN FOR SOUTH CONTRACT?? – The South Contract has a mix of urban and rural interstates, but the predominant workload will be in the rural, middle Tennessee area in both responding to maintenance needs but also to emergency incidents on long, interstate roadways. This is our environment!!!

This is what we do throughout many Southern States. This is what we do on I95 in St. Johns County, FL I95 in Indian River County, Fl. And, on interstate Roadways in Fredericksburg Virginia, IH45 in Central Texas. And, a very similar corridor with many comparable features in I-95 D5 South Georgia.

B.1.1. STATE REQUIREMENTS

Our philosophy revolves around a core principle: achieving a thorough understanding of the entire project and seamlessly integrating it into our work execution. We've extensively reviewed contract documents, assessed the project scope and requirements, and developed actionable plans that are closely aligned with our execution strategy. Jorgensen's successful track record and "lessons learned" from similar scope projects are integrated into our approach for effective work execution.

B.1.1.1 Contract Documents

A summary of the key contract documents and our understanding of the most significant issues:

- Contract: Establishes the contract start DATE – 90 days after execution of the contract – and the contract TERM – 60 months; and establishes the amount of payment/performance bond – at least $125 million.
- RFP: Solicitation document that binds together and summarizes schedule of events, response requirements, general contracting information, evaluation and contract award and attachments.
- Scope of Services (SOS): The key technical document that outlines the essence of the contract obligations, the maintenance and operations work to be performed, quality and performance requirements, and TDOT specifications in two sections – Exhibit A PBMC Scope of Work and Exhibit B Special Provisions.
- Technical Proposal: The technical proposal represents our strategy for executing the SOS in strict accordance with the stipulations outlined in RFP Section B, as well as adhering to the specifications and special provisions. Our entire executive team at Jorgensen was actively involved in crafting this plan, with valuable input from key staff members..
- Special Provisions/Supp Specs/Standard Specs/TDOT Drawings: These are essential engineering documents that determine standard maintenance specifications for work performance and work administration, safety and traffic control MUTCD compliance, and materials usage on the ROW. Jorgensen's JEEP team incorporates technical TDOT documents, specs and drawings into our JAMMS system, O&M management, and MQA programs.

B.1.1.2 Key Proposal Elements that Demonstrates Our Understanding

Sections of our proposal are summarized below to demonstrate the key elements of understanding.

- Jorgensen Technical Engineering Group: We formulated the foundational annual work plan encompassing routine maintenance services, phased maintenance services, and potential unit price work activities. To create this plan, we meticulously collected critical data through an exhaustive field inventory and condition assessment, supplemented by thorough research and analysis provide by TDOT.

» QMP: The QMP program is top down driven with experienced QA/QC personnel in the field to document the actions needed to ensure our corporate philosophy of striving for "continuous improvement.

» Third Party Claims: Our TPC team has successfully processed thousands of claims in the past 18 years.

» JEDi Training and Safety Leadership: The Directors of Training and Safety, with their significant tenure at the firm and extensive experience on PBMC projects, are well-prepared to immediately mobilize and implement tailored training program for the project.Furthermore, they are committed to adopting comprehensive training programs for technicians to ensure they are well-equipped to excel in preforming maintenance activites for the project .Customer Service Plan: Jorgensen brings the experience learned from processing customer service requests on 30 PBMC and comprehensive maintenance contracts every day, 365 days a year.

» Incident Management and Emergency Response: Our response teams have experience as first responders on all 30 AM projects in addition to providing HELP and TMC services on several projects.

» JAMMS Maintenance Management: Jorgensen's proprietary JMMS system is software-adaptable to TDOT specs. Field technicians use Phone apps to input work needs and results directly to JAMMS.

NOTES OF INTEREST

» TDOT Was One of the First States to Adopt MMS Concepts.
» These concepts were developed by Jorgensen associates for FHWA.
» These concepts exist today at TDOT as evidenced by the SOS, Chart 1. Maintenance Activities.

B.1.2 PROJECT SCHEDULE

To ensure an orderly transition within the Department's timeline the project schedule is defined into the following phases: pre-award, mobilization, phased-maintenance services, and routine and preventive maintenance services.

B.1.2.1 Pre-Award Activities

Project Preparation Activities. A key Jorgensen capability for this project is to anticipate the needs and begin initial mobilization activities without knowing the finality of the award. The following items are set-in motion using regional yards in Virginia, Georgia and Florida.

» Personnel: Internal Jorgensen managers/supervisors have participated in this job and planning the transfer process to the TN region. Critical senior management with Jorgensen are already in place and been on the ground preparing for a successful award.

» Equipment: Jorgensen holds a fleet of 2000 + units and our Fleet manager is already allocating internal unit transfers from our legacy fleet to mitigate lead times to acquire new equipment.

» Materials: Our Divisional inventory of critical materials is in excess of $[redacted] and startup inventories will be allocated and shipped directly to Region 3.

» Regional Crews: We will mobilize legacy regional crews for incident response, guardrail/attenuators, pavements, and mowing in additional to critical activity equipment operators.

» Training/Safety Indoctrination: Initially we will use certified legacy technicians to handle traffic control incident response, NIMs, confined space, ATSSA supervisor, until resident staff are trained and certified for these critical activities.

Evaluation and BAFO Award Process. The execution team will prepare a response if requested by the Department. We understand this part of the procurement will be administered at the Departments discretion and are aware the entire evaluation will occur from Mid-December through mid-January.

Award of Contract (Mid-January). Jorgensen will execute the contract and provide payment/ performance bonds within 10 business days of contract execution.

DEMONSTRATED ABILITY TO MOBILIZE AND EXECUTE QUICKLY

In Early 2022 VDOT Requested Jorgensen Support in Stepping into Four PBMC Contracts After the Collapse of the Incumbent. Within One Week Jorgensen Had In-Place Technicians and Equipment to Respond to Emergency Events and Work Activities on all Contracts and Continued to Perform Services for Months Until VDOT Could Procure New Contracts with Several Awarded to Jorgensen.

B.1.2.2 Post-Award Mobilization Activities

Post-Award Jorgensen will begin mobilization activities. The project mobilization phase is critical requiring completion of many tasks for a successful project start up. (insert graphic?)

Mobilization (January 2024). This is the critical month to initiate efforts for obtaining resources for Day 1.

- Equipment: Truck, loader, dump, bucket truck, TMA final orders are made; recognizing that the initial fleet transfers were already in progress with transfers from Mid-Atlantic yards.
- Location: Finalize multiple year leases for operational centers and maintenance yard location.
- Materials: Orders for G/R materials, attenuators, signs, asphaltic materials, and delineators.
- Subcontractor Interface: Establishing sub contractual relationships with key activity providers --- mowing/ vegetation, sweeping, traffic services, and drain cleaning.
- Personnel: Offer letters for critical personnel were already made during procurement (and in many cases transfers), so recruitment and training will be focused on resident staff and technicians

Mobilization (February 2024)

- Training: The JEDi training program includes required technical, safety and project specific training.
- Finalizing Condition Assessment Surveys: The initial condition assessment plan determined during procurement will be revisited and updated with new findings.
- Phased Maintenance Plan: Finalizing the work schedule for the 6-month phased maintenance plan.

Mobilization (March 2024)

- Final Employee On-Boarding: Final prescriptive training occurs with new staff on-boarding.
- Client Interface Meetings: Kick-off meetings for effective communication protocols.
- Final Materials/Equipment Deliveries: Setting maintenance yard and inventory levels, establishing network of equipment maintenance vendors/service providers.
- Mock-Run Exercises: 'Mock' exercises for mobile operations, lane closures, and incidents.
- Local Subcontractor: Establishing work schedules for subcontractor providers.

B.1.2.3 Phased-Maintenance Services

Since Phased Maintenance Services will begin no more than 90 calendar days of contract execution, we have based our proposal for these work activities to begin April 2024 and conclude in 12 months for unpaved shoulder drop-offs and six months for misc. drainage structures, paved ditch, ground signs, and inlets. A detailed schedule of the Phased Maintenance Services is provided in Section 8. Work Needs.

B.1.2.4 Routine Maintenance Performance Based Services

The routine maintenance services will occur from April 2024 through March of 2029 and will be executed through our annual work planning process. The plan uses the TDOT activity definitions and guidelines for maintenance management. We segregated work activities by approach: routine maintenance, preventive maintenance, emergency maintenance, and other maintenance activities with consideration for expected traffic incidents and emergencies, and customer service requests.

Year One Schedule. Initiation of preventative maintenance work plans for system wide correction of poor

performing assets/phased maintenance services using regional Jorgensen work forces and subcontractors.

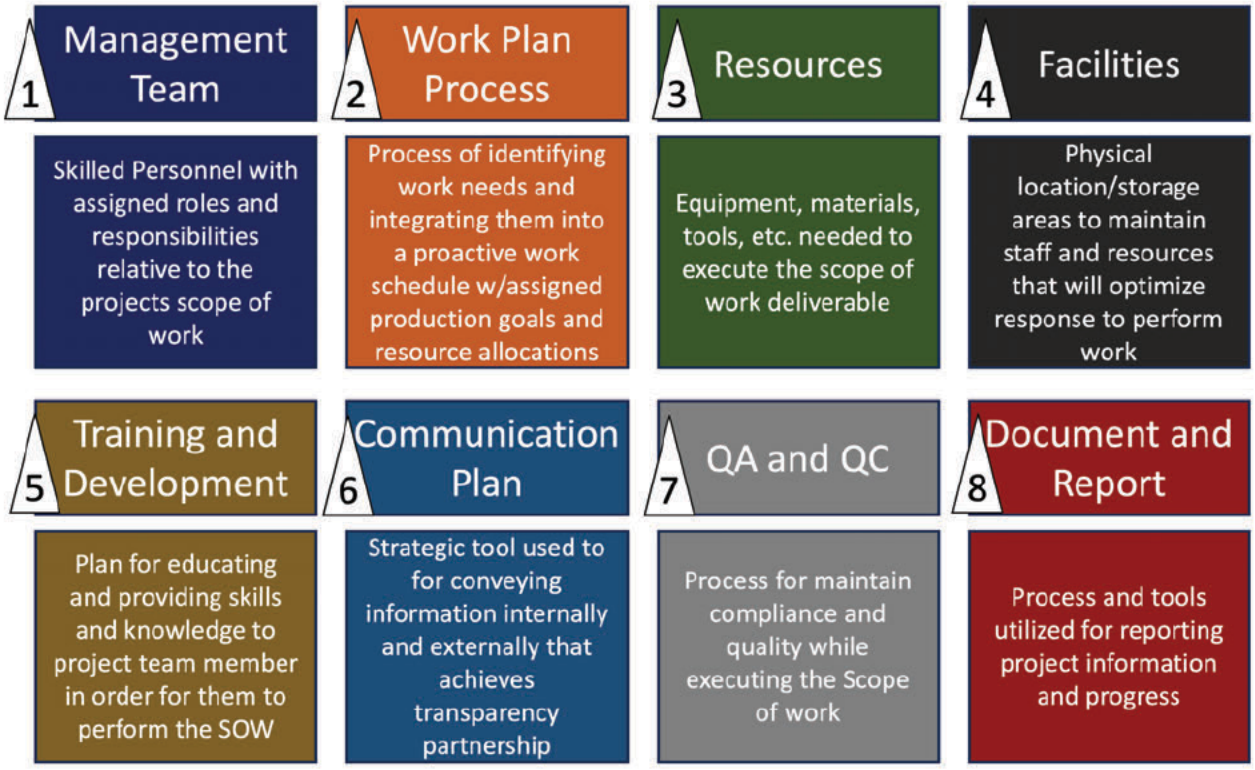
Year Two-Four Schedule. Continuation of the preventative maintenance work with adjustments to maximize routine maintenance with a focus on field aesthetics and public perception.

Year Five Schedule. Execution of routine work plans, continued adjustment of PM activities schedules and preparation for investment on contract extensions or hand-back requirements.

B.2 MEETING SCOPE OF SERVICES, REQUIRED OBJECTIVES AND SCHEDULE

B.2.1 MEETING SCOPE OF SERVICES

The key elements in meeting the scope of services starts with putting in place a capable and experienced management team with realistic work plans, adequate resources and facilities. Ongoing effectiveness is determined by providing training at all staffing levels and constant communication with stakeholders while continuing to evaluate results to address needed corrective actions.



B.2.1.1 Management Team

The management team includes professional engineers, PBMC experienced managers, AM field technicians, and support staff that are subject matter experts. The Jorgensen approach includes three functional groups:

» **Managers/Supervisors.** Provide oversight, direction, and processes for scheduling and work execution,

» **Field Technicians.** Perform the assigned maintenance work task, and

» **Support Groups.** Provide technical and administrative guidance to facilitate performance improvement.

B.2.1.2 Work Plan Process

The project work plan serves as a roadmap for project execution and is an essential tool for providing realistic objectives for day-to-day work execution. The project work plan encompasses work activities, work frequencies, production rates, locations, and resources necessary to meet the performance requirements of the contract. A well-structured work planning process ensures that projects are completed efficiently, on time, and compliant with the scope of services. The elements of our work planning process include:

» Scope of Work – The TDOT scope of work as defined in the RFP, Exhibit B includes Bridges, Drain/Bridge Cleaning, Pavement, Mowing and Litter, Sweeping, Guardrail/Attenuators, and Ground Signs.

» Standards for Maintenance Activities – Production rates, labor, equipment, and material requirements for the significant maintenance activities establishes the standards for work performance.

» Infrastructure Assets– Asset inventory and condition – MQA &Inspections - determines work quantities,

» Annual Plan and Schedules – Defines annual plan, rolling three-month plan and weekly/biweekly schedules.

» Evaluation and Documentation – Assesses documents results and determines corrective actions needed.

B.2.1.3 Resources

It's important to carefully plan for and allocate resources – equipment, materials, subcontractors.

RESOURCE PLANNING

Equipment – Our fleet management team is led by a seasoned Jorgensen employee – John McPherson - with years of experience in identifying, procuring, and managing the many aspects of equipping AM projects with the correct allocation of equipment types and number of units. Additionally, John has the support of Element, inc, a specialized firm with equipment professionals staffed nationwide to efficiently identify, procure, setup and deliver all our equipment needs. Element, Inc also keeps a database of information needed for monitoring the maintenance, repair and replacements that includes:

» Regular Inspection/ Maintenance Checklists - Establishes schedule for equipment inspections used to identify maintenance needs and pin-point minor issues before they become major repair issues,

» Preventative Maintenance - PM Program to perform routine checks, lubrications, and calibration,

» Record Management - Comprehensive records for each unit to including maintenance history, repair logs, and any modifications or upgrades, and

» Utilization reports - Utilize data analytics to monitor equipment performance and predict maintenance needs and provide data history for unit replacement decisions.

Materials - Effective material management reduces crew downtime by ensuring the right materials are available when needed. Key to the effectiveness of this effort is:

» Supplier Relationship - Jorgensen has built a nationwide stable of reliable material suppliers with whom we have purchased millions of dollars of AM materials to support our 50 + contracts,

» Material Availability - The material supply chain is often subject to stresses from shortages as was the case during the pandemic - total disruption. Predicting material availability is a daily ongoing effort for our material procurement team to ensure critical materials like guardrail, attenuators, regulatory signs, patching material, pavement marking materials, drainage pipes and devices are always available.

» Storage and Handling - Jorgensen regularly stock materials at all its 50+ project sites. This ensures redundancy in our supply chain ensuring materials are available somewhere. For Tennessee projects we have warehouse materials in Virginia, Georgia, Virginia, and Florida to provide backup support.

Subcontractors – The Jorgensen business model for utilization of subcontractors on PBMC projects has been built on many "lessons learned". The model that is most effective for our team is built on:

» Establishing Trust – Good contractor-sub relationships are established with fair pricing, consistent performance, and prompt payments. These are the key elements to establish a trusting relationship.

» Establishing the Right Local Mix – Jorgensen can perform and has performed all typical AM work activities; however, the right mix is dependent on availability and capability of local subs. For Central Tennessee we note the availability of many mowing and litter subs, but limited numbers of subs for attenuator/guardrail/ cable rail repairs, sweeping and drain cleaning.

» Subcontractor Agreements – A clear scope of work expectations and pricing prepared jointly is central to continuity of work operations within contract requirements.

B.2.1.4 Facilities

The project facilities will include offices, warehouses and staging/laydown yards for equipment and materials. The project field team during its' field surveys has identified alternatives for facilities as discussed below:

Main Office Facilities. The main office will include adequate space for project manager, supervisors, admin support staff, conference room, training room, restrooms, and storage areas. The alternate sites considered by the field team include potential locations in Dickson County near I40/I840 intersection.

Warehouse/Staging/Laydown Yards. Location of the staging/laydown yards is critical to ensure easy access to the system while minimizing deadheading. The location and configuration of these sites may change during the course of the contract as workloads vary.

» Typical configuration would include temporary office trailers with fenced and gated areas.

» Closed/open storage, laydown area and material storage sites.

Site Locations. The alternate sites considered by the field team include:

» Potential sites adjacent to TDOT's/Subcontractor properties

» Other sites that TDOT may make available,

» And rural sites in Rutherford and Giles counties (Murfreesboro Area).

B.2.1.5 Training and Development

Training and development programs help employees acquire new skills and improve existing ones while improving productivity. The completion of training courses provides growth opportunities for team members, identifies innovation opportunities, and improves work quality. Jorgensen's most important assets is its' people and as such, we make a substantial investment in structured training programs including the establishment of our own training center.

B.2.1.6 Communication

A Public Information Plan (PIP) will be jointly prepared with the Department that will prescribe roles, responsibilities, and procedures regarding public communications. Implementation of the PIP together with the Customer Service Resolution Plan will provide for effective communication with all the key stakeholders.

B.2.1.7 Quality Assurance

Quality is a critical role in ensuring the work we deliver meets TDOT standards but even more crucial is ensuring the work is done with the upmost attention to safety of the staff and the motoring public. Quality will be accomplished through the utilization and implementation of our quality program detailed in Section B6.

B.2.1.8 Evaluation

The process for reporting and documenting results is an integral part of our JAMMS system. Evaluation of the operational results is an ongoing process to analyze the need for corrective actions to be implemented to ensure that we achieve continuous improvement in our operations.

B.2.2 ACCOMPLISHING OBJECTIVES

The success of Performance Based Management Contracts as demonstrated in other transportation agencies especially Virginia, Texas, and Florida where PBMC programs have been successfully implemented revolves around accomplishing four objectives:

» Partnering – Identifying and addressing challenges in partnership is the primary key to success,

» Add Value – Providing cost effective maintenance solutions for aging infrastructure,

» Measurable – Defining repeatable measures for work performance, and

» Quality and Safety – Performing work activities safely and with quality workmanship.

B.2.2.1 How We Build a Partnership

Building a successful partnership comes from planning, effective communication, and commitment to the goals and values of the project.

Planning. This is a fundamental process to achieve objectives, make informed decisions, efficiently manage resources and adapt to changing circumstances. It is a critical element of success, knowing what needs to be done and having a plan to achieve objectives reduces uncertainty and risk.

Communication. Honest and open communication is critical for project success.

- Communication Plan: Implement a structured communication process that defines the frequency and methods of communication between team members, partners, and stakeholders.
- Reporting Mechanisms: Describe how progress and concerns will be reported.
- Issue Resolution Matrix: Establish a resolution matrix to address and resolve conflicts as they arise.

Commitment. Involves articulating a clear understanding of the scope of work and project objectives and the processes to implement and assess the results.

B.2.2.2 How We Bring Value to Tennessee Residents and Stakeholders

The scope of this project includes ageing infrastructure that needs various levels of maintenance to maintain a stable asset condition. We will bring value to Tennessee through our ability to execute a realistic and routine work plan within budget while implementing innovative concepts and technology.

B.2.2.3 How We Bring A Consistent and Measurable Level of Service

Achieving a consistent and measurable level of service includes effective planning, realistic standards, consistent monitoring, and a management commitment to continuous improvement. The means are:

- Training managers and field staff on MQA and contract performance measures,
- Document and implement project specific processes and procedures,
- Set Key Performance Indicators (KPIs) that align with the objectives and scope of services,
- Establish Quality Program that brings about continuous improvement,
- Establish strong internal and external communication channels,
- Establish a culture of accountability for consistently meeting service standards,
- Recognize and reward individuals and teams that consistently excel in service delivery,
- Leveraging Innovation to achieve and exceed standards, and
- Training, training and more training.

B.2.2.4 How We Bring Safety and Quality

Quality and safety programs are top down driven at Jorgensen from the Corporate Board room to the field activities. We work every day to strengthen these programs through investments in safety equipment with several hundred TMA's and mobile barriers to instilling our quality philosophy of continuous improvement. Sect. B.6 provides a comprehensive Quality Management Plan and Sect. B.9. speaks to Safety.

B.2.3 HOW WILL WE MEET THE TDOT PROJECT SCHEDULE

The Interstate corridors are a dynamic environment with changing conditions dictated by weather conditions, driver habits and skill levels and infrastructure condition. Jorgensen can only impact the latter – infrastructure conditions. The means and methods we use to effect condition are many, some simple, some complex. And, we need to put all these means and methods to work in order to create an orderly and achievable program of work activities to meet the project schedule. Many of these means and methods have already been discussed and others will be discussed in more detail throughout the proposal, but a summary of the key tasks to be

accomplished to meet the project schedule includes the following:

DEMONSTRATED ABILITY TO MOBILIZE AND EXECUTE QUICKLY

- » Clear comprehension of project scope, objectives and performance criteria and the measurable metrics,
- » Development and execution of the project work plan,
- » Ensure that team members have the necessary resources,
- » Utilize JAMMS software to create and maintain project schedule,
- » Monitor the project's progress regularly comparing planned to actual and identify variances,
- » Maintain open and transparent communication with the team and stakeholders,
- » Use key performance indicators (KPIs) to track individual and project progress,
- » Hold regular project meetings to review progress, discuss challenges, and plan for upcoming tasks,
- » Keep detailed records of project changes, communications, and issues that arise, and
- » Strive for continuous improvement.

B.3 MANAGEMENT OF THE PROJECT

Our Team proposes a structured management approach that's proven successful on numerous large, long-term projects similar in size and scope to TDOT's performance-based maintenance (PBMC) contract.

- » Plan, organize and perform maintenance work with JAMMS decades-tested O&M methodologies.
- » Communicate and collaborate with TDOT's staff, local stakeholders, and the public.
- » Perform detailed tracking to inform TDOT of project status with scheduled reporting and status meetings.
- » Provide qualified personnel and equipment resources to meet and exceed TDOT's required condition assessment levels and performance criteria.

B.3.1 MANAGEMENT VISION COMMITMENTS

Jorgensen's vision statement is aligned with TDOT's CARE core values – committed, accountable, responsible, and ethical – as summarized by three key attributes that are fully integrated into our management approach.

JORGENSEN'S VISION STATEMENT

Our Vision of Commitment to TDOT as a Partner. Jorgensen has worked with public agencies all over the world and understand that true partnerships at all levels are based on customer service and operational transparency. Our management techniques are centered around client-based 'buy-in' through open communication. We are an extension of the Department; our employees are representatives for TDOT's core values. There invariably will be a learning curve for both parties on this project, and Jorgensen is committed to work with TDOT to provide an easy transition to a new innovative maintenance management approach.

Our Vision of Commitment to Tennessee Businesses and People. Success stems from our investment in our people, Tennessee subcontractors and vendors. We have contacted, met, talked to, and made preliminary plans with several key Tennessee-based subcontractors. We believe that through our investment in these people and businesses, we can provide an effective avenue to energize the local economy and provide maintenance improvements to the roadway.

Our Vision of Commitment to the Interstate. The central Tennessee roadway network is heavily traveled by interstate commerce users and local residents on a system at maximum capacity. This roadway can provide travelers with an overall impression of Tennessee, and we understand that aesthetics and commuter perception are intangible goals that we will try to maximize. We envision our maintenance management approaches to be proactive and preventative investments for long-term success.

B.3.2 PROJECT MANAGEMENT APPROACH

The project management approach was structured to manage the work defined by our five-year work program as outlined in Section B8 Work Needs. Based on these work needs the program was organized to be managed and accomplished with in-house resident crews, regional crews, and subcontractor crews.

The inhouse resident crews are primarily responsible for routine and preventive maintenance activities such as pothole repairs, fence repairs, drainage maintenance, herbicide, sign repairs, debris removal, road patrols and incident response.

In-house regional crews will perform bridge maintenance and repair and will supplement some of the activities that the subcontractors perform such as guardrail and attenuator repairs and shoulder drop-offs.

Subcontractor crews will first focus on some of the Phased Maintenance Services – Unpaved shoulder drop-offs, paved ditch repairs, ground sign replacements and repair and inlet repairs. Subcontractors will also perform mowing/ litter, drain cleaning and inlet repairs along with Tier 2&3 asphalt and Tier 2 concrete repairs.

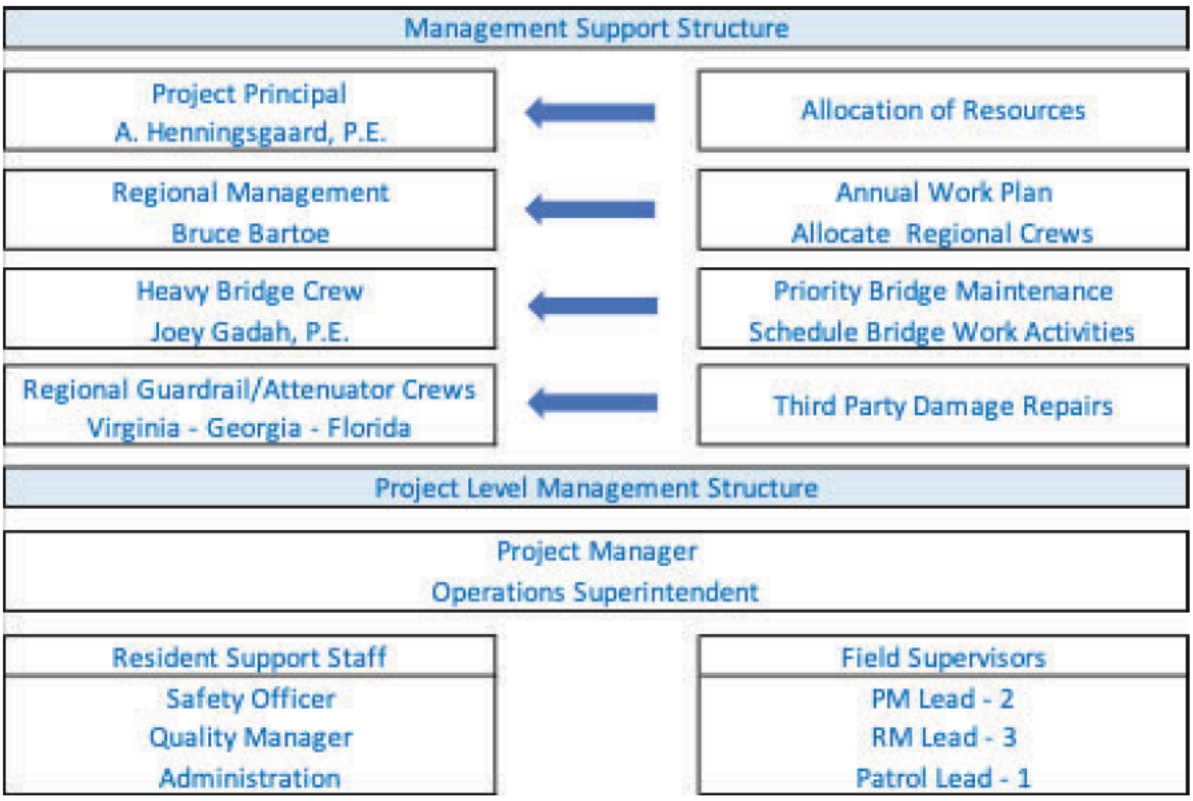
NOTES OF INTEREST

The work activities in the Five-Year Program were prioritized and work quantities calculated - 80% of the work needs involve the following activities:

- Bridges: joints - approaches - missing signs.
- Pavements: potholes – edge drop-offs.
- Drains: inlet cleaning.
- Vegetation: mowing – litter
- Sweeping: cyclic program and PM sweeping.
- Ground Signs: repair/ replace missing
- Traffic Service: Guard &cable rail/ attenuator repairs.
- Road Patrols: debris removal and incident response.

B.3.2.1 Project Management Structure

The management structure shown below provides for both top-down direction and support and allows for bottom-up initiatives to respond to specific project work needs. The critical need for this project is to have the capability and management skills to transition from the sidelines to the playing field at mid-night April 1, 2024.



B.3.3 ENSURE PERFORMANCE OF SCOPE OF SERVICES THAT ACCOMPLISHES PROJECT OBJECTIVES

The chart below summarizes the significant work activities included in our Five-Year Program that will ensure the scope of services designed to meet the project objectives are accomplished.

Project Objectives per Exhibit A, Section 1 General

"These comprehensive maintenance services shall include the management and performance of maintenance and repair activities of the interstate highways including all ramps, collector/distributor ramps and frontage roads, bridges, and all roadway appurtenances within the right of way in Williamson, Marshall, Maury, Smith, Wilson, Dickson, Giles, Bedford, Rutherford, Cheatham, Hickman, Humphreys Counties."

Key Activities to Meet Scope and Accomplish Objectives	PM Crew	RM Crew	Road Patrol	Heavy Bridge1/	Regional Crews	Subcontractor 2/ Note	Phased Maintenance Services
Drainage							
431: Clean Inlets - VacAll						2 - Subs	
431: Clean Inlets - Labor							
433: Misc Drainage Repairs							In-house/Sub
426/432: Paved Ditch Repair							In-house/Sub
432: Repair Inlets							In-house/Sub
Structures							
450/447: Clean Structures							
447/450: Remove Debris							
451:Structure Maintenance 2/							
451:Minor Priority Structure Rprs. 2/							
454:Approach Repairs						Pavement Sub	
Roadside							
425/426:Edge Drop-offs							In-house/Sub
435/441:Mowing and Litter						3 - Subs	
Traffic Services							
475:Guardrail Attenuator Repairs						2 - subs	
472/473:Ground Signs							In-house/Sub
Emergency Response and Incident Management							
482:Emergency Response						As Needed	
482/489:Incident Management							
Pavement							
446:Sweeping						2 - subs	
401:Pothole Repairs							
403/404:Tier 2& 3 Asphalt						Pavement Sub	
411:Tier 2 Concrete						Pavement Sub	

1/ See Section B 11 for Detailed Work Program
2/ Note See Section B4 for List of Subcontractors

B.3.4 MONTHLY REPORTING OF RESULTS

In order to provide the Department operational transparency to our operational and administrative processes, we developed a management methodology within the Jorgensen Asset Maintenance Management System.

B.3.4.1 Monthly Accomplishment Reporting: JAMMS™

JAMMS™ is a proprietary software package developed by Jorgensen specifically to provide for efficient administration of comprehensive performance-based maintenance projects. The software is a tool that assists project management with scheduling and tracking work and inspection activities as well as storing electronic copies of documentation used by Jorgensen and required by the client.

Jorgensen has experienced first-hand the thousands of emergencies that occur on the interstate systems, and we developed a system to effectively react to these conditions and also simultaneously accomplish our routine maintenance plans. The use of JAMMS™, provides Jorgensen with one distinct and essential tool for reaching our goal of maximizing our production efficiency through accomplishment of a well-planned maintenance schedule while still performing reactive and emergency needs.

JORGENSEN ASSET MAINTENANCE MANAGEMENT SYSTEM
JAMMS™ is a fully integrated maintenance management system. All actions performed on the contract are entered into a web-based, electronically secured database. These actions are first classified by service request; routine maintenance (RMSR), customer service (CSR), or third-party traffic incident (ASR) and second by requestor; Jorgensen (internal), TDOT, citizen/public, supporting law enforcement and/or fire rescue agency), or misc. Every call request is date stamped with entry and received dates with exact time. Based on the maintenance service required, work orders will be nested into the service request (e.g. Jane Citizen asks for interchange clean up requiring litter removal, mowing, graffiti removal, edging, etc.). Each work order, in turn, is assigned to a supervisor to be performed by either an in-house maintenance crew or subcontractor. During the issuance process maintenance management system work, quantities are estimated, materials are ordered and all traffic control plans are requested.

From the planning stage the work orders (all with pre-programmed contractual compliance guidelines), are segregated to the assigned supervisor and published on a pre-programmed maintenance schedule. The maintenance schedule is then utilized in the weekly production meeting to determine the week's assignments for in-house and subcontractor crews.

The supervisor's maintenance schedule, the fundamental administrative module of the daily operation, is updated in real-time as jobs are completed in the field. From this schedule, supervisors' issue daily work reports (DWRs) to our maintenance crews, who record their accomplishments against the assigned work orders. As these DWRs are nested into the work orders and work orders are nested into the maintenance request, all levels of data from materials/equipment used to TDOT maintenance activity performed are tracked and organized at the original service request location.

B.3.4.2 Monthly Accomplishment Reports

The following reports are the critical TDOT requirements that will be provided the Department:

Monthly MMS Accomplishment Report. Jorgensen's JEEP team has created the accomplishment report for the Department and Jorgensen's Operational Center will deliver the report every month with TDOT maintenance activity codes including any nonconformance/deficiency status updates. Jorgensen's monthly work report is a detailed derivation from our annual plan and includes data on the previous month's completed maintenance work schedule and our plans for the following month. This report is kept in a real-time mode for instance revisions in our JAMMS™ system and fully integrated with TDOT maintenance activity definitions and location descriptions. Prior to beginning the contract operational year, and after full partnership of our

annual work program, our estimated monthly maintenance work schedules are published. These are integrated into the needs of the roadway, growing seasons, traveler seasons, and specific customer-based needs.

Customer Service Monthly Report. The Customer Service Request(CSR) will be administered by Jorgensen's operational center and shall include a log of all complaints and/or requests and separately will also include requests from the Department.

Third Party-Damage Reporting. Jorgensen's accident-service-request (ASR) report will include a listing of all their party damage/repairs and restoration activities and the first report shall be provided to the Department within 60 days of the contract start-Date and also delivered monthly.

Highway Lighting Outage Report. Jorgensen will prepare this report with referencing outages by mile post and the date/time of observation.

Weekly Work Plan Report. Jorgensen's project manager will deliver the weekly operations and maintenance work schedule. This report will be delivered to TDOT and will feature an itemized listing of activities scheduled, required lane closure requirements and shall interface with SWIFT under TDOT guidelines.

Total Project Pothole Field Ride and Weekly Guardrail Field Reports. Jorgensen's Road service patrol unit will prepare this report(s), weekly, and Jorgensen's Project Manager will submit report(s) itemized by location, repair quantities, scheduled repair dates and the actual logs shall be submitted to TDOT on Friday every week.

Monthly Pavement Condition Assessment Report. Jorgensen's on-site quality control team will provide a pavement condition assessment report for pavement condition relating to asphaltic and concrete surfaces. The report shall include recommendations for permanent pavement repairs with location and quantity estimates separated by Tier-specification format.

B.3.4.3 Additional Reports

The following meeting and reports that will be helpful for full transparency of operations.

- Monthly Project Coordination Meeting - Jorgensen and TDOT
- QMP Program Deliverables
- Monthly Sample MQA Report
- Phased Maintenance Services Monthly Report
- O&M Project QC Compliance Report
- O&M Corporate QA Compliance Report

We recommend that these reports be staged over time and tested for usefulness and revised to meet changing conditions especially after the completion of the Phased Maintenance Services.

B.4 FIRM EXPERIENCE AND PERFORMANCE

A HISTORIC MAINTENANCE RECORD
Initially established in 1961 as a corporation and operating for 65 years, Roy Jorgensen Associates, Inc. was the first engineering and management-consulting firm to specialize in transportation and public works infrastructure maintenance. Mr. Roy Jorgensen, P.E., was the Deputy Secretary of Transportation of the State of Connecticut. Mr. Jorgensen had recognized maintenance to be a critical, and high priority link in the development of our country's highway network. Through the establishment of Roy Jorgensen Associates Inc., he and the Jorgensen staff became a recognized and highly sought Maintenance Management System developer and consultant for state transportation departments.

B.4.1 OVERALL EXPERIENCE

From 1994-1997, Jorgensen contracted for and successfully completed one of the first comprehensive roadway maintenance projects in the U.S. The contract included approximately 35 centerline miles of interstate through Jacksonville, Florida. It was the beginning of Florida's PBMC program.

Since the initial contracting effort, Roy Jorgensen Associates, Inc. and Jorgensen Contract Services, LLC, a wholly owned subsidiary, have continuously completed $[redacted] in multi-year comprehensive roadway operations and maintenance contracts (109) and are currently performing on over $[redacted] (49) contracts in Florida, Virginia, Georgia, Colorado, and Texas.

Today, Jorgensen is a US leader in total maintenance contracting and asset management and has provided services to agencies throughout the US and worldwide seeking to improve their operations.

The industry still implements many of Jorgensen's original maintenance concepts; and in alignment with our goal of continuous improvement in every aspect of our organization, our firm continues to refine our management and work methods, processes, and approaches to stay ahead of our competition and provide our clients the best service available.

B.4.1.1 Current Jorgensen Staffing

Jorgensen currently employs 1040 program/project managers, engineers, operators, field supervisors, O&M maintenance technicians, and administrative personnel located in 23 offices throughout the US. The staff includes: 150+ Maintenance Managers, Six Professional Engineers, 690+ Maintenance Technicians, 80+ Contract Administrators, 7 Human Resource, 7 Safety/Training, and 68 corporate personnel.

B.4.1.2 Scope of Services

Jorgensen contracts cover all roadway O&M activities including Bridge and Culvert Maintenance/Repair, Sign Structure, Roadside Maintenance (sweeping, litter/debris removal, fence repair), Daily Service Patrol, Aesthetics. Program (landscaping, cyclical mowing), Asphalt Pavement Maintenance, Signing and Pavement Markings, Roadway Maintenance (attenuator, guardrail, cable rail, highway illumination), Storm Water Drainage, Maintenance of Traffic, Rest Areas, Emergency Response/Mitigation/Repair, Snow and Ice Control, Asset Inspections (bridge, sign, guardrail, attenuator), Asset Monitoring and Analysis, Project Administration & Reporting, Project QA/QC, Extensive Third-Party Damage Repairs.

As a maintenance contractor Jorgensen brings over 29 years of relevant experience operating and maintaining assets on performance-based contracts that are similar in size and scope to this PBMC Region 3 South contract. An overview of our current project portfolio similar in scope to this work is included in this section. Our accomplishments have enabled the development of innovative methods and processes that are proven to increase efficiency, improve the quality and longevity of roadways, reduce risk to the Department, and reduce overall costs, while improving roadway performance, safety, and service for the traveling public.

B.4.2.1 Relevant Contracts Most Similar to TDOT Program

In Table 1 are listed seven of the most relevant contracts Jorgensen is currently performing. The information includes the owner, the client, contract number, description, contact information, value, start dated, term, AADT, 3-year record of results, and contract scope along with a summary of the contract scope.

B.4.2.2 Current Portfolio of Active Maintenance Contracts

Jorgensen's portfolio of current contracts is provided in Table 2 as demonstrated evidence of the strength of firm's ability to perform at the highest level with a 29-year record of completing all our contracts without a termination for cause.

STATE	OWNER	CONTRACT NUMBER	DESCRIPTION	CONTACT INFO	VALUE	START	TERM	AADT	3 YEAR PERFORMANCE SCORE AVERAGE if Applicable	PAVE SURFACE	SHOULDERS & DITCHES	DRAINAGE	ROADSIDE	TRAFFIC SERVICES	FACILITY MAINTENANCE	PARK AND RIDE LOTS	EMERGENCY RESPONSE	THIRD PARTY CLAIMS	STRUCTURE MAINTENANCE	TORT/DAMAGE CLAIMS	PAVEMENT MARKINGS
FL	FDOT D2	E2X03	JAX Interstate AM	Dr. Richard Barne 904.360.5615	$ 87,300,000.00	2018	10 years	170,000	80.4 MRP	•	•	•	•	•			•	•	•	•	•
FL	FDOT D4	E4V24	Broward 2022	Flavia Magalhaes 954.958.7632	$ 62,300,000.00	2022	7 years	314,000	90 MRP	•	•	•	•	•	•	•	•	•	•	•	•
FL	FDOT D4	E4R18	Treasure Coast	Richard Edwards 772.429.4940	$ 68,300,000.00	2016	10 years	217,346	91.6 MRP	•	•	•	•	•	•		•	•	•	•	•
TX	TXDOT	639534001	Walker I45	Delmy Rayes 936.295.3462	$ 13,514,343.00	2022	3 years	18,008	80 MRP	•	•	•	•	•			•	•	•	•	•
FL	FDOT D7	E7N65-R0	Tampa I75	Phil Bryant 813.612.3209	$ 35,493,554.45	2021	6 years	64,000	85 MRP	•	•	•	•	•	•		•	•	•	•	•
TX	TXDOT	645013001	I35	Stanley Swiatek 254-939-3788	$ 37,852,916.00	2023	3 years	150,000	n/a	•	•	•	•	•			•	•	•	•	•
GA	GDOT	District 5 CMC	CMC I95	Jackie Smith 912.530.4492	$ 20,223,564.00	2022	3 years	90,000	89 MCA	•	•	•	•	•			•	•	•	•	•

Table 2 - Current Portfolio ($1,000,000,000)

PROJECT NAME	CONTRACT NUMBER	TERM	BEGIN DATE	END DATE
Less Than $2 Million in Value				
VDOT I95 Fredericksburg Emergency Operations	49580	Weekly	10/27/21	3/14/24
MCTRA SH249 Debris Removal		not set	7/9/21	Unknown
Gibson City of Dallas		unkown	7/10/23	unknown
TXDOT Tarrant South IH30	641762001	1 year	10/2/23	10/1/24
TXDOT Dallas SW BR 408	643787001	81 work days	9/25/23	12/15/23
TXDOT Dallas NW BR 183	643785001	80 work days	9/11/23	11/30/23
TXDOT Chambers IH10 GR 2023	639500001	1 year	6/9/23	6/8/24
TXDOT Galveston GR SH146	643054001	1 year	6/12/23	6/11/24
TXDOT Navarro SH31	638596001	2 years	11/11/22	11/10/24
TXDOT S Harris GR SL8 2023	643664001	2 years	9/1/23	8/31/25
TXDOT McLennan FD US84	642715001	1 year	8/6/23	8/5/24
$2,000,000 to $10,000,000				
TXDOT Travis IH35 Concrete #4	639960001	2 years	9/1/22	8/31/24
BCTRA	21-99	5 years	10/18/21	10/17/26
TXDOT Dallas IH35E South	639997001	2 years	10/1/22	9/30/24
TXDOT Dallas W 2 FD SL12	640178001	2 years	10/10/22	10/9/24
TXDOT Liberty SH99	639915001	2 years	11/1/22	10/31/24
TXDOT Harris 45 2023	640439001	2 years	4/1/23	3/31/25
Lonestar I-35 East Ph II	L5C-I35-6-K005	3Y 8M	3/28/22	11/29/25
TXDOT West Harris Guardrail	639343001	2 years	4/11/22	4/10/26
FDOT - Okeechobee County	E1O32	9 years	7/1/15	6/30/24
FDOT - FL Turnpike Facilities	E8Q47	5 years	1/1/19	12/31/23
$10,000,000 to $30,000,000				
TXDOT SH99 2022	639155001	2 years	7/20/22	7/19/24
TXDOT Dallas IH35 2021	637300001	2 years	6/1/21	5/31/25
TXDOT Walker I45	639534001	3 years	7/1/22	6/30/27
FDOT - FL Turnpike South Facilities	E8S83	5 years	11/1/21	10/31/26
TXDOT Bexar West IH10	639540001	2 years	4/1/23	3/31/25
GDOT CMC I95		3 years	10/3/22	10/2/25
I4 Mobility I4 O&M	JORG 0002	3 years	1/1/22	12/31/24
FDOT - Turnpike Zone 2	E8S48	7 years	12/1/20	11/30/27
VDOT NOVA BIMS I95/I395	IFB156244-CF	5 years	12/1/20	11/30/25
VDOT I495/95 BIMS	48794/48796	5 years	6/1/22	5/31/25
HCTRA - 2020	20/0039	5 year	12/1/20	11/30/25
MODOT Rest Area	2021-10-66453	2Y 11M	11/1/21	9/30/24
TXDOT Austin SH130 2020	633608001	5 years	10/1/20	9/30/25
TXDOT Dallas IH30 HOV/Managed Lanes	632443001	6 years	9/1/18	8/31/24
CFX	001151	6 years	7/1/17	6/30/24
$30,000,000 to $50,000,000				
NTTA - CTP	05597-CTP-00-CN-MA	6 years	10/1/22	9/30/28
FDOT - Tampa I75	E7N65-R0	6 years	7/1/21	6/30/27
TXDOT Waco UP	645013001	3 years	10/5/23	10/4/26
Kiewit - I70 2023	Part 2	10 years	2/17/23	2/16/33
TXDOT Bexar East IH35	637250001	2 years	4/1/21	3/31/25
TXDOT Austin IH35 PBMC	632560001	5 years	3/1/19	2/28/24
NTTA - PGBT	04841A-PGB00-CN-MA	6 years	11/19/19	11/18/25
Greater Than $50,000,000				
Woodrow Wilson Bridge Completion	57850	5 years	6/1/22	5/31/25
FDOT - Broward 2022	E4V24	7 years	1/1/22	12/31/28
ACS - I-595	E4J69	13 years	8/1/09	5/31/24
FDOT - Treasure Coast	E4R18	10 years	1/1/16	12/31/25
FDOT - JAX Interstate AM	E2X03	10 years	7/1/18	6/30/28
CTRMA Completion	20PROGXXX02M	6 y 2 m	4/1/22	6/30/28

B.5 MANAGEMENT TEAM

This section of the proposal will focus on the operational capabilities of the management team to execute this contract with focus on an effective organizational structure that provides for the delivery of reliable services. A summary of the key personnel and their role, project commitment, education, licenses and certifications, and project tasks, functions, and responsibilities are provided.

B.5.1 MANAGEMENT TEAM

Jorgensen has assembled a management team and resident supervisors to execute this contract under an organizational structure specific to the requirements of the Region 3 South contract.

B.5.1.1 Principal Corporate Officers

Mr. Douglas Selby as Jorgensen's President and Chief Financial Officer is responsible for the financial health and stability of Roy Jorgensen Associates, Inc. and in fulfilling our contractual obligations. Mr. Selby has 32 years of finance experience in the maintenance, construction, and engineering sectors. He has been a Jorgensen executive for the past 22 years providing effective leadership to operations for allocating resources, financial investments, bonding, budgets, and capital expenditures.

Mr. Abraham Henningsgaard, P.E, VP and Director of Infrastructure Operations. Abe is a licensed TN professional engineer (PE#129102) and has responsibilities for capital investments, innovative project investment plans, negotiation of contractual issues and change orders, third party litigation and liability suits, safety programs and QA reviews. He has 18 years' experience including 15+ years managing over $[redacted] in active/completed projects.

B.5.1.2 Project Leadership Team

Jorgensen's project leadership team specifically responsible for leading and guiding the South contract includes two key Jorgensen top managers – Bob Gorski and Bruce Bartoe –with 60+ combined experience.

KEY PERSONNEL PROJECT ROLES	EDUCATION, LICENSES, AND CERTIFICATIONS	KEY ACCOMPLISHMENTS	PROJECT RESPONSIBILITIES
Robert B. Gorski, **VP Project Principal, Exécutive Liaison to TDOT.** Years of Expérience : 22 Project Allocation : 20%	• Bachelor of Science • Mansfield University • Business Administration • Specialization in Finance, Marketing & Human Psychology • Numerous leadership certifications.	• Highway and Asset Maintenance Executive for 20+ years and over $1.2BN active/completed infrastructure projects in both the PBMC and P3 markets. • Current Board Member and past Chairman of AMOTIA	Executive Liaison and primary POC for TDOT Central Office and TDOT Region 3 Executive Team. Escalation matrix lead for: project performance, third party recovery, subcontractor relationships, MQA, project strategy adjustments, and overall project exec administration and will backstop, Mr. Bartoe.
Bruce Bartoe ***Regional Manager, Backup Safety Coordinator.*** Years of Experience: 39 Project Allocation: 25%	BSCE, Penn State U. • Virginia Contractor's License "Class A" • VDOT Basic & Intermediate MOT • -NIMS 100,200,700,800 • Association of General Contractors • Associated Builders & Contractors • Real Estate Associate Broker License	• 30 + years of project management experience • Renewal or re-award of tendered contracts in excess of $20M annual value, as testament to significant leadership and communication. • Numerous customer service recognitions from both VDOT and Transurban P3 partners	*Mr. Bartoe will be primarily responsible for oversight of annual and quarterly work plans as well as assisting PM in planning all prescribed line-item work items, *Supervise project operational QC *Oversee third party claims program and employee training programs for optimum success. *Our regional manager will backstop Mr. Richardson and his management team in all related matters

B.5.1.3 Project Team – Key Members of the Jorgensen Presented on the Next Page

KEY PERSONNEL PROJECT ROLES	EDUCATION, LICENSES, AND CERTIFICATIONS	KEY ACCOMPLISHMENTS	PROJECT RESPONSIBILITIES
Michael Richardson ***Project Manager and Backup Incident Management Coordinator*** Years of Experience: 24 Project Allocation: 100%	• VDOT Contractor PM Leadership Training • Jorgensen Project Management Training program • NIMS Certified at multiple levels. • ATSSA Certified Work Zone Safety Intermediate • VDOT Work Area Protection Manual certified-Advanced	• Mr. Richardson has successfully managed multiple PBMC projects in the Richmond, VA area with multiple renewal options awarded on each project. • Versatile leader who connects well with his in-house staff as well as his DOT counterparts. • Hands on leader who spends his time in the field.	-- Mr. Richardson will serve as the key TDOT daily point of contact. He will have general operations oversight on all O&M activities, managing equipment and personnel resources. He will provide technical oversight on maintenance and customer service requirements and will back-stop the project Superintendent and Area Managers. He will be primary contact for all subcontractors and vendor partners.
Guy Mamac ***Operations Superintendent and Incident Management Coordinator*** Years of Experience: 19 Project Allocation: 100%	12-year career in service to the US Marine Corp, as Engineer Equipment Chief and Engineer Equipment Operator/Trainer. Currently serving as the Transportation O&M Manager for the Oregon DOT, D2, seeking this role to relocate to TN	Four Navy and Marine Corp Commendation and Achievement medals; Driving Force State award for Incident Response and Management Leadership during a horrific, fatal accident on I 5 in Oregon. Numerous other achievements and recognitions for staff training and significant contributions to Oregon DOT.	Mr. Samac will supervise in-house maintenance technician crews and area managers in all aspects of roadway maintenance. Additional responsibilities include serving as the project incident management coordinator for the project ensuring all procedures are followed and coordination with TDOT managers, inspectors and engineers.
Joey Gadah P.E. ***Structural Engineering Manager*** Years of Experience: 16 11+ years in AM Contracts Project Allocation: 20%	• BSCE & MSCE from University of South Florida • Licensed PE (FL) • Have 18+ years' experience in engineering (construction, design, inspection and maintenance) • Numerous NHI Certification courses completed for bridge inspections and bridge engineering	• Served as FDOT District 7 Engineering Section Manager over seeing Asset Maintenance Contracts & Bridge Rehab/Replacement Programs for 6-1/2 years. • Many achievements and accolades being part of FDOT (specifically: having zero structurally deficient bridges in District 7 and the top District in the state with the highest percentage of bridges in good or better condition	Mr. Gadah, PE, Mr. Frederick Schonis, CBI (Engineering Specialist) and Heavy Bridge Crew Manager, Mr. Dennis Burchfield lead an in-house team of experience personnel who conduct all aspects of bridge routine and preventive maintenance; coordinate specific incident management procedures for bridge strikes and accidents/incidents. Fred, Dennis and Joey bring a combined total of 80+ years of experience in bridge construction, design, engineering, inspection and maintenance.
Jermie Harris ***Quality Manager*** Years of Experience: 17 Project Allocation: 100%	• Jorgensen QA/QC training program • VDOT leadership training certification • RMTA (toll authority) co-training • Class A CDL • Certifications for all heavy civil equipment operations	• Served for 8 years as Operations Manager and Superintendent on the RMTA (toll authority) PBMC project in Richmond, VA • Currently serving as Superintendent/QC leader for VDOT Fredericksburg PBMC project	Mr. Harris will be responsible for the quality control of operations, including maintenance audits on in-house technician and subcontractor tasks; ensure continual compliance with TDOT specifications, procedures and guidelines; perform random QC inspections on completed work and operational functions; Perform quarterly MQA inspections.
John Tuomisto ***Safety Officer*** Years of Experience: 24 Project Allocation: 25%	ATSSA—Traffic Control Supervisors Course. HAZWHOPPER-40 hour train the trainer ATSSA Intermediate TCS Certification VDOT WZ Traffic Control Training Instructor Advanced RCRA Managers Course NIMS Certified OSHA Certified Trainer	• 10 years of construction and vertical maintenance management experience • Extensive knowledge in transportation safety with an emphasis on maintenance of traffic safety, construction and facility safety and emergency operations, with over 14 years' experience. • Significant military training experience and lessons learned which translate directly into the transportation management field.	Responsible for planning, implementing, and coordinating safety program to reduce and eliminate occupational injuries. Conducts field safety training and inspection. Manages notification and reporting requirements for severe weather response, major and minor crashes, hazardous and non-hazardous material spills. Performs after action reviews (AARs) following incidents to ensure SOPs were followed, and if needed update any procedures that would improve response times or actions. The Safety Officer has completed the Basic and Intermediate Work Zone Traffic Control, NIMS 100's, 200's, 300's, 400's, 700, 800's and the Level 1 Incident Commander Training.
Cary Ernest ***Corporate Health, Safety & Environmental Director*** Total Years of Experience: 24 Project Allocation: 10%	MS Safety and Environmental Management, West Virginia University • Confined Space • Authorized OSHA 10- & 30-hour Instructor • First Aid/CPR Certified • MSHA 24-hour Certified • Advanced MOT Cert.	• Board Member on Mascaro's Annual Safety Seminar • Implemented the five High Impact Target Zero Techniques established by the CII	Mr. Ernest will oversee annual MOT training, defensive driving, Safety Policy and Practices, safety audits, and safety-training seminars. He will ensure that training is in accordance with all TDOT policies and guidelines.
Jack Johnston ***Corporate Training Manager*** Total Years of Experience: 21 Project Allocation: 10%	BA, Gov. and Computer Apps, U of Notre Dame • NGTS Program Manager's Course • US Army Mobilized Civil Affairs Course • Homeland Security Evaluation Program	• Military Veteran • 21 years' experience in training development, scheduling and tracking all training activities, licenses and certifications. • Developed project specific and division training plans to outline all aspects of training	Mr. Johnston will manage the overall administration of the training program. Deliver training and ongoing support to regional projects to ensure compliance with contract requirements. Create, schedule, deliver, and evaluate training. Evaluate project needs to plan a comprehensive training curriculum.
(Two Area Managers to Be Hired Locally – Urban and Rural Years of Experience: 10+ Project Allocation: 100%	• ATSSA Certified Traffic Control (Intermediate/Adv.) • TDOT Leadership Training Courses • Jorgensen Area Manager Training • Advanced Safety Training	• Key experience with TDOT maintenance and operations in a supervisory role • Incident response and traffic control experience • Institutional knowledge of the project interstates.	Jorgensen Area Manager will be assigned to a TDOT roadway section and will oversee multiple crews in order to conduct routine/preventative maintenance operations, oversee subcontracted work, and respond to emergencies within their area.

B.5.2 ORGANIZATIONAL CHART

Jorgensen has assembled a very experienced leadership and management team to guide and oversee this vital PBMC project for TDOT as presented below and on the organizational chart on the next page.

B.5.2.1 Executive Leadership Team

The executive leadership team led by Mr. Henningsgaard and Mr. Gorski have a combined 40+ year record in the Transportation Operations and Maintenance arena, and have managed/overseen maintenance responsibilities on projects well in excess of $[redacted] in total contract value (completed and ongoing) in both the PBMC and P3 markets. These projects are some of the most high profile, highly traveled corridors in our Nation, including the Woodrow Wilson Bridge (MD/VA), the I-4 Ultimate P3 project (FL), the President George Bush Turnpike (TX), the C-70 Interstate/Tunnel P3 project (CO), and the most heavily travelled corridor on the east coast, I-95, which Jorgensen maintains in its entirety in the State of Georgia, as well as the majority of the I-95 Interstate lane miles in Florida and Virginia.

B.5.2.1 Regional Leadership Team

The Regional Leadership team will be led by Mr. Bruce Bartoe, but will also include Ms. Pearl Barrientos and Maj. John Farnoly, P.E., who will both serve as mobilization leadership support, as well as regional "eyes and ears" to support Mr. Bartoe in an ongoing capacity. These three individuals have 75+ years of experience in roadway and structure operations and maintenance. Mr. Bartoe and his team will ensure compliance with all time-tested corporate training and safety programs and be an additional layer of project oversight and quality assurance to be ensure Jorgensen is operating at the highest level possible to ensure the safety and convenience of the travelling public.

B.5.2.2 Project Management Team

This team will be led Project Manager, Mike Richardson - TDOT's primary point of contract. Mike is responsible for all written and verbal communication at the Project level to TDOT. Our100% dedicated PM will report to our Regional Manager and will have the following primary responsibilities:

- Principal liaison 24/7 with the Department's designated authority.
- Overall management and financial authority to develop plans, adjust plans, execute orders and directions.
- Initiate local allocation of materials, equipment, tools, labor, incidentals, and subcontracts.
- Resolution of all contractual disputes and deficiencies.
- Obtain contractual certifications in addition to MOT and Incident Commander requirements.

PROJECT MANAGER

Mike Richardson has served many roles for our firm as a Project Manager including leading efforts to support VDOT in managing emergency contracts on over 30% of the Virginia Interstate on literally 24 hours' notice when the primary Contractor filed a (no) notice of bankruptcy.

Additionally, our Operations Superintendent Guy Mamac and two locally hired Area Managers will provide field supervision to our team of regional and local hire Maintenance Technicians.

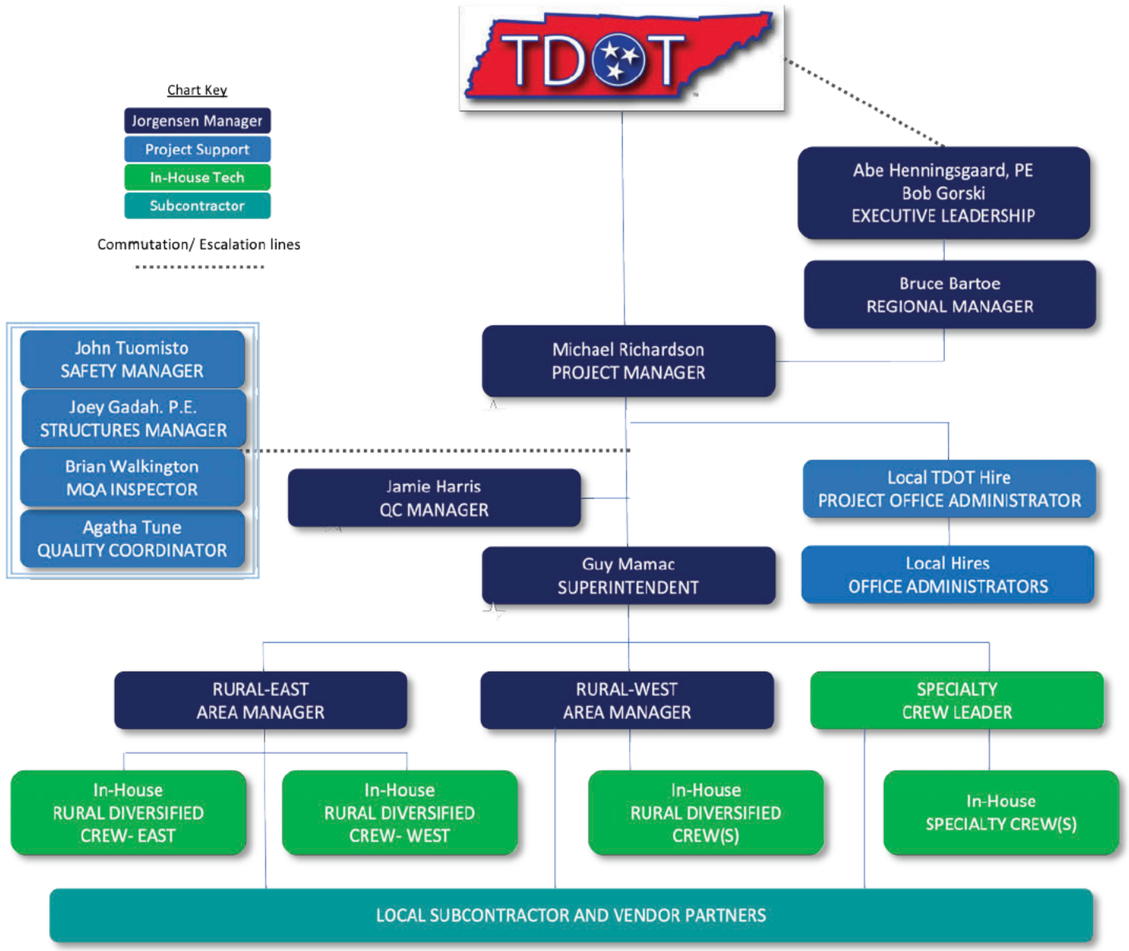
B.5.2.3 Subcontract Team Supporting Jorgensen

Jorgensen has also assembled a subcontractor team to support our resident staff. This team was selected based on TDOT's list of qualified subcontractors and Jorgensen's long-term relationships with the subcontractor base in the Southeast.

Our Executive Leadership team initiated and received commitments/partnerships from many subcontractors in Tennessee. We invested in an industry-leading "Meet and Greet" (11/20/23) in Nashville to personally partner and collaborate our Firm with the subcontractor community and the PBMC industry model.

Organizational Structure for the South Contract and Subcontractor Team

Our Subcontractor Team				
Contractor	**Address**	**Contact**	**Email**	**Phone**
ATTENUATORS				
Site-Safe	200 Judge Kenneth H. Goff Drive, Leitchfield, KY 42754	David Rich	drich@sitesafeonline.com	270-287-2646
Lu, Inc	429 West Kingston Springs Rd., Kingston Springs, TN 37082	Novice Cole	novice.cole@guiderail.com	615-330-9614
CABLE RAIL				
Lu, Inc	429 West Kingston Springs Rd., Kingston Springs, TN 37082	Novice Cole	novice.cole@guiderail.com	615-330-9614
Tennessee Guardrail, Inc.	2620 Pickel Lane, Knoxville, TN 37914	Derrick Howard	dhoward@tennesseeguardrail.com	865-522-9734
SWEEPING				
Sweeping Corporation of America	4141 rockside Rd, Suite 100 Seven Hills, OH 44131	Larry Grimaldi	lgrimaldi@sweepingcorp.com	732-330-8350
Blevins Enterprises, Inc.	734 Main Street, P.O. Box 98, Altamont, TN 37301	Zach Blevins	blevinsent@aol.com	931-639-0724
DRAIN CLEANING				
Sweeping Corporation of America	4141 rockside Rd, Suite 100 Seven Hills, OH 44131	Larry Grimaldi	lgrimaldi@sweepingcorp.com	732-330-8350
Blevins Enterprises, Inc.	734 Main Street, P.O. Box 98, Altamont, TN 37301	Zach Blevins	blevinsent@aol.com	931-639-0724
GUARDRAIL				
Tennessee Guardrail, Inc.	2620 Pickel Lane, Knoxville, TN 37914	Derrick Howard	dhoward@tennesseeguardrail.com	865-522-9734
R.D. Construction	1924 Main Street, Pikeville, TN 37367	Travis Angel	tangel@rdconstruct.net	423-618-6719
Asphalt and Concrete				
Jones Brothers Contractors	1010 Pleasant Grove Place, Mt. Juliet, TN 37122	Daniel Dougharty	ddougharty@jonesbroscont.com	615-218-9995
Jamison Construction	4532 Indian Creek Road, McEwen, TN 37101	Kevin Cable	kevin.cable@jamisonconstruction.net	931-582-3201
Mid State Construction, Inc	9190 Bradford Hicks Drive, Livingston, TN 38570	Nick Davis	nick@mid-stateconstruction.com	931-239-0887
ON-CALL SIGNS				
Superior Traffic Control	114 Capital Way, Christiana, TN 37037	John Morgan	jmorgan@superiortrafficcontrol.com	629-280-0659
MOWING & LITTER				
Big All Mowing, LLC	1029 3rd Ave South, Nashville, TN 37210	Libby Phillips	Libby@BigALMowing.com	615-519-9869
Salazar Contracting, LLC	165 Dry Creek Road, Tellico Plains, TN 37385	Josh Salazar	salazarcontllc@aol.com	423-351-4950
Caudill Mowing, Inc	4201 Midland-Fosterville Rd, Bell Buckle, TN 37020	Terry Caudill	terrycaudill64@gmail.com	615-390-5667
M&M Contract Mowing, LLC	153 County Road 404, Madisonville, TN37354	Mike Martin	volsimmental@gmail.com	423-519-3616
Bass Mowing, LLC	559 Bass Road, Prospect, TN 38477	Joey Bass	jbass4020@gmail.com	931-580-9464
TRAFFIC CONTROL				
Superior Traffic Control	114 Capital Way, Christiana, TN 37037	John Morgan	jmorgan@superiortrafficcontrol.com	629-280-0659



NASHVILLE MEET AND GREET

On Monday, November 20th, Jorgensen's executive leadership and human resources team hosted and informative and casual gathering with TDOT subcontractor community, purposefully fostering a collaborative and inclusive environment. The primary objective was to cultivate a long-term partnerships with specialized contractors, emphasizing a commitment to a new contract model that promotes mutual success and synergy.

During this meeting, the Jorgensen team was dedicated to not only sharing their vision for this innovative contract model but also to actively garnering support from the local subcontractor community. We recognized the value of collective expertise and the strength of a united effort in ensuring the model's success. By engaging in open dialogue and seeking input and feedback from subcontractors, the leadership team aimed to solidify a strong foundation for this transformative approach, reinforcing the idea that success is achievable through shared commitment and collaboration.

By the end of the evening, a palpable sense of excitement and enthusiasm permeated the room as all participants recognized the potential of this new approach. The spirit of collaboration and shared purpose had energized the group, leaving these local subcontractors excited for this new prospect. It was a defining moment that solidified the foundation for a promising and enduring partnership, and more successful outcome for TDOT

B.5.3 MANAGEMENT METHODOLOGY

B.5.3.1 Delivering Reliable Services

» Engagement and partnership with local subcontracting community, who have been performing the work, and are capable of stepping up to the performance standards of the PBMC's.

» Utilize specialty contractors starting Day 1.

» Initial and ongoing monthly training of in-house crews and subcontractor leadership.

» Jorgensen "independent" (non-project personnel) conducting extensive QC/QA program on quarterly basis.

» Use Pillar, Inc as completely independent review of service methodologies on a periodic review basis.

» Bringing veteran TDOT personnel onto the Jorgensen team to engrain our team with the specifications and expectations of the TN leadership and travelling public.

B.5.3.2 Coordination and Communicating

» Monthly Project Update meetings with TDOT Contract and District Management, and Jorgensen Contract Management personnel, RJA Regional Management., and Jorgensen VP.

» Monthly Project Management (TDOT/Jorgensen) Ride Along to view project assets and update monthly/ weekly workplans.

» Weekly Project Management (TDOT/Jorgensen)) PM Level In-person meeting.

» Weekly interaction of our project administrative personnel with TDOT, Tenn State Police, County Sheriff's Offices, subcontractors, and local vocal citizens.

» Quarterly Regional Leadership in-person meetings with TDOT District 3 leadership and Jorgensen Regional Manager and Executive Leadership.

» Create a targeted campaign (in conjunction with TDOT) for local stakeholders to get to know Jorgensen and our areas of responsibility within the contract limits and encourage direct outreach to Jorgensen for concerns/suggestions.

B.5.3.3 Management and Operational Capabilities

» Jorgensen management and operational skills are built on our extensive training program which includes the opportunity to attend our training academy in the Southeast.

» We conduct supplier-led training from for OEM's whose products are on the network system (guardrail, cable rail, sign structures, bridge joints).

» Management and oversight experience in both urban and rural areas is vital to the success of these TDOT projects.

B.5.3.4 Building Subcontractor Relationships

We understand our responsibility as a newcomer to TDOT and the local subcontractor community to build a bridge to this road community. This is not a new undertaking for Jorgensen. Every day we are writing checks to hundreds of subcontractors and vendors across the Southeast. Our responsibility is to build strong partnering relationships and we will do it.

B.6 QUALITY MANAGEMENT PLAN

B.6.1. QUALITY MANAGEMENT APPROACH AND METHODS

Jorgensen's Quality Management Plan (QMP) is designed to provide a uniform and consistent level of maintenance to meet contract performance measures. It is our process of developing, implementing, monitoring, reporting, correcting, and improving project operations to produce work in compliance with contract measures and client expectations and minimize oversight efforts by the Department.

CORPORATE QUALITY POLICY

"Jorgensen shall endeavor to continuously improve our operations and maintenance services to provide our clients and the public with the highest quality infrastructure assets."

B.6.1.1 Approach to Quality Management

The systematic approach to implementing an effective quality program will be achieved if the following are accomplished:

» Communicating goals and objectives,

» Implementing quality processes and procedures,

» Identifying metrics to measure success,

» Implementing a realistic action schedule, and

» Understanding quality interrelationships.

Quality Goals and Objectives. Effective and continuous communication of goals and objectives throughout the project is essential to success. Goals and objectives are:

» **Goals:** Continuous Improvement – Contract Compliance – Training Needs (QC Identifies Needs)

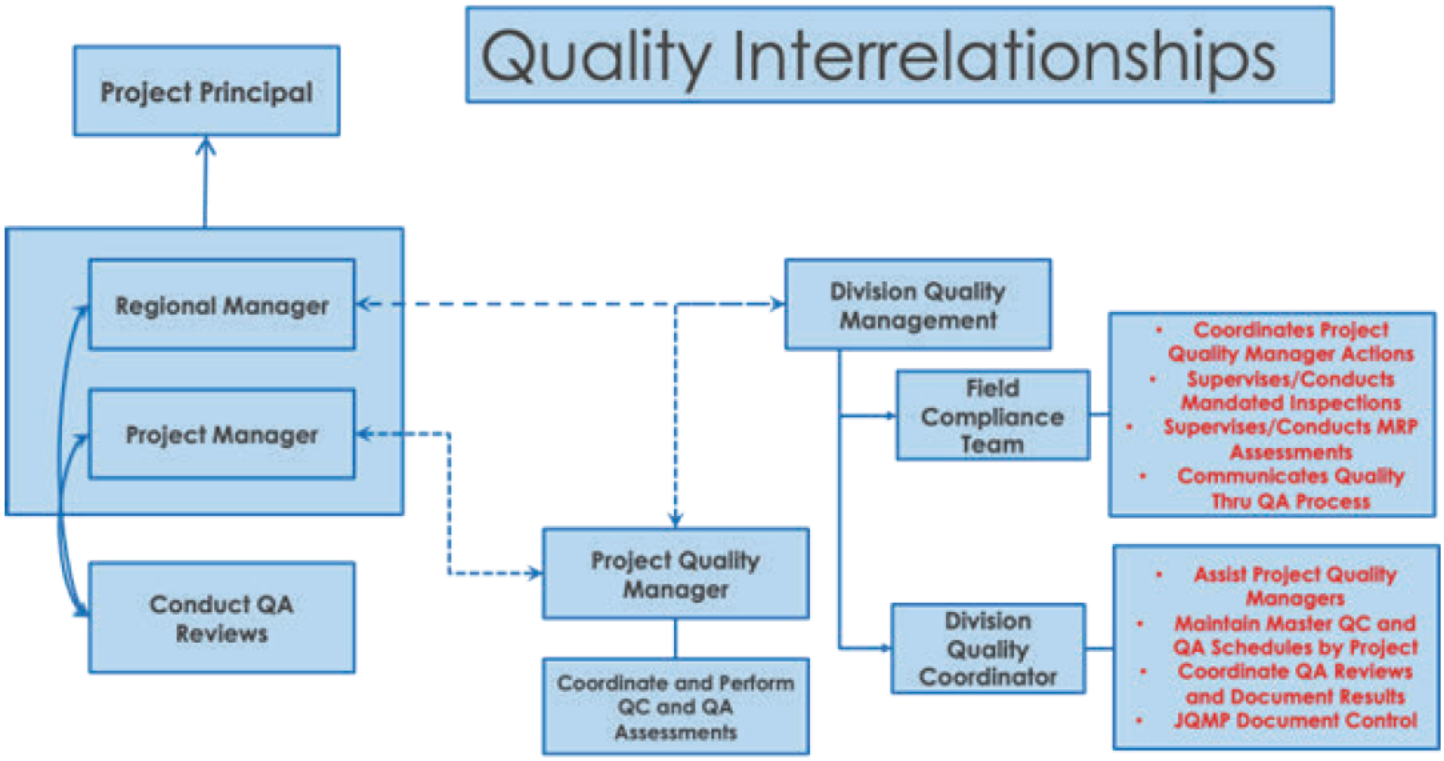
» **Objectives:** Taking Ownership – Achieving Consistency in Results – Meeting Deadlines

Quality Processes. There are two primary Quality processes – Quality Control (QC) and Quality Assurance (QA). The QC process is a project level activity to determine if operational procedures and actions are meeting contractual requirement and to identify areas for improvement.

The QA process is a corporate/regional activity to verify that the QC process is functioning as designed by providing continuous feedback on the overall quality of the operation and maintenance activities.

Measurable Metrics. Measurable metrics are established to determine the outcome of implementing the Quality program. These metrics will include a focus on trends in non-compliance and client penalties, planned verses actual accomplishments for both work quantities and financial sustainability and identification of training needs.

Quality Interrelationships. The Quality Program is both top down and bottom up driven. The quality interrelationships between Corporate, Region and Project are clearly defined to ensure that managers and supervisors understand their respective roles and responsibilities. The figure on the next page is a graphical representation of these interrelationships.



B.6.1.2 Monitoring Performance Through MQA Program

TDOT has established a Maintenance Quality Assessment rating program conducted four times a year to inspect all elements and characteristics of their roadway assets. Elements include Paved Lanes, Unpaved Shoulders and Ditches, Drainage Structures, Roadside, Traffic and Bridge Maintenance. A qualified member of the project team will accompany the Department MQA team during the inspection, taking note of any deficiencies. Upon receiving official MQA scores, Jorgensen will repair deficiencies found; aiming for continuous improvement in MQA scores each subsequent quarter. In addition to the official inspections, the Quality Control Manager will conduct a monthly MQA evaluation on 10 locations. These evaluations will be used by the PM to adjust resource allocation and work activities to achieve a consistent level of maintenance.

B.6.1.3 Reporting Quality Results

An independent system of checks and balances is instituted through inspections, monitoring, reporting, and corrective actions. To achieve independent validation of the QMP, the Quality Control Manager will perform QC audits and inspections and generate QMP reports for the executive team. The QC audits will quantify the efficacy of the O&M plan and generate a report from which deficiencies are corrected and successes are highlighted. This approach combines both positive reinforcement and swift corrective action to achieve continuous improvement throughout the contract term.

Our QMP includes three components: Internal Monitoring, Independent Quality Control and Quality Assurance. A QMP report will be prepared to facilitate the QA process and will include:

» Validation for selected sample size,

» QC inspection results with compliant and non-compliant occurrences,

» Root cause and corrective action recommendations with frequency and size for future QC audits,

» QC verification and QA certification for Invoice, and

» QA recommendation for operational plan, QC plan, and resource changes.

B.6.1.4 Contract Compliance

Understanding the contract and ensuring compliance is what sets Jorgensen apart from other Asset Maintenance contractors. Having the entire project team know the tolerance and criteria of each characteristic as described in the MQA will ensure compliance by meeting these requirements.

B.6.2 QUALITY MEASURES AND MEANS

B.6.2.1 Performance Criteria

Understanding the performance criteria and target ratings as shown in Section 27, Tables 1-7 of the RFP, allows Jorgensen to aim for compliance and improving the overall MQA element/characteristic scores.

B.6.2.2 Evaluation Processes and Procedures

Jorgensen has spent considerable time developing processes and procedures for our proven Quality Management Plan, which includes three components: Internal Monitoring, Independent Quality Control and Quality Assurance.

Internal QC Monitoring. Our 360-degress quality approach – Jorgensen employees participate in the QMP through internal monitoring and reporting which validates O&M services at work identification and completion. Whether our maintenance technician is reporting the completed graffiti removal, or our supervisor is verifying a guardrail completed repair, our staff reports on QMP self-monitoring each day. Our PM is responsible for the effective self-monitoring and reporting for field operations.

Independent Quality Control (QC). The second component of our QMP involves independent quality control auditing by our Corporate QC Manager, who will conduct both field inspections and document audits to ensure QMP compliance and will work closely with the project Quality Control Manager to correct any deficiencies.

Executive Quality Assurance (QA). The Executive Management Review led by VP Sara Henningsgaard, P.E. identifies the performance improvement actions and to affect necessary quality changes.. This review process involves the final validations of the QMP, certified the QC program, verifies deductions, initiates corrective actions, revises QC inspection frequency, amends operational safety procedures, and certifies the invoice. The QA process will enforce the QC protocols and target the reduction of non-compliance events.

B.6.3 QUALITY MANAGEMENT ACTIONS

B.6.3.1 Quality Data Analysis.

The following are the key items included in the QC/QA process:

QC Frequency Baseline. Setting the QC frequency baseline is the first step in the QC process. QC frequency is based on the volume of work completed and reported to TDOT activity codes, along with the QA targeted characteristics, closely following the MQA elements and characteristics.

These characteristics are determined with statistical methodology to achieve the +/- low % accuracy rate. Bias will be applied for the inclusion of safety characteristics. Between 50 – 80 auditable occurrences ("work actions") per quarter are sampled with an established minimum number to initialize the QC review.

Quality Control Test Methods. Field inspections, MMS tracking audits, and records reviews will be conducted to validate the QC inspection.

B.6.3.2 Management Actions

Independence and Authority. The executive QA team members are the central force ensuring the process is clear and communicated to the Department and provides an accurate and repeatable QMP. Both the Regional Manager and VP have direct authority to implement immediate changes to the work plan, QMP, and project resources to drive continuous improvement.

B.6.4 CONTINUOUS IMPROVEMENT PROCESS

B.6.4.1 Implementation Actions

QMP MMS. JAMMS tracks O&M work activities. Employees performing project work execute a daily work report (DWR) to record MMS activity accomplishments and resource usage, and supervisors issue work orders (WOs) to record maintenance activities. The DWR and WO are the building blocks to the QMP reports that record the MMS accomplishment and trigger a self-monitoring QC check. The QMP system enables contract-specific contract measures, notes compliance times, monitors results, and defines auditing methods.

Proactive Alerts. QMP findings will be communicated directly to staff members and subcontract partners. QMP notifications include alerts, daily reports, QC inspection reports, QA/QC analysis reports, and field inspection reviews. QMP communication protocols target all levels of the operational team:

- » JAMMS QMP compliance alerts to mobile device: Target audience = Maintenance Technician.
- » JAMMS Daily QMP reports: Target audience = Crew Leaders and QC Manager.
- » QC Findings: Target audience = Supervisors.
- » QA Report: Target audience = Project Manager.
- » Root-Cause Analysis and Corrective Actions: Target audience = Project Manager, Training, & QC Managers.
- » Field QMP Inspections: Target audience = Jorgensen operations and subcontractor partners.

B.6.4.2 Follow-up Corrective Actions

Continuous improvement has been a guiding principle for all Jorgensen projects nationwide. To this goal, the Regional Manager/Vice President will identify corrective actions for improvement to the PM and project staff. Improvements to the QC process will also be identified including revisions to QC sample size, adjusted work plan activities, resource shifts to under-performing characteristics, reorganization recommendations, equipment alternatives, technical training, alternate subcontract resources, and changes to operational safety.

B.6.5 TRAINING AND PEER REVIEW

B6.5.1 JEDi Training Program

Jorgensen believes in focused and efficient technical training to eliminate root-cause QC failures. The JEDi program, managed by Training Manager, Jack Johnston includes critical courses, technical briefs, and customized field exercises to improve knowledge of field operations. Brian Walkington, Corporate QC Manager, trains on guardrail, attenuator, and sign inspections, MQA, and drainage. Example courses include:

EXAMPLE JEDI COURSES

- » PBMC Principals,
- » MQA Inspection and Specific Contract Specs & Standard Compliance Indicators Review.
- » Turf & Vegetation Management,
- » Lighting / Electrical Safety,
- » Equipment O&M.
- » Field Installation Training: Guardrail, End Treatments, Attenuators, Signs, Delineators

B.6.5.2 Peer Review

Jorgensen currently maintains roadways and infrastructure assets in Virginia, Georgia, Florida, and Colorado. At any given time, a Quality Manager from one or more of these projects can be called upon to perform a peer review to ensure contract compliance and quality work is being performed. We can take our technical expertise from other projects and apply it where needed.

A recent year-long guardrail end treatment compliance project in another state resulted in our discovery of that agency's consultant's lack of knowledge in the various types of end treatments. Jorgensen conducted it's own field inspections (the only asset maintenance contractor to do so) and identified at least 30% of the original consultant's inspection reports and checklists used were incorrect. We correctly identified issues and found other deficiencies not originally identified, making the end results safer for the traveling public.

B.7 CUSTOMER SERVICE, INCIDENT, AND EMERGENCY RESPONSE

The Jorgensen customer service team operates nationwide handling thousands of service calls annually across our 50 plus projects and in addition processes thousands of Third-Party Claims for damaged infrastructure. This operation is staffed with managers, service call specialists along with on-call technicians to respond to accidents, emergencies, and hundreds of incidents 24 hours a day 365 days a year.

B.7.1 CUSTOMER SERVICE

B.7.1.1 Addressing Customer Concerns

Jorgensen understands we are an extension of the Department and responsible for all customer requests and complaints. Our focus includes requests from TMC, actions generated from Nashville District 3 THP, Tennessee Department of Safety and Homeland Security (TDOSHS), local County Sheriff Office (Bedford, Cheatham, Dickson, Giles, Hickman, Humphreys, Marshall, Maury, Rutherford, Smith, Williamson, and Wilson), TDOT Region 3 Operations, State Maintenance Office, and other local citizens.

TIMELINESS PERFORMANCE CRITERIA

- Initial contact within 24 hours,
- Follow-up 72 hours for proposed resolution,
- Completion within 14-days, and
- Documentation input to TDOT's work request system for work tracking

Jorgensen partners with other responders including TDOT, HELP, emergency managers, construction contractors, and law enforcement to discuss resolution methods, concerns, where improvements are needed, and incident management lessons learned.

We give personal attention to frequent callers and understand the sensitivity and political nature of complaints that may arise due to the proximity to Music City. We provide a 24/7/365 hotline, database, and personalized responses to concerned citizens.

B.7.1.2 Anticipating and Reducing Call Volume

Jorgensen understands TDOT concerns when transferring customer complaints and response efforts to a contractor. We have developed methodologies that make the transition a seamless process which include analyzing customer request history, customer service training, communication plans, customer partnership and community outreach.

The approach to proactive identification of requests is to analyze and map the recent history, classify each request by activity type and use these tools to identify target areas. As an example, we analyzed TDOT historical data and found the highest level of maintenance concerns are in Williamson, Wilson, Rutherford, and Dickson Counties. Most of these requests are for damaged guardrail/cable rail from incidents, manual brush control for vegetation encroachment, litter removal, and pothole spot patching. All these activities will be proactively addressed within our work planning process.

B.7.1.3 Customer Service Training

Training workshops and seminars are provided to our maintenance workers and local staff so that the entire team is receiving and addressing customer concerns. A snapshot of training includes:

- Learning to effectively communicate with varying types of personalities and communication styles.
- Handling the toughest questions with finesse and polish includes techniques for maintaining composure and diplomatic ways to deliver bad news.
- How to communicate effectively by phone, chat, posts, and emails with right message in the right manner.
- Handling evolving customer expectations and leading with intention and direction that is right for TDOT customers, employees, and organizations.
- Teaching customer service reps how to provide great service in the field and create positive long-term relationships with customers.

B.7.1.4 Customer Partnership and Community Outreach

A strong partnership with Stakeholders leads to meeting expectations and requires personal meetings with frequent requesters, stakeholders, and business owners to continuously improve customer relationships and strengthen partnerships with the community.

We partner with the Department to discuss maintenance schedules, project updates, priority customer requests and participate in construction meetings including pre-work, progress, semi-final, and final inspections.

We develop partnerships with local sheriff offices, highway patrol, and other emergency responders including HELP operators and Protect the Queue vehicles, so we work together as one team during incident scenes.

We will also participate in after action review meetings and periodic working sessions with emergency responders to help develop process improvements that promote urgent lane and incident clearance.

CUSTOMER COMMUNICATION PROCESSES

- Phone Support and Contact List. Our local number is available 24 hours a day, 7 days a week and provided to the Department and other project stakeholders. A contact list with mobile numbers and email for project supervisors, managers, and emergency responders is updated frequently.
- In Person. Requests received from the field will be logged in JAMMS using mobile devices to document the request in real-time, perform a corrective action, and notify the appropriate entity for resolution.
- Email. Customers can use ops_support@royjorgensen.com to submit non-emergency requests. The customer service inbox is monitored by administrative staff.

B.7.1.5 Customer Service and Incident Response Documentation

In addition to utilizing TDOT's work request system for work tracking, Jorgensen will also utilize JAMMS. JAMMS is tailored specifically to manage all aspects of roadway and facility maintenance with flexibility to adapt to the specific requirements of this contract.

Operational success is governed by the PBMC provider's ability to identify, plan, schedule, execute, monitor, and control work. JAMMS is customized for each contract to include the project limits, asset inventory, maintenance activities, and contract priorities. As both Jorgensen employees and customers report maintenance requests via available communication channels, each request is classified and prioritized within JAMMS. Work orders are generated and distributed to in-house maintenance crews or qualified subcontractors to report work completion, accomplishments, photographs, and GPS. Several standard reports are produced that analyze the work completion data as shown below.

JAMMS STANDARDIZED REPORTS

- Customer Service Resolution Log. This report summarizes requests received from customers along the project limits. Each entry includes the date and time of receipt, customer contact information, location, work description, and work performed. This report is used to confirm compliance with the Customer Service Resolution Performance Measures and provided to the Department by the 1st of every month.
- Client Accomplishment. Each entry on the report consolidates the monthly work activities by MMS and corresponding unit of measure.
- Incident Management Log. This report logs maintenance work resulting from damage caused by a third party. Each entry includes date and time of the accident, location, asset damage, work performed, and pertinent incident notes.

B.7. INCIDENT AND EMERGENCY RESPONSE

B.7.2.1 Approach and Methods to Incident and Emergency Response

Jorgensen responders manage incidents involving guardrail, sign repairs, fence damage, gravel spills, car fires, asphalt damage, MSE damage, clear zone hazards, and hazmat cleanup. Our crews will be staged along the interstate corridors in Rutherford, Williamson, Giles, Dickson, Counties to respond within 60 minutes 24/7/365.

EMERGENCY RESPONSE PLAN UPDATES

Emergency Response Plan provided 30 days prior to Contract Start and updated annually by July 1st.

We conduct an on-scene assessment upon arrival and coordinate with on-scene emergency responders. If additional support resources are necessary to assist with incident clearance, we will mobilize our in-house and specialty subcontractor resources to be on scene within 60 minutes.

B.7.2.2 Personnel and Equipment Resources

The Incident Management Coordinator will have TDOT Incident Commander Training in addition to the certifications and training shown.

TRAINING AND CERTIFICATIONS

Responders hold MOT certifications and National TIM Responder Training, along with training for (NIMS), Hazardous Material Awareness and Response, North American Emergency Response Guidebook (NA-ERG), Driver's Safety, CPR and First Aid, and Illicit Discharge Detection and Elimination Training.

Our resource base within our division includes 246 MOT Responders, 183 TIMS Responders, and three MOT and TIMS trainers.

Our in-house fleet includes logoed advance warning vehicles, truck mounted attenuators, arrow boards, dump trucks, skid steers, excavators, sand trucks, bucket trucks, and traffic control devices capable of managing multiple events.

Equipment is outfitted with digital alerts utilizing iCone, message boards and revolving strobes. Specialty subcontracts will be used regarding spill mitigation and cleanup, hazmat remediation, and pavement repairs.

B.7.2.3 Agency Notification and Submission of incident Reports

Upon notification of an incident our responders are trained to communicate with the TDOT Region 3 TMC directly to confirm location, incident details, and inform them we are in-route to the scene. Upon arrival we will serve as POC for coordination and communication with incidents and providing updates. We will notify the Department of any incident measures ensuring the safety of motorists and hazmat mitigation and cleanup.

The TMC is notified upon arrival, status updates every 30 minutes or as directed, and upon re-openings. Incidents are documented utilizing approved TDOT methods within 24 hours of any occurrence and include times (notification, dispatch, arrival), number of lanes/shoulders/ramps blocked and clearance, level of incident, THP case number, response/clearance times, pictures, asset damage and description.

B.7.2.4 Plans for Making Emergency Repairs

Our Emergency Response Plan (ERP) contains plans for both weather and non-weather emergency related incidents including traffic crashes guardrail hits, severe potholes, debris within travel lanes, washouts, and other common emergencies.

B.7.2.5 Handling of Hazardous Waste

Jorgensen assists with the containment and cleanup of hazardous waste and chemical spills. Procedures include step-by-step instructions for response and communication TMC protocols. We have a well implemented 10-50 ton/month hazardous debris removal program using limited lane obstruction MOT devices and working with certified hazardous materials handling contractors - SWS Env./ AAG Env./ Env. Rem.

B.8 WORK NEEDS ANALYSIS

Proactive work needs identification is key to defining and implementing a dynamic Work Plan that consistently meets or exceeds MQA criteria and client expectations..

B.8.1 WORK NEED'S PHILOSOPHY AND APPROACH

Our work need's philosophy and approach are based on answering three fundamental questions:

» What is a Work Need? – A process of defining what work needs exist.

» How Are Work Needs Generated? – Assessing and documenting the actual needs.

» How are Work Needs Proactively Managed? – Managing the execution of the work to remedy deficiencies.

B.8.1.1 Initial Condition Assessment

During the bidding phase the Jorgensen field team conducted a detailed condition assessment of the system and documented the current needs. Further we used an outside MQA team supplied by Pillar Associates to provide an independent condition assessment and to provide an inventory and condition data base.

Summary - Pillar Field Assessment			Field Survey Data -*Database (DB) Location*			
Asset	**Unit of Measure**	**Qty**	**Line Details DB**	**Windshield Details DB**	**MQA Details DB**	**Ramp/Sign Post DB**
Heavy Liter	Directional Miles	25.8				
Poor Pavement		36.3				
Poor Shoulder	Linear Miles	150.9				
Tree Trimming		21.3				
Attenuator	Fail Count	1				
Barrier		1				
Guardrail/Cable		142				
Double Post		124				
Single Post		361				
Spot Trim		58				
Mainline Potholes	Pothole Count	395				
Fence	Percent Fail	33%				
Inlet		42%				
Misc. Drain		43%				
Paved Ditch		69%				
Pipe		24%				
Unpaved Ditch		29%				
Ramp Single Post	Estimated Damaged	71				
Ramp Double Post		36				
Ramp Poor Shoulder	Estimated Miles	36.7				
Paved Ditch	Estimated Miles	25.5				
Single Post	Estimated Missing	550				
Double Post		192				
Drain	Estimated Cleaning	1096				

The results of the two assessments were analyzed to arrive at the Work Needs Results which provided the foundation for the Five-Year Work Program. The detailed results are shown on the next page.

This process facilitated the teams' efforts to categorize the work activities into the three bid categories for purposes of determining the Five-Year Work Program Budget.

The work activities in the Five-Year Program were prioritized and work quantities calculated. In summary it was determined that 80% of the work needs would involve the following activities.

» **Bridges:** joints - approaches - missing signs.

» **Pavements:** potholes – edge drop-offs.

» **Drains:** inlet cleaning.

» **Vegetation:** mowing – litter

» **Sweeping:** cyclic program and PM sweeping.

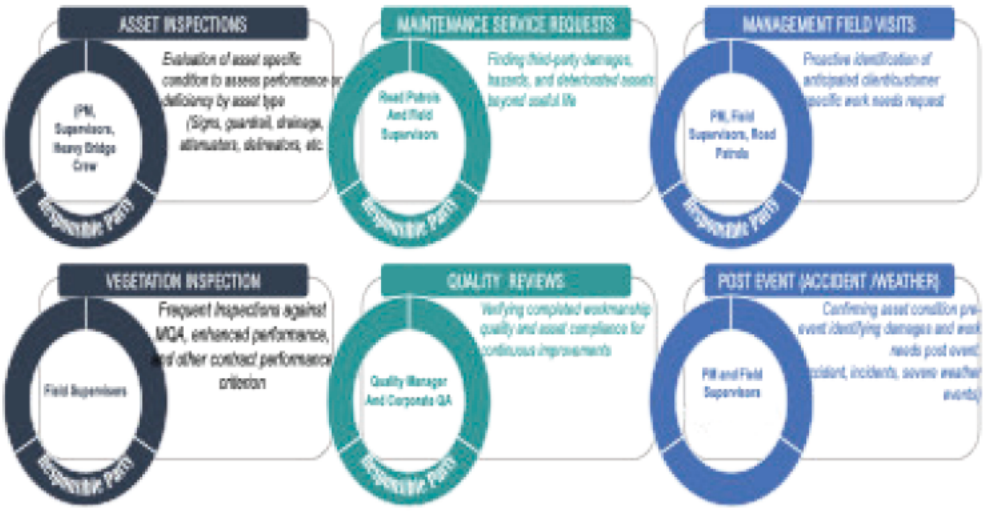
» **Ground Signs:** replace missing signs – straighten and repair signs.

» **Traffic Service Devices:** Guard &cable rail/attenuator repairs.

» **Road Patrols:** debris removal and incident response.

B.8.1.2 Continuing Condition Assessments and Inspections

Identification of work needs continues throughout the contract term incorporating input from asset inspections, road patrols, management project rides, quarterly MQA's, customer service requests, emergency events, and quality program.



B.8.2 IMPLEMENTING CORRECTIVE ACTIONS

The Jorgensen Quality Management plan is focused on identifying correction actions leading to continuously preserving and prolonging asset life. The significant actions to accomplish this are:

Identify the Issue. Clearly define and document the issue or problem that requires corrective action. This includes identifying what went wrong, why it happened, and its impact.

Assigning the responsibility for the corrective action. Identify the person or team most capable to implement the corrective action.

Develop Corrective Action Plan. Establish a corrective action plan that outlines the steps and actions required to address the issue including responsible parties, deadlines, and measurable objectives.

Allocate Resources. Ensure that the necessary resources, such as personnel, equipment, and materials, are available to carry out the corrective actions effectively.

Communicate the Plan. Communicate the corrective action plan to all relevant parties, including employees, suppliers, customers, and stakeholders if applicable.

Execute Corrective Actions. Implement the corrective actions and track progress to ensure accomplishment.

Report and Review. Document and review the results to ensure successful correction of the deficiencies.

Mobilization Plan

Mobilization (January 2024): *Critical month to initiate mob efforts for DAY 1*
Equipment: Truck, loader, dump, bucket truck, TMA final orders and begin transfers from Mid-Atlantic yards.
Location: Finalize multiple year leases for office/yard facilities
Materials: Inventory G/R matrls, attenuators, signs, asphaltic materials
Subcontractor Interface: Execute sub agreements for mowing/vegetation, sweeping, traffic control, and drain cleaning.
Personnel: Recruitment, staffing of local resident staff begins.
Mobilization (February 2024)
Training: The 4 to 6 week JEDi training program begins.
Condition Assessment: The initial condition assessment updated.
Phased Maintenance Plan: Mobilize in-house/sub resources
Mobilization (March 2024)
Finalize Office/Yard Setup: Inventory in-place, vendors verified.
Mock-Run Exercises: Exercises for mobile operations and incidents.
Client Interface: Operational planning meetings with TDOT
April 1 - 12:01 - DAY 1

Phased Maintenance Services

Work Activity	Months	Unit of Measure	All Counties
426:Unpaved Shldr	12	SMI	79.4
433:Misc. Drainage	6	EA	286
432:Paved Ditch	6	mi	19.9
472/473:Ground Signs	6	EA	515
431: Inlets	6	EA	2,512
Routine and Preventative Maintenance (In-House)			
431: Clean Inlets -Labor	60	EA	2,512
433: Misc Drainage Repai		EA	29
432: Paved Ditch Repair		mi	14.3
431: Repair Inlets		EA	25
472: Ground Signs		EA	179
447: Manual Sweeping		mi	130
401: Pothole Repairs		ton	104
Bridges Prev. Mnt.		EA	322

Heavy Bridge Crew

Work Activity	Unit of Measure	All Counties
Bridge Inventory		322
Emergency Repairs	Work Orders	326
Routine Maintenance		761
Priority Repairs		435
Priority Repairs by Others		652

Regional Crew Program

Work Activity	Unit of Measure	All Counties
475:Guardrail Repairs	LF	20250
474:Attenuator Repairs	#	20
411: Tier 2 Concrete	SF	2000

Subcontractor Program - *Routine Maintenance*

Work Activity	Unit of Measure	All Counties
431:Clean Inlets	EA	2512
451:Bridge Approach Repairs	EA	25
435/441:Mowing and Litter	AC	20712
446:Sweeping	Mi	5720
401:Tier 2 & 3 Asphalt	Tons	1560

Work Plan Schedule

Program	Yr 0	YR 1	YR 2	YR 3	YR 4	YR 5
Mobilization						
Phased Maintenance Services						
426:Unpaved Shoulder Dropoff						
433:Misc. Drainage Structures						
432:Paved Ditch						
472/473:Ground Signs						
431:Inlets						
Routine and Preventive Maintenance						
431:Clean Inlets -Labor						
433:Misc Drainage Repairs						
432:Paved Ditch Repair						
431:Repair Inlets						
472:Ground Signs						
447:Spot Sweeping						
401:Pothole Repairs						
451:Structure Prev. Maint.						
Heavy Bridge Crew *(See Detailed Work Plan in Section B11)*						
451:Bridge Super/Substructure						
454:Bridge Steel Members						
451:Ancillary Structures						
Regional Crews						
475:Guardrail/Attenuator Rprs						
411:Tier 2 Concrete						
Subcontractor Program for Routine Maintenance						
431:Clean Inlets						
451:Approach Repairs						
435/441:Mowing and Litter						
446:Sweeping						
403/404:Tier2 & 3 Asphalt						

B.8.3 SHORT TERM VERSUS LONG TERM STRATEGIES

The detailed short term and long-term work plans outlined on the previous foldout page were based on a twofold strategy as summarized below.

Short Term (6 to 12 Months) Strategy. The focus is on mobilizing resources to be ready on Day 1 to perform work and to complete the Phased Maintenance Services.

- » Upon execution of the contract, the offices, yards and warehouses will be leased; recruiting, hiring and training of local staff will commence; and equipment and materials allocated from current stocks while new equipment and material inventories procured.
- » Subcontract agreements will be executed specifically directed to the Phased Maintenance Services to be completed in the first 6 to 12 months for unpaved shoulder drop-offs, cleaning misc. drainage structures and inlets, repairing paved ditches and ground signs.
- » Regional crews will work along with and train local staff on Day 1 to perform routine maintenance and operational activities and begin the transition to the long term.

Long Term Strategy. The focus is transitioning to a steady state program to meet contract performance measures including achieving/exceeding MQA requirements.

- » Scheduling and executing of the long-term maintenance programs for Preventive Maintenance, Minor Priority Repair, Routine Maintenance, and Emergency Services.
- » Executing additional subcontract agreements for Tier 2 & 3 asphalt and Tier 2 concrete repairs, sweeping, mowing and litter, guardrail and attenuator repair.
- » Ensuring inspection programs are providing assessments to determine corrective actions.
- » Continue to reach out to all stakeholders to ensure effective communication processes are in place.

B.8.4 STRATEGY FOR MEETING MQA AND NON MQA CRITERIA

The project limits are a mix of rural and urban interstate corridors within the five county South contract. It will require county and project specific characteristic work plans to manage the roadway's unique characteristics and current MQA condition scores. Four key principles form our strategy for meeting MQA service levels.

- » Understand Current Condition and Asset Inventory.
- » Develop the Work Plan.
- » Execute the Plan.
- » Evaluate Results and Modify.

B.8.4.1 Understanding Current Condition and Asset Inventory

During the procurement process the Department established a baseline condition with an MQA assessment of one segment of the system. The Jorgensen and Pillar field teams performed separate assessments to verify that the Department's assessment was representative of the entire system or if adjustments were needed. The results of the separate assessments are discussed below.

TDOT MQA Assessment. The baseline condition as established by the Department's MQA assessment identified the element and characteristics that are deficient providing the Contractor with direction in formulating the work plan priorities. A summary of the baseline condition results is shown in the table on the next page. (need to update table)

Element	Criteria	Cheatham	Dickson	Giles	Hickman	Marshall	Maury	Rutherford	Williamson	Wilson
Drainage Structures	Inlets Obstruction			0%	0%				75%	72%
	Misc. Drainage Obstruction		0%	0%	0%			67%	29%	63%
	Misc. Drainage under drain rodent screen		100%		0%					64%
	Pipe Obstruction		67%		67%	0%				
Guardrail/ Cable/ Concrete Barrier	Guardrail Functional Damage	75%	65%	50%	50%	40%	25%	33%	60%	58%
Roadside	Mowing Height		77%	33%		27%	7%	67%	71%	79%
Traffic	Object markers & delineators, Missing			67%		57%	75%		58%	
	Sign Installation, Lean						67%	50%	79%	
Unpaved Shoulder/Ditch	Blocked Ditches, Paved	0%	22%		67%	0%		75%		75%
	Shoulder drop off, unpaved	25%	36%	67%	0%	40%		50%	60%	48%

Jorgensen Field Condition Assessment. The condition assessments performed by Jorgensen and its' independent consultant Pillar were directed to both assessing MQA criteria and to identifying work locations and work quantities. These results are shown in the previous foldout page.

B.8.4.2 Developing Work Plan to Meet MQA and Non-MQA Criteria

The work needs identification process is directed to identifying work activities to correct deficiencies identified by MQA assessments and work activities that address the timeliness performance measure requirements.

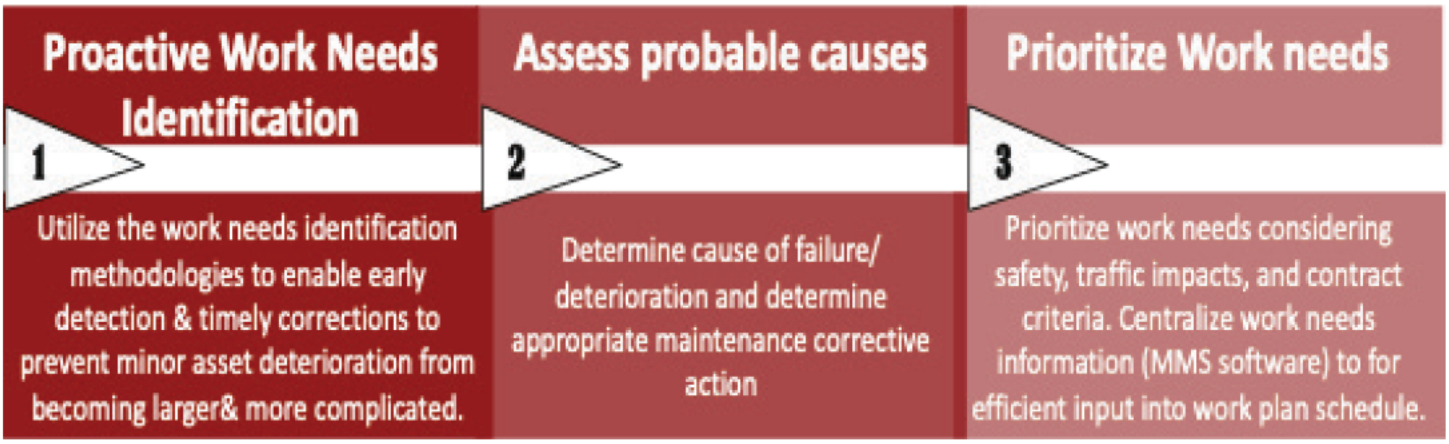
Meeting MQA Criteria. Work plans are first targeted to prioritize deficient characteristics while preserving the assets that are currently meeting the criteria. The critical input used to develop the MQA work plan are the element/characteristic deficiencies - quantities and locations.

Meeting Non-MQA Timeliness Performance Criteria. The timeliness performance tolerances and criteria are directed to both operational activities and criteria asset performance as summarized in the table.

Element	Characteristic	Score
Drainage Structures	Inlets	61%
Drainage Structures	Miscellaneous Drainage Structures	25%
Drainage Structures	Pipes	63%
Roadside	Control Access Fence	72%
Roadside	Guardrail / Cable Rail / Concrete Barrier	61%
Traffic	Ground Signs & Overhead Signs	64%
Traffic	Object Markers and Delineators	70%
Unpaved Shoulders & Ditches	Paved Ditches	41%
Unpaved Shoulders & Ditches	Unpaved Shoulder Edge	53%

B.8.5 COMMITMENT TO PROACTIVE WORK NEEDS ANALYSIS

Proactive work needs analysis includes both assessment and analysis techniques that ultimately will provide the inputs to the project work plan. The previous discussion detailed the assessment processes and documented the initial results that were analyzed to establish a basis for our Five-Year Program.



Jorgensen is committed to this proactive and dynamic process that will continuously improve operations during the term of the contract leading to prolonged asset life.

B.9 MAINTENANCE OF TRAFFIC (MOT), SAFETY AND LANE AVAILABILITY

Increasingly in the last few years, there has been a dramatic uptick in speeds on congested roadways in addition to many more distracted or impaired drivers causing an ever-increasing number of major traffic incidents with fatalities and injuries to both first responders and motorists. This dangerous environment demands a laser focus on safety and the development of life-saving innovative solutions.

B.9.1 MAINTENANCE OF TRAFFIC (MOT)

The MUTCD, TDOT Standard Drawings, and TN Work Zone Field Manual (WZFM) will be used for traffic control and work zone requirements. The common closures for this project on the interstates will include shoulder closures, mobile operations, and single/multi-lane lane closures.

Most lane closures will fall within the Multi-Lane Divided Road category, where applicable, Jorgensen will implement the standard layouts and follow the guidance as provided in the TN Work Zone Field Manual.

We will also consider weather, time of day, traffic volumes, traffic speed, roadway geometry, and roadside conditions when implementing MOT plans. Potential disruptions to motorist will be reduced by shifting work to evening and off-peak hours when possible.

KEY ELEMENTS OF MOT PLAN

- » Trained personnel
- » Channelizing Devices
- » Flashing Warning Lights
- » Vehicle Warning Lights
- » High Visibility Clothing
- » Work Zone Signing
- » TMA's and Mobile Barriers
- » Crashworthy Testing Devices

B.9.2 CREATING AND MAINTAINING A SAFE ENVIRONMENT

Jorgensen is dedicated and committed to a safety-driven culture that ensures the presence of qualified personnel, rigorous certified training, and strict adherence to relevant procedures, laws, and regulations.

To underscore this commitment, firm meetings commence with a "Safety Moment," serving as a focal point for all meeting discussions - operational or administrative. Every team member must be continually reminded and unwavering in our shared mission to safeguard the well-being of road users and workers on the highways.

B.9.2.1 Safety Plan Approach

Jorgensen's 6-point program called "Road to Zero" defines expectations, policies, and training; increases awareness, includes inspections, evaluates work habits, and rewards outstanding safety records.

JAMMS STANDARDIZED REPORTS

- The Safety Manuals are RJA's historical collection of procedures, policies, and programs located in project offices and web accessible. The corporate safety manual includes material for OSHA, ATTSA, DOT, and applicable federal/state laws (includes MUTCD). The "Employee Safety Manual" has safety policies and practices followed to keep the employee, transportation clients, and the public safe.
- The Training Program is the curriculum and schedule prepared specifically for this project and tailored for the Managers, crew leaders, and technicians. All crew personnel proposed for this project will have at a minimum the approved ATTSA Traffic Control Technician training or equivalent certification to ensure proper work-zone setups along with the National Traffic Incident Management responder training to ensure proper traffic control during emergency response.
- Jorgensen Safety Awareness provides constant visual reminders, including posters and decals, of working safely and behavioral based safety methods.
- Inspection and Documentation Methods conduct regular safety compliance inspections to identify potential safety violations and prevent incidents by identifying unsafe risk actions. Jorgensen will utilize internal checklists along with the Department TTC Checklist found in Work Zone Field Manual, Figure 6K-1, pg. 6K-xii, to ensure proper establishment of work zones.
- Enforcement involves timely and effective disciplinary action to be consistently implemented. Employees go through a counseling and retraining process for any deficiencies found during inspections.
- Creative programs like Recognition and Reward encourage a safety culture and reward exceptional performance. Incentives will reinforce the outstanding work performed by the team.

B.9.2.2 Key Safety Means and Methods

The focus of our daily safety efforts is directed to those means and methods that we have learned (many painful lessons) have the most impact in instilling a safety culture at all levels in our organization.

- Training technicians in daily safety-area and tool assessment reviews,
- Stop-Work' practices for addressing unsafe conditions and behaviors,
- Injury reporting and documentation to track repetitive problems,
- Notification of job-site safety hazards, equipment pre/post inspections,
- OSHA 'big-3' reviews, and
- Removal of deficient "Danger-Do Not Use" items.

B.9.3 INNOVATIVE TECHNOLOGIES FOR CREATING SAFE WORK ZONES

Jorgensen is continually seeking innovative ways to keep a culture of "maintenance safety" while working on roadways and bridges. Jorgensen works with the technology sector to pilot various safety enhancements for both our employees and the traveling public.

B.9.3.1 ICone Technology for Digital Message Signs

JAMMS STANDARDIZED REPORTS
Jorgensen partnered with Royal Trucking, TMA outfitter, to provide iCone connected arrow boards on our TMAs. iCone is a new technology that gained recognition by DOTs for its effectiveness. The device is attached to an arrow board and permits the status of the arrow board to broadcast to GPS applications like Waze. Automated alerts warn drivers of MOT events like closures or mobile operation to prepare for upcoming work zones. The data is pushed to these systems at MOT deployment. This technology leads to less traffic congestion with GPS applications routing motorists around work zones. We are currently working with FDOT TMC to implement the iCone technology to Digital Message Signs (DMS), such that when MOT devices are deployed, DMS are triggered to update to the appropriate lane closure type for the public to see.

B.9.3.2 J-Tech Lane Blade

Jorgensen is currently evaluating the use of the J-Tech Lane Blade, which is a mounted blade to a work truck that safely removes debris from live travel lanes, allowing for workers to stay in the vehicle and reduce vehicle queuing or dangerous last second maneuvers. Our success with J-Tech Blade, with TDOT approval, could be implemented on the Region 3 projects.

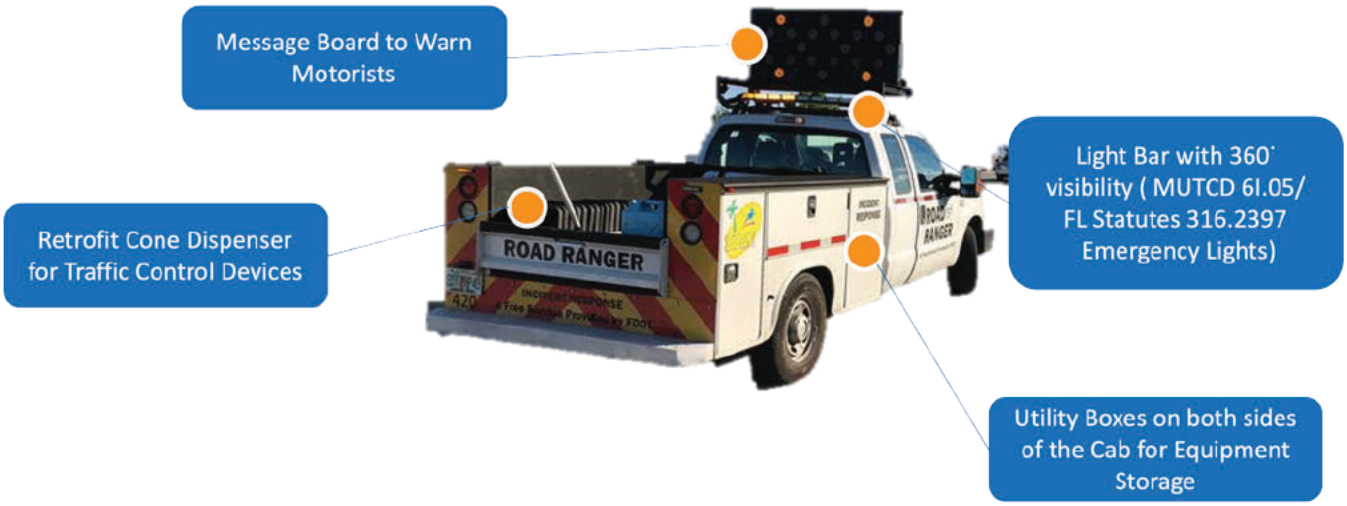
Modified TMA for First Responder Currently Being Used in FL

B.9.3.3 First Responder Vehicles

Jorgensen also strives to provide additional TMA resources for MOT, even when not required by standards, especially for night closures.

This includes the use of off-duty police officers and specially designed first responder vehicles as shown in the photos.

Jorgensen Specification for Road Patrol and First Responders



B.9.4 LANE AVAILABILITY PLAN

The performance times for planned maintenance work will occur according to the TDOT requirements.

Weekday & Weekend	
For Lane Closures	
I-65, I-40, I-24, I-840	5:00am to 8:00pm, Monday through Sunday
For Shoulder Closures	
I-65, I-40, I-24, I-840	6:00am to 9:00am and 4:00pm to 7:00pm, Monday through Friday
Holiday - *Scheduled Maintenance Work Must Be Approved by TDOT*	
New Year's Day, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, and any other day(s) designated by the Department.	
Holiday restrictions will also be for the day before a holiday and the full day immediately following that holiday.	

Peak traffic hour volumes and restricted capacity for open road travel will be considered prior to determining the optimal time to minimize motorist vehicle impacts. We will estimate queues based on work duration and number of lanes through the Department provided data and deploy traffic queue protection vehicles when applicable per SP712PTQ. During our internal planning meeting for monthly and weekly scheduling, we evaluate all maintenance work that can be accomplished during a closure, to minimize the amount of lane closures for a specific area.

Communication with the Department is paramount during any lane closure. This ensures all involved have timely and accurate information, ultimately creating a safer work environment for our technicians, subcontractors, other contractors, and the public. Our traffic control plans will be shared via the following:

Type	Submission Requirements	Timeframe
Traffic Control Plan (not covered in the TCP that will require restriction or diversion of traffic) including lane closures and detours)	Site specific traffic control plan – location, date and time, nature of work, lanes/ramps to be closed, field POC and any detours	14 days prior to commencing
Weekly Work Plan (Planned Closures)	Location of lane closure, date and time, applicable standard drawing, field POC	By Monday at 1 PM for the following Thursday and Wednesday work week 8 hours prior to the start of work 30 mins after lane closure is removed
Department Traffic Control Meetings	Planned lane closures submitted for following week and present any known future lane closures	Weekly

During our internal planning meeting for monthly and weekly scheduling, we evaluate all maintenance work that can be accomplished during a closure, to minimize the amount of lane closures for a specific area.

B.10 ADDED VALUE

Jorgensen provides services tailored specifically to the project and to Region 3. We offer value-added programs with many additional benefits to the Department that are above and beyond the scope of services. In our in-depth assessment of the project area and the scope, we believe these initiatives ensure a seamless transition of management from TDOT to Jorgensen and can stimulate a vital partnership between the stakeholders on the project, for the overall success of the residents and traveling public.

B.10.1 ADDED VALUE – ROAD SERVICE PATROL (RSP), SAFETY AND LANE AVAILABILITY

Jorgensen Road Service Patrol (RSP) and Lane Availability. For this project Jorgensen is proposing our signature RSP program that offers three distinct routes within the Region. These maintenance units are highly specialized maintenance technicians and cross-trained incident responders with the capability to maximize lane availability during emergency events. The RSPs are resourced with equipment to rapidly deploy and collect hazardous debris thereby minimizing motoring traffic slow-downs and improving lane availability.

Jorgensen's "Road-to-Zero" Safety Program. An operational program embedded in all levels of Jorgensen's organization; its key elements are designed to reduce traffic accidents, eliminate lost time accidents, and increase motorist's awareness of highway maintenance workers. Significant components of this program include dedicated, TMAs, variable message boards (for fire, smoke, fog visibility notification, flooding), safety "stand-up" discussions, project management accountability, and dedicated project safety coordinators.

B.10.2 ADDED VALUE – TECHNOLOGY

Wearable Safety Technology. The use of new devices is exploding in the tech world and Jorgensen is actively testing and implementing devices to improve highway motorist visibility of the field maintenance techs. These devices include bump caps/SmartCap, high intensity lighting, uniforms, PPE, and smart work-zone lighting.

iCone Technology. Jorgensen partnered with our TMA outfitter, to provide iCone connected arrow boards on our TMAs. iCone is a new technology that gained recognition by DOTs for its effectiveness. The device is attached to a TMA-mounted, Truck mounted or tow-behind arrow board and permits the status of the arrow board to be broadcast to GPS applications like Waze and Google maps. Automated alerts forecast warnings to drivers of MOT events like closures or mobile operations to prepare for upcoming work zones. This technology leads to less traffic congestion with GPS applications routing motorists around work zones and acknowledges active safe work zones for protection of maintenance workers and the traveling public.

QR Code Asset Identification. Jorgensen will pilot QR code weather-able labels for key assets on the network. These labels can store the critical data for each asset: GIS location, maintenance history, type, inventory requirements, digital images. Paired with simple scannable devices the QR code labeling pilot project will catapult data management for both the Department and Jorgensen years ahead.

WITH APPROVAL FROM TDOT, JORGENSEN PROPOSES TO PLACE QR CODES ON ASSETS TO ASSIST WITH IDENTIFICATION, INSPECTIONS, AND ARC GIS.

ArcGIS Environment e-Maintenance. The Jorgensen team is building our meta-data into a virtual e-Maintenance environment. We are using Arc-GIS platforms to actively document the asset network, forecast maintenance needs, predict traffic incident probabilities, and improve resourcing. The team is capturing near real-time imagery, topography, 'heat-maps', statistical history and putting this into growing virtual viewers and with the ability to capture the projects asset inventory and embed, asset condition history, work service history, work schedule, and annual work plans. The goal is for an e-maintenance environment where employees, DOT staff, can be anywhere and still monitor the system.

Project Specific Website and Office 365 Data Portal. In today's device-enabled atmosphere, we want to be able to provide as much information as possible to strengthen the partnerships we will form on this project. To make communicating efficient, Jorgensen will host and maintain a project specific website and Office 365 data management portal. We will utilize this site to update general workplans and locations, so citizens will have advance of planned work zones and maintenance schedules.

We will generate and post content that is useful to the citizens and TDOT. Jorgensen has a solid reputation in dealing with "vocal citizens", we can utilize the website to enhance customer's positive perceptions of the project, and TDOT. In the growth of the remote-work culture, Jorgensen partnered with Microsoft in adaptation of the Office 365 platform that creates opportunities for TDOT to share in that online space.

Our data portal for the project will be made available to TDOT contract management personnel to enable document sharing. This process allows for sending files without email and regardless of file size, firewalls or otherwise. Jorgensen IT developed an online training tool to make this transition as seamless.

B.10.3 ADDED VALUE – MAINTENANCE SERVICES AND QUALITY

Jorgensen regularly reviews industry APL materials, DME Memorandums/specifications, and engages with innovative technology service providers to maximize our maintenance work plans. Key value-add offerings to TDOT network assets are discussed below.

B.10.3.1 Approach Terminal Upgrades

As a value add, Jorgensen proposes to upgrade approach terminals damaged by third party to the latest MASH compliant treatments available on the APL. This approach demonstrates our commitment and ownership of improving the roadway infrastructure in project area. For flared systems, Jorgensen proposes to utilize (typically) the latest MFLEAT. For parallel systems, Jorgensen proposes to utilize the MSKT.

B.10.3.2 Turf Management through Herbicide Control

Beyond traditional mowing techniques Jorgensen will use a proactive turf management program with selective herbicide treatments. Jorgensen staffs a Chemical Engineer to review the herbicide applications. The work plan will include herbicide mow treatments with advanced active ingredients (or equivalent) in Milestone™, Garlon 3A™, Rodeo™, and Plateau™ promoting selective invasive species reduction and noxious weed elimination. Application methods will include roadside spraying and spot treatment with mechanized utility ATVs.

B.10.3.3 Jorgensen Quality Manager

Jorgensen understands the complex nature of the quality management plan directed by the SOS and accordingly will use a dedicated Quality Manager. The individual will focus on oversight of the contract QMP using ISO-9001 principles and will additionally provide support for MQA inspections and quality assurance of work plan principles. A dedicated staff member in this role this brings significant value to the project.

B.10.4 ADDED VALUE – CUSTOMER SERVICE CHAMPION

Jorgensen Customer Service Champion and Hotline. Jorgensen offers a customer service champion that aims to communicate with the Customers of the Region and understands the local constituents' view and provides critical communication channels. In support of this role, Jorgensen investigated the local 800 and 888 number networks to obtain a project specific Customer Service Hotline with an easy to recognize number. Additionally, in the first 18 months of the contract we will be advertising the number and the usage of it.

We would undertake a print and radio advertising, as well as the number being posted on our fleet of vehicles. Jorgensen's customer service champion will have a constant contact with the residents and roadway users and feedback that comes from these users is invaluable in the successful management of the project.

Input received by the Customer Service Champion will be a key element in work planning, and routine methods of daily service patrols, key inventory and condition assessments, and Stakeholder's satisfaction. This customer centric approach leads to success and ensures TDOT resources are minimized for customer issues.

B.10.5 ADDED VALUE – STRUCTURES

Monthly Inspection of Bridges with Concrete Deck Panel Systems and Deck Issues. Jorgensen will provide a monthly visual inspection of bridges with concrete deck panel systems, and deck issues. Joey Gadah, P.E, will lead this monthly review with trained maintenance project personnel. Joey is very experienced with these deck panel bridge systems and bridges with concrete deck issues, and proactiveness is necessary when it comes to these types of bridges. A spreadsheet is created to monitor these structures and provide proactive maintenance activities to address deficiencies found that require repair. A spreadsheet and photos are provided to TDOT after the inspection month.

Quarterly Structures Maintenance Meetings. Jorgensen will set up quarterly structure's meetings throughout the duration of the contract. These meetings will identify of strengths and weaknesses, areas of improvement, scope compliance issues, and outstanding items TDOT would like to discuss.

Access to Nationwide Bridge Professionals and Structure Experienced Technicians. Jorgensen's inventory of structures under maintenance and repair by our Structures Team numbers in the thousands. Consequently, this has enabled the assembly of a large staff experienced and focused on structure repair and maintenance. It includes professional engineers, bridge superintendents and field technicians. We are especially proud of the team managing a signature bridge across the Potomac River in the nation's capital. – The Woodrow Wilson Basque Bridge.

B.11 STRUCTURES

The South contract has many different structure types - new structures (new or new replacement) - bridges in construction zones (widened or replaced) – existing structures. Conditions very from failing approach slab transitions at both ends to deck joint header failures to vegetation and dirt/debris build-up in the bridge shoulder areas to clean roadway shoulders. The bridge maintenance program will focus on these issues.

B.11.1 APPROACH TO ANCILLARY STRUCTURE AND BRIDGE MAINTENANCE AND REPAIR

Structure maintenance and repair is a prescribed activity per RFP, Exhibit B, Sect. 29. TDOT identifies ancillary structure work needs with inspections conducted every 60 months and for NBIS bridge inspections every 24 months. Jorgensen's approach to the inspection results and requirements of Sect. 29 is discussed below.

B.11.1.1 Approach to Ancillary Structure Maintenance

TDOT conducts the 60-month inspections on designated major (Cantilever or Butterfly) Roadside Sign Structures and Overhead Sign Structures and will provide Jorgensen the reports upon request. Jorgensen will use these reports along with our periodic inspections to identify and generate minor Priority Repair and Routine Maintenance work orders through our JAMMS processes.

Jorgensen road patrols and the MQA process will supplement the 60-month inspections to provide for a proactive preventive maintenance approach to identify needs such as: cleaning and painting of corrosion on the anchor bolts, base plate, anchor hardware, moment connection and moment connection bolts. The identification and correction of these deficiencies will be a focus of our work program in the initial 24 months.

B.11.1.2 Approach to Bridge Maintenance

The routine NBIS inspections are conducted every 24 months and could be supplemented by annual Fracture-Critical and Interim/Special inspections.

Deficiencies from these inspections to be performed by the Contractor are categorized according to TDOT's/AASHTO Bridge Manuals into three categories:

- » Critical Finding – Responsible to Mitigate
- » Priority Maint./Rprs. - Responsible for Minor Repairs
- » Routine Maintenance – As Defined Section 29.2.4

Jorgensen will perform mitigation activities or temporary traffic control for deficiencies assigned as critical or priority findings by the TDOT Regional Bridge Engineer.

The findings from the mandatory bridge inspections will be incorporated into our annual work plans, rolling three month and monthly plans. Work orders as generated from our JAMMS process will be scheduled on a weekly/bi-weekly basis.

Work execution for minor routine maintenance will be performed by road patrols and a resident bridge crew for preventive maintenance items. Activities such cracked AWS, leaking or damaged expansion joints, masonry members out of alignment, restricted bearing movements or minor settlements will be performed by our Regional Heavy Bridge Crew led by Joey Gadah, P.E., Structures Manager

B.11.2 METHODS TO MONITOR, REPORT AND ENSURE COMPLIANCE

Jorgensen's initial field inspections during the procurement phase included ancillary and bridge assessments along with data review and analysis to better understand the overall conditions and identify work quantities.

Field Structure Assessments

- » Field assessment of Region 3 (South) roadways, and
- » Random sampling documenting conditions.

Structure Data Review and Analysis

Data Review of Jorgensen Data Base

- » Reviewed 2000 WO Over 3 Year Period of Similar Roadway Corridors
- » Projected 600 WO's Annually

Analysis and Projected Workload (See on Next Page).

- » 15% - emergency repairs to be included in road patrol and Heavy Bridge Program,

TDOT BRIDGE COMPOSITION AND INVENTORY

- » Multi-beam/girder (concrete and steel),
- » Culverts/frames (both concrete and steel),
- » Concrete slabs (reinforced, continuous, and pre-stressed),
- » Girder/floor beam/stringer system (steel),
- » Concrete box beams,
- » Steel box beams, and
- » Concrete segmental box girders.

Region 3 South Inventory – 322
Good or Better Condition (7,8,9) – 57%

PREVENTATIVE MAINTENANCE APPROACH

Bridge Decks – PM activities to prevent water intrusion into cracked areas to prevent rebar corrosion.

- » Repairing leaking/damaged expansion joints,
- » Regular sweeping of decks to prevent material buildup along curbs and on drains,
- » Period cleaning of deck drains to prevent clogging,
- » Removing debris that obstructs effective deck drainage, and
- » Patching minor spalls and loose aggregate areas that affect rideability or expose rebar.

Superstructure and Substructure – PM activities to protect the integrity of the structure.

- » Keeping caps/bridge seats clean,
- » Removing excessive vegetation around and on structures,
- » Correct cracking, unsound patches, minor spalls, delamination of concrete members,
- » Repair exposed rebar in concrete members without measurable section loss,
- » Repair minor settlement and scour areas, and
- » Repair bearing restrictions.

Steel Members – PM activities to prevent member deterioration.

- » Clean and paint corrosion areas,
- » Tighten loose fasteners that are still functioning,
- » Repair minor gouges in steel flanges.

» 35% - routine maintenance to be included in preventative maintenance program,

» 20% - minor priority repair to be included in Heavy Bridge Maintenance program, and

» 30% - priority repair by others.

B.11.2.1 Monitoring and Reporting

The field road patrols will monitor the overall structure performance and condition daily, supplemented by the Regional Bridge team quarterly reviews. The entire monitoring process is integral to JAMMS from field identification of deficiencies through JAMMS mobile input to weekly scheduling of work orders. The key monitoring elements to ensure identification and correction of deficiencies:

» JAMMS – provides software tool for planning, scheduling, executing, reporting, and controlling work,

» Heavy Bridge Team Close Out Packages – Crew notes, WO's, photos beginning to end, GPS locations,

» QA/QC Process – sample work orders to ensure effective QC and document corrective actions, and

» TDOT Quarterly Structure Meetings – Review of deficiencies identified by TDOT/Jorgensen and status.

B.11.2.2 Key Considerations for Ensuring Compliance

The maintenance and repair of structures is a complex undertaking with many variables affecting the effectiveness of implementing a program that prolongs the life of the aging structures. Stretching the maintenance dollars requires a focused program performed in partnership with TDOT.

The Contractor's prescribed maintenance responsibilities as defined in Section 29.2.4 generally should be directed to a preventive maintenance approach as summarized in the table for the key structure components.

B.11.3 MEETING REQUIRED TIMEFRAMES FOR ALL PRIORITY TYPES

The primary timeline requirements are defined for minor Priority Maintenance/Repairs (180 days) and for Routine Maintenance (One Year). Additionally, the bridge criteria in the performance tables have timelines criteria. A summary of our approach to meeting these timeframes is provided below.

B.11.3.1 Approach to Structures Priority Maintenance /Repairs

Per Section 29.2 "The Contractor shall perform minor Priority Repair, and Routine Maintenance" as defined in the SOS. Typical priority maintenance activities as defined in the SOS include:

» Excessive settlement of the approach slab or approach roadway,

» Excessive erosion at the end bent that may affect bridge approach roadway,

» Missing regulatory or warning signs,

» Spalls with exposed rebar in the top of a concrete deck, and

» Unsound patches with rust staining in prestressed concrete members.

PRIORITY MAINTENANCE (SECT. 29.2.3)

Includes any repairs required to correct deficiencies or defects to protect the integrity of the structure or maintain a desired level of performance.

The Heavy Bridge Team conducted the field assessment/data analysis to determine work needs and bidding quantities for structures that were assessed to be a minor priority repair or routine maintenance activity. The results were tabulated for bidding purposes and work scheduling timelines as shown on the next page.

B.11.3.2 Meeting Performance Timelines (SOS Section 29.2.8)

Extensive Jorgensen resources are available to complete routine and emergency repairs compliant with the required timelines. These resources are available to respond quickly 24/7:

» Nationwide operation center staffed with technicians to dispatch on-call technicians,

» Resident staffing within Bedford, Cheatham, Dickson, Giles, Hickman, Humphreys, Marshall, Maury, Rutherford, Smith, Williamson, and Wilson Counties,

» Regional Bridge Crew led by, Structures Engineer Joey Gadah, P.E and Superintendent Dennis Burchfield and

» On-Site TMA's, pre-stocked bridge rail, bearing, patching materials and on-call asphalt sub.

Deficiency Identification	Time Allowed/Criteria	Actions to Meet Timelines
a) Failure to timely complete repairs identified in Bridge Inspection Review Committee meeting.	Per Criteria	Minor Priority Repairs Complete Within 180 Days
		Routine Maintenance Complete Within One Year
b) Failure to make temporary safety repairs resulting from Incidents	Secure hazards and establish MOT before leaving site	Daily road patrols on-site with certified MOT technicians on call 24/7 to mitigate site
c) Failure to replace or repair damaged bridge railing	Secure site within 24 hrs & complete repairs within 7 days	Resident Field Team secures site & Regional Heavy Bridge Crew completes repair
d) Failure to timely complete urgent or emergency repairs identified outside of the Bridge Inspection Review Committee meeting.	Complete Repairs within 30 days of discovery	Resident field crews identify deficiency & Heavy Bridge Crew notified to complete repairs

B.12 SCENARIOS & SITUATIONS

B.12.1 SCENARIO #1: DIRT, DEBRIS, AND VEGETATION REMOVAL ON/AROUND BRIDGE DECKS

A committed proactive approach for bridge decks, approach slabs and expansion joints are central to an effective preventive maintenance program. The four work elements that are a part of this program are:

Debris clean-up: Daily Road patrols will remove debris accumulation – including large trash hazardous to motorists - and note excessive material buildup in gutters for scheduling sweeping operations. Crews will clean the decks, approach slabs, clean dirt/vegetation build-up along the barrier walls and curbs & gutters.

Bridge deck joint cleaning: Resident project staff will routinely clean joints, scuppers, and drainage elements as part of the Bridge PM program. Needed joint repairs will be scheduled quarterly for accomplishment by the Heavy Bridge Crew.

Approach slab maintenance: Daily road patrols will observe approach slabs for any deficiencies and minor patching will be scheduled for accomplishment before the quarterly MQA. A subcontractor annual work plan will include milling/overlaying of deficient approach slabs.

Excess vegetation removal: Slope protections, wingwalls are evaluated annually for excessive vegetation buildup prior to warmer months and maintenance activities scheduled for spraying, hand, and mechanical removal of vegetation. The underside of bridges will be inspected three times a year, which includes slopes (both under and between bridge structures), wingwalls and channels, and deficiencies found will be included for repair (as needed) in the monthly work plan.

B.12.2 SCENARIO #2: REPAIRING SPALLS IN SUPERSTRUCTURE AND SUBSTRUCTURE ELEMENTS

The Jorgensen Heavy Bridge crew has performed similar spall repairs including ones over the aggressive environments associated with inland and coastal waterways. The step-by-step process followed is:

Step 1: Inspection reports are reviewed to locate the most critical-sized spalls and then prioritize the secondary locations. The spalls noted as "up to 18 inches wide with exposed corroded reinforcement".

Step 2: Secondly, all deficient areas are sounded, limits identified to determine to be either a minor Priority Repair or a more in-depth repair (non- routine maintenance) and a strategy defined for restoration/replacement including the need for an engineered design.

Step 4: The findings from Steps 1&2 will be reviewed with TDOT and consensus agreed to as whether this is a minor Priority Repair to be performed by Jorgensen or whether it is a non-routine maintenance repair to be performed by others. For a minor Priority Repair Jorgensen will proceed with steps 5 -7.

Step 5: For the structural elements that control load ratings such as beams, the spall locations are important in determining the repair method. For a normal routine spall repair, the loose concrete is removed and concrete chipped back to a minimum of 3/4" to 1" behind the reinforcement to get a good bond between the new concrete and existing reinforcement.

Step 6: A strict protocol is followed for cleaning and preparing rebar reinforcement to include corrosion prohibitors. A needle gun, or wire wheel is used to clean the existing reinforcement and a corrosion inhibiting spray is applied to prevent the reinforcement from future corrosion.

Step 7: Finally, after the spalled area is prepped, the section is poured back with concrete (from Approved Products List (APL). The Bridge team will also seek TDOT for other products not on the APL especially for deck top spalls where newer products have proven to provide excellent results.

B12.3 SCENARIO #3: REPAIRING UNDERMINED CONCRETE BOX CULVERTS

Major storm events and other weather-related emergencies are integral to PBMC responsibilities. Our response teams have dealt with all kinds of severe events including the devasting Hurricane seasons impacting infrastructure assets on our Florida, Texas and Georgia projects.

B12.3.1 Initial Response and Temporary Mitigation

The emergency response team will be dispatched to the site upon notification by our road patrols, TDOT or other stakeholders. Follow-up actions will be initiated in accordance with our Emergency Response Plan including immediate repair efforts that include communicating with TDOT staff, temporarily mitigating and making the site safe (with having the mindset of forecasting the vision of the repair methods needed), and any MOT needed to accommodate safety for the traveling public.

B12.3.2 Temporary Repairs and Field Assessment of Damage

The Heavy Bridge Team will be dispatched to the site with materials and equipment to provide interim stabilization efforts until final repairs are completed. While on site the team will make a detailed assessment of the damage and the extent of the repairs needed and document damages with detailed notes and photos.

B.12.3.3 Partnering with TDOT to Determine Course of Action

The repairs required to remedy the damage caused by this weather event would fall under the contract provisions defined in SOS Section 22 EMERGENCY RESPONSE AND THIRD-PARTY DAMAGE. The significant provisions of this section that would dictate the course of action for TDOT and Jorgensen to follow:

Qualifying FHWA Reimbursement: The damage caused by this major storm event may qualify for FHWA reimbursement. In this event Jorgensen would complete the repairs and provide complete documentation for TDOT to seek reimbursement from FHWA to compensate Jorgensen.

States of Emergency: The mobilization of state forces may in some cases be used to supplement or replace Contractor forces. In this case Jorgensen would partner with the Department to provide needed services.

Jorgensen Performs Repairs: In those instances where neither of the above two actions are initiated, Jorgensen will perform the repairs following the recommendation documented by the following actions.

REPAIR COURSE OF ACTION
Information Gathering: Structure design, plans, scour information (ie 3-Scour Critical) and any scour countermeasures installed previously, inspection reports and channel profile data. Engineering Field Review: A engineering field review by P.E for each concrete box culvert to determine the extent of the erosion and undermining of floor slabs, concrete aprons, or culvert walls; cracking/spalls or voids and if penetration into the voids is observed; and fill loss or bubbling effect at the top. Minor Erosion Repair Report: A summary report of the extent of the damage including recommendations that range from normal erosion repairs (i.e., fill back in with fill and compact the dirt and/or sand-cement riprap bags) to the minor erosion damage that occurred. Major Erosion Damage Report: A comprehensive engineering report for possible scour countermeasures/major repairs. This approach includes several scour evaluation reports for documentation purposes depending upon repairs methods such as: articulated-concrete block mats, grout-filled mats, rock rubble riprap, gabion walls, or lining the culvert walls with concrete. These major erosion repairs are designed by an engineer, with signed and sealed plans and specifications accommodating the recommendation for repairs and TDOT approval obtained.

B.12.4 Scenario #4: Hairline Cracks in Cantilever Sign Structure

This is a real-life situation for the Jorgensen Heavy Bridge Crew with our Florida PBMC contract on I595 in South Florida where several over-lane cantilever structures and span sign developed hairline cracks.

In the Florida scenario, the structures have been determined to have latent defects leading to the cracking. Resolution is currently ongoing with involvement by FDOT, the PPP developer and the vendor. Jorgensen has been tasked with monitoring the cracks both visually and with remote monitoring equipment. The discussion below summarizes the actions in this scenario.

12.4.1 FDOT Approach

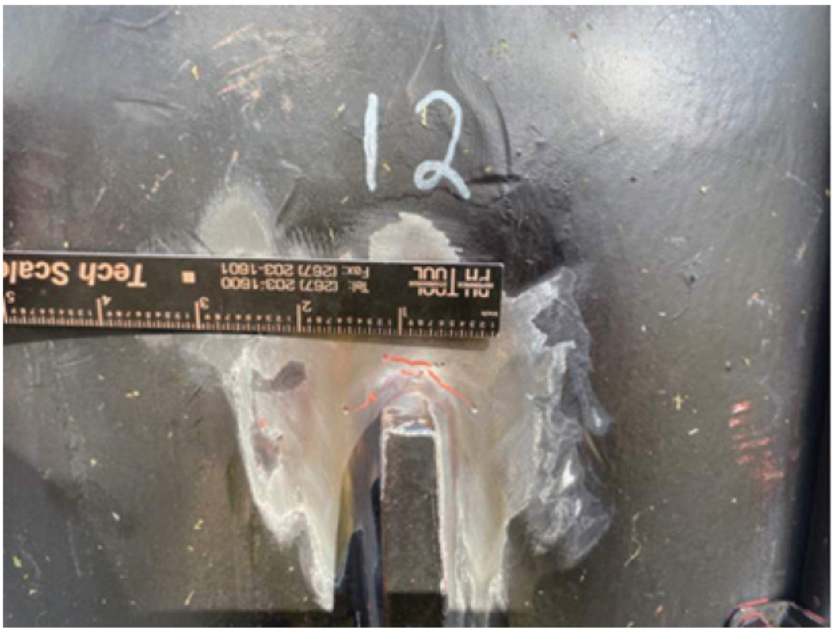
The FDOT State Maintenance Office (SMO) has not yet made recommendations for final repairs but has made several determinations towards finding the ultimate solution/solutions. The current situation is:

Initial Evaluation: Cracking was observed in the moment connections for horizontal members. Additionally, there does not appear that any crack repairs have been made to the chord sections or base metal of the sign structures since they were initially installed approximately ten years ago. It is not known when the cracking first appeared, but first detected in 2019.

Current FDOT Determinations: The initial determination was for Jorgensen to immediately carryout procedures for both visual and remote monitoring. FDOT also recommended against a blanket weld repair for the chords including the moment connection.

FDOT Approach to Recommended Repair: Jorgensen will continue to collect monitoring data for FDOT to analyze in order to recommend an approved method for a long term repair solution/solutions.

12.4.2 Approach to TDOT Scenario #4



Given our experience in Florida, we recommend the following tasks to arrive at an acceptable solution if this scenario occurs on the TDOT contract.

Review Historical Data: Review past inspection reports for a history of the cracking deficiencies, or if it has been labeled a 'new' deficiency or an 'increase' from the previous deficiency.

Ultrasound (UT) Testing: Testing to get an accurate measurement of the cracking, and to check if the crack(s) have any penetration into the base metal of the moment connection or any area of the chord member. Jorgensen has partnered with NOVA to do the testing and prepare a report.

Communication of Test Results: Final report is reviewed in-house by Bridge Team and the results communicated with TDOT for discussion of arriving at an acceptable solution for each structure affected.

Execution of Potential Solutions: The final solution may involve repairs to cracked welds on moment connections, stiffeners, or upright connections; or weld removal, re-welds and touch ups. In some instances, the sign structure will need to be completely dissembled or structure element totally replaced.

The Jorgensen Heavy Bridge team Crew partnered up with structural steel subcontractors has performed all these activities on our PBMC contracts and will support this project with the complete repairs.