ATTACHMENT A Scope of Work October 31, 2024



I. <u>OVERVIEW</u>

- A. The intent of this solicitation and resulting Contract is to obtain professional construction management services for the construction of improvements at VRE's Franconia-Springfield Station in Springfield, Virginia. The selected firm is referred to herein the Scope of Work as the "Consultant" or "Construction Manager (CM)". The General Contractor or Construction Contractor is referred to herein as the "Contractor" and will be awarded a separate contract for construction.
- B. The Franconia-Springfield Station improvements will extend the existing platforms to better accommodate up to 8-car train consists, allowing all car doors to open, and improving the efficiency of boarding. The improvements will also enhance the existing ADA-compliant access to the Barry Road culde-sac, by constructing a new pedestrian ramp and tunnel extending along the existing tracks toward the cul-de-sac. This tunnel is designed to maintain continuous pedestrian access to the existing VRE and Washington Metropolitan Area Transit Authority (WMATA) stations, to include providing access upon completion of the Virginia Passenger Rail Authority's (VPRA) Franconia to Lorton Third Track project, which will construct a 3rd track through the limits of the Franconia-Springfield Station. Lastly, the improvements encompass repairs to the existing station, including but not limited to, concrete repairs, steel repairs, cleaning and painting.
- C. The Scope of Work shall include comprehensive construction management services for construction of extended platforms along both Track 3 and Track 2, rehabilitation of the stair/elevator towers, platforms, and canopies, as well as pedestrian ramp/tunnel construction. See Exhibit A for the project overview.
- D. The Consultant shall provide all labor, supervision, materials, supplies, equipment, and transportation necessary for full construction management services (General, Pre-Construction Phase, Construction Phase and Project Closeout) to ensure the work is performed in accordance with the contract plans, specifications, applicable codes, regulations, and standards. The Consultant shall take initiative and act to mitigate circumstances that could lead to claims, resolve conflicts promptly, and keep VRE advised of any potential disputes. The Consultant shall have sufficient financial resources to complete the Scope of Work to the satisfaction of VRE.



E. The Consultant's work shall be managed through VRE's Headquarters Office of Design and Construction. A Project Manager (PM) will be designated by VRE for this Contract to coordinate all tasks.

II. <u>GENERAL REQUIREMENTS</u>

- A. The Consultant shall provide Construction Management Services from preconstruction through project closeout. VRE anticipates the term of the construction contract to be eighteen (18) months from Notice-to-Proceed (NTP) to closeout. Pre-construction services are anticipated to be up to ten (10) months in duration (including seven (7) months for the Invitation for Bids solicitation) preceding the construction contract and up to three (3) months for project closeout. Therefore, the term of this Contract shall be thirty-one (31) months from Notice-to-Proceed.
- B. Construction management services for this Contract shall include oversight for the construction of improvements to the station facilities to include site/civil, drainage, shoring, extension of the existing platforms, pedestrian ramp/tunnel, signage, lighting, communications, and any related utility protection/relocation.
- C. Construction must be conducted in a manner that minimizes interruptions or delays to railroad operations, pedestrian flow, and vehicular movements. It is the responsibility of the Construction Manager to facilitate coordination that permits construction in this manner.
- D. The Consultant, prior to entering onto CSX Transportation, Inc. (CSXT) property for this work, must apply for a right of entry permit and submit the required proof of insurance, including railroad protective liability insurance, to CSXT for review and approval.
- E. Prior to conducting any work on CSXT Right-of-Way, the Consultant shall submit and receive approval for all required insurance, complete and provide evidence of the required Roadway Worker Protection safety training and coordinate required track protection with CSXT and the VRE Project Manager.

III. <u>SERVICE REQUIREMENTS</u>

The Consultant shall perform construction management services to monitor construction project activities through all phases of the project. The Consultant's responsibilities shall include, but are not limited to, the following tasks:

A. <u>General</u>

1. Ensure the Contractor's compliance with applicable safety and security requirements as enumerated in the plans and specifications.



- 2. Monitor project schedule and costs.
- 3. Monitor quality of workmanship.
- 4. Coordinate and advise the VRE Project Manager (PM) of construction progress (schedule), unusual disruptions, potential changes, and potential Change Orders.
- 5. In conjunction with, and following approval from the VRE PM, initiate actions to mitigate activities that may lead to claims and/or stop work orders and resolve potential conflicts as promptly as possible.
- 6. Coordinate with stakeholders to include the Class I Railroad (CSXT), Virginia Passenger Rail Authority (VPRA), multiple Utility Owners, Local Municipality (Fairfax County), Washington Metropolitan Area Transit Authority (WMATA) and Funding Agencies. Coordination of stakeholders on prevalent fronts is a key and constant element of the duties and responsibilities of the Consultant for this project.

B. Pre-Construction Services

- 1. Review plans, specifications, design documents, site conditions, site condition reports, adjacent works and other pertinent documents provided by VRE and external stakeholders, including but not limited to, CSXT, Fairfax County and VPRA, for potential schedule, phasing, staging and cost impacts as well as for errors, omissions and anomalies. Report any findings to the VRE PM. Adjacent works include, but are not limited to:
 - a. Transforming Rail in Virginia's Franconia to Lorton Third Track
 - b. Fairfax County's Cinder Bed Road
- 2. Conduct and provide written recommendations on constructability, cost and schedule to mitigate impacts. Submit a draft and final report identifying all constructability review findings to the VRE PM within thirty (30) calendar days from issuance of the NTP.
- 3. Evaluate and verify the accuracy of all designer prepared construction cost estimates developed in the design phase for correct methodologies, assumptions used and for reasonableness.
- 4. Review construction documents and bid documents for design integrity, constructability, dimensional accuracy and potential coordination impacts among project disciplines. Submit the findings



to the VRE PM following the construction cost estimate review. Construction documents will be provided by VRE and external stakeholders, including but not limited to CSXT, Fairfax County, and VPRA.

- 5. Assist the VRE PM with the preparation of a Project Schedule for the components of the work, including phasing of construction, times of commencement, completion required of the Contractor(s), and ordering and delivery of products with long lead times. The Construction Schedule shall be in Primavera P6 format for submittal, review, and tracking.
- 6. Prepare an anticipated sequence of construction identifying potential CSXT/VRE/Amtrak operations interruptions as part of the constructability review and Construction Schedule for submittal, review, and tracking. The schedule and sequence of construction shall consider and reflect dependencies connected to adjacent works performed under separate contract (e.g. the Franconia to Lorton Third Track project), and parties responsible for performing specific work for this project (e.g. CSXT union forces must perform certain work elements).
- 7. Attend and participate in the construction contract pre-bid meeting and site visit (if held).
- 8. Assist the VRE PM and Purchasing and Contract Administration Department with review of bid submittal materials of Contractors for compliance and completeness and participate in evaluation as needed or requested.
- 9. Assist in reviewing the bid abstract for recommendation of award to the Contractor.
- 10. Assist VRE in coordinating and monitoring in regard to all applicable state, federal, and local permits, with documentation and monitoring to ensure conformity with all permits in place or accomplishment of all permits needed. This shall include compliance with building codes and host railroad standards and other applicable design and construction standards and practices.
- 11. Review utility contracts as well as any utility relocation or coordination required by the utility companies in order for the construction contract to be built. Ensure coordination is accomplished both prior to construction between VRE and the utility company as well as between the utility company and the Contractor through construction.



- 12. Review Fairfax County permit requirements and ensure compliance.
- 13. Ensure the Contractor obtains the required building permit from Fairfax County, if applicable.
- 14. Establish on-site project file protocols and maintain files using project controls software (e.g. e-Builder/Trimble Unity Construct). Confirm the agreed upon protocols with the VRE PM.
- 15. Assist in developing and establishing project controls and related procedures for submittals and reviews using project controls software (e.g. e-Builder/Trimble Unity Construct). Confirm the agreed upon procedures with the VRE PM.
- 16. Attend, participate in, and document the pre-construction conference.
- 17. Conduct a Pre-Construction visual survey and document the findings with a Pre-Construction Photo Log. The Pre-Construction Photo Log shall include ground photos and aerial (drone) photos. The CM is responsible for adhering to all local, state and federal laws and regulations related to drone usage.

C. Construction Phase

- 1. Act as VRE's representative in monitoring construction progress, each Contractor's performance, the Contractor's Quality Assurance (QA)/Quality Control (QC), and other duties as assigned by the VRE PM to ensure Contractor compliance with construction plans, Contract Documents, deliverables and specifications as well as ontime project completion within budget compliance. **Some weekend and night work may be required.**
- 2. The CM is authorized to provide field directives to the Contractor, as required. Such directives may not alter the scope and/or nature of the work as shown on the plans or described in the specifications. All field directives shall be documented and provided to the VRE PM.
- 3. In conjunction with the VRE PM, organize, attend and document all project-related meetings, including but not limited to, weekly and monthly construction progress meetings. Assist in resolving field and administrative issues.
- 4. Prepare construction progress meeting agenda to include, at a minimum, the following:



- a. Review previous progress meeting minutes to ensure the inclusion of topics related to safety, errors and omissions, work performed to date, upcoming work scheduled, utility coordination (if applicable), adjacent project coordination (if applicable), QA/QC, Submittal Status Report, Requests for Information (RFI), Status Report, Potential Change Order(s), Change Order(s), and the schedule for upcoming progress meetings.
- 5. Assist in the preparation, evaluation and recommendation of Potential Change Orders for need, appropriateness, and cost.
- 6. Assist in the preparation of required Independent Cost Estimates for Potential Change Orders.
- 7. Assist the VRE PM with Change Order negotiations and written responses.
- 8. Maintain a Change Order log.
- 9. Assist with the review of Contractor-prepared construction schedules, schedule analysis, activity durations, sequence, and critical path issues to determine if projected completion dates are realistic and consistent with scheduling specifications. The schedule and sequence of construction shall consider and reflect dependencies connected to adjacent works performed under separate contract (e.g. the Franconia to Lorton Third Track project), and parties responsible for performing specific work for this project (e.g. CSXT union forces must perform certain work elements).
- 10. Assist the VRE PM in analyzing Contractor claims for time extension(s), delay claims, critical path impacts and alternative(s) to reduce schedule and critical path impacts.
- 11. The CM shall be responsible for coordinating with all applicable agencies (VRE, CSXT, VPRA, Amtrak, WMATA, Fairfax County, etc.) and the Contractor to ensure the work is correctly constructed in accordance with approved drawings and specifications, prior to being put into service.
- 12. In the event the owner determines that advance procurement of materials is appropriate, the CM's responsibilities shall be limited to facilitating the exchange of information between the owner and the Contractor regarding the timely delivery to the site of such materials.



- 13. Assist the VRE PM in the performance of materials testing as well as equipment and systems testing and coordinate with the Contractor for inspection and testing. Conduct site visits to observe construction activities, to include the following (as applicable):
 - a. Contractor and Subcontractor activities, personnel, and equipment.
 - b. Host Railroad or Railroad Forces activities, personnel, and equipment.
 - c. Utility Company activities, personnel, and equipment.
 - d. Observe and review performance tests as required by specifications.
 - e. Any other authorized construction activities on site by the Contractor or others (e.g. Host Railroad or Utility Owner). If activities are being accomplished by entities that have not contacted or coordinated with project personnel, identification and authorization must be requested, along with the Point of Contact or the person in their organization that directed them to be on site and perform work.
- 14. Establish fixed vantage points and times at which photo documentation will be obtained at weekly and monthly intervals.
- 15. Maintain a current project Record Set of documents, including posted drawings and specifications reflecting any modifications, As-Built records and drawings, hard copies of all RFIs (including responses), submittals, and other project related correspondence for the project completion and closeout process.
- 16. Monitor the Contractor's red-line revisions to plans, on a regular basis, throughout the course of the work to confirm accuracy and verify that all trades are properly recording field changes.
- 17. Receive all RFIs and submittals from the Contractor.
- 18. Maintain electronic and paper files of all RFIs, responses and submittals as well as coordinate with the VRE PM to ensure the appropriate design engineering personnel reviews are performed and responses provided.



- 19. Coordinate review of and responses to RFI's, Submittals, and other projected related correspondence as appropriate with the stakeholders, including but not limited to, CSXT, Amtrak, Fairfax County, WMATA, and VPRA.
- 20. Review and monitor the Contractor's Critical Path Method (CPM) baseline schedule and advise as to the best sequencing to facilitate productivity.
- 21. Review and approve CPM schedule updates and review and monitor weekly "look-ahead" schedules. Identify and determine delays and initiate corrective action plans.
- 22. Oversee Federal Transit Administration (FTA) and VRE compliance requirements, if applicable. Conduct regular unannounced field verifications for all FTA contract clauses, including but not limited to, the Davis-Bacon Act, Buy America, Commercially Useful Function (CUF) Evaluations, Disadvantaged Business Enterprises (DBE)/Small Business Enterprises (SBE) participation and Civil Rights requirements.
 - a. At a minimum, the CM shall ensure that work committed to DBEs, at contract award, is actually performed at the construction site by the DBEs to which the work was committed by the Contractor.
- 23. Review the Contractor's payment applications, if applicable, for accuracy and completeness and compliance with the Davis-Bacon Act, to include review and auditing of certified payroll documentation, and prepare a monthly compliance report.
- 24. Make a payment recommendation on all monthly payment applications and submit recommendations using project controls software for the VRE PM to approve. Invoice review includes verification of accuracy of invoice charges, conformance with Contract terms and complete invoice support documentation.
- 25. Develop cash flow reports and observe trends in comparison with the construction schedule. This information shall be used at monthly progress meetings to compare work completed versus the projected cost to complete.
- 26. Prepare daily construction reports for the VRE PM to include weather, manpower, equipment, major issues and work completed.



- 27. Prepare Weekly Reports, with Weekly Photo Documentation from pre-determined locations, along with specific activities.
 - a. Provide Weekly Reports no later than two (2) business days following the reporting period.
 - b. Each Weekly Report shall contain a narrative description of contract work completed, identify issues during the reporting period and outline concerns anticipated for the next reporting period.
- 28. Prepare Monthly Reports to include Monthly Digital Photo Documentation from pre-determined locations, along with specific monthly activity updates.
 - a. Provide Monthly Reports no later than seven (7) business days following the reporting period.
 - b. Each Monthly Report shall contain a narrative description of contract work completed, identify issues during the report period and outline concerns anticipated for the next reporting period.
 - c. Each Monthly Report shall also include copies of submittal reports as well as RFI and Change Order Logs including photos.
- 29. Not all weekly and monthly photos shall be included in Weekly Reports and Monthly Reports. Include only photos that have changed and show progress for that particular period of time. However, all weekly and monthly photographs, as well as those captured via drone flights, shall be available to VRE at all times and included in the Project Archive.
- 30. Coordinate with VPRA and CSXT to provide their representatives with access to the project site for efforts related to the Franconia to Lorton Third Track project.
- 31. Ensure the Construction Management Plan is implemented in a timely manner.
- 32. In conjunction with the VRE PM, monitor the preparation and completion of "punch list" items for Substantial Completion, Final Completion and closeout.



D. Change Order Evaluation and Claims Management

- 1. Assist in administering the change order/contract administration process, to include evaluating change orders and providing recommendations to VRE as to whether the revision is within the contract scope, is necessary, and the cost is equitable/fair and reasonable. Assist VRE to ensure procedural completion and work accomplishment.
- 2. Review contract documents including shop drawings and shop drawing modifications to verify that materials are correctly estimated in change orders and verify that the designer of record has approved them to be in accordance with the specifications.
- 3. Review associated shop drawings that may be affected by change order work for coordination and verify that the designer of record has approved any modifications.
- 4. Coordinate review of shop drawings and change order documentation with stakeholder(s) affected by the change. Stakeholders include, but are not limited to, CSXT, Fairfax County, WMATA, and VPRA.
- 5. Prepare cost estimates, to include supporting documentation such as RSMeans data (or similar), for change orders and support change order negotiations.
- 6. Prepare change order cost analysis including establishing a fair and reasonable cost for authorized changes.
- 7. Bundle all supporting data for the change order file, which includes pertinent contract drawing(s), specifications, shop drawings, site photos, and Contractor time and material tickets.
- 8. Provide auditing and claims analysis services.

E. <u>Contractor's Project Closeout</u>

- 1. Perform a final walk-through inspection and prepare a punch-list of incomplete or unsatisfactory items.
- 2. Pursue the correction, schedule and completion of any punch list items.
- 3. Perform and assist in final inspection to ensure punch-list completion by the Contractor.



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- 4. Assist in the negotiation and resolution of any Change Orders or claims.
- 5. Provide the Change Order Report with final values.
- 6. Review the payment application for substantial and final completion in accordance with VRE specifications.
- 7. Provide Substantial Completion Verification prior to finalizing contract time and use of or availability for use of the site/facility by VRE.
- 8. Monitor compilation, review, and ensure the Contractor's documents include completed As-Built drawings, warranties, Operation and Maintenance (O&M) Manuals and other required submittals are delivered to VRE.
- 9. Coordinate final acceptance of as-built improvements and completion of as-built record set specifications and drawings, in hard copy and electronic formats.
- 10. Ensure all as-built plans and specifications electronic updates are approved by the Engineer of Record.
- 11. Review and ensure training requirements are satisfied.
- 12. Review, collect, and archive warranty documents.
- 13. Review, document and ensure the Contractor adheres to project acceptance as stated in the Contract specifications.
- 14. Prepare a final closeout checklist.
- 15. Perform Final Completion and Closeout Verification.
- 16. Collect and provide CSXT, VPRA and their contractor project documents required for their construction of the Franconia to Lorton Third Track (e.g. relevant as-builts or shop drawings).
- 17. Collect and archive all project documents using project controls software.
- 18. Prepare a final expenditures tabulation for an accurate report and submit to the VRE PM for final acceptance.



F. Safety and Security

- 1. The CM and all its employees performing work on this Contract must complete the VRE-provided on-line Contractor safety training (<u>https://www.vre.org/careers/contractors/</u>).
- 2. Prior to commencing work on this project, the CM must certify that all of its personnel (including Subconsultants) working under this Contract have received On-Track Contractor Roadway Worker Protection Safety training through an approved course. The program must comply with Federal Railroad Administration (FRA) regulations, and the content of the course must be approved by the Host Railroad Safety Program Administrator.

This course must be completed annually by any Contractor working on CSXT's property and right of way. With this annual renewal, proof must be furnished to CSXT that the course has been completed for the current year. VRE cannot and shall not provide this training. It is the responsibility of the Consultant to solicit and obtain training for its personnel on site.

- a. Information regarding available training that meets CSXT (and FRA) requirements can be found at: <u>https://www.csx.com/index.cfm/library/files/suppliers/csx-guide-for-contractor-safety-compliance</u>
- 3. Prepare a Construction Management Plan, which shall include a Safety and Security Plan and a Quality Assurance/Quality Control Plan for Construction Management Services. Submit the plan to the VRE PM for review and provide updates, as needed.
- 4. Monitor the Contractor's Safety and Security Plan including health and safety procedures.
- 5. Ensure compliance with safety and security protocols for the construction site.
- 6. Report accidents, near misses and other safety or security violations and concerns to the VRE PM, the VRE System Safety and Security Administrator or his/her designee, and the Host Railroad.
- 7. Coordinate on-site visits by local, state and federal agencies, stakeholders and others. Document visits on the daily report, visitor log and update the action item log, as necessary.



8. Maintain and store required Personal Protective Equipment (PPE), provided by VRE, for up to ten (10) site visitors at a time, except for required foot gear, which visitors must furnish.

G. Document Management

- 1. VRE employs a project controls software system (e-Builder/ Trimble Unity Construct). The Construction Manager shall be required to utilize the e-Builder system or another VRE approved project controls software. Tasks anticipated to be performed in e-Builder include, but are not limited to, processing submittals, pay applications, potential change orders, change orders, RFIs, meeting minutes, daily construction reports, action items, construction schedules, punch lists, and incident reports.
- 2. The CM shall ensure all submittals from the Contractor to VRE are processed through e-Builder or another VRE approved project controls software. The CM shall also submit all submittals applicable from the CM to VRE through e-Builder or another VRE approved project controls software.
- 3. The CM shall review, respond to and maintain all documentation required by the Contract, such as submittals, RFIs, Change Orders, Claims, and Contractor correspondence. The CM shall coordinate, input and maintain all project documentation on-site in hard-copy and in e-Builder or another VRE approved project controls software so that all project files may be easily retrieved for review or audit. Status reports for submittals and RFIs shall be prepared weekly (or more frequently as needed).
- 4. The CM shall provide daily electronic field reports/diary with photos and post the reports using e-Builder, or another VRE approved project controls software, to include, but not limited to, the following:
 - a) Equipment on site
 - b) Labor on site
 - c) Subcontractors on site
 - d) Work activities accomplished
 - e) Testing and inspections on site
 - f) Pay item and material quantities delivered
 - g) Visitors to the site
 - h) Weather
 - i) Delays and cause



- 5. The CM shall develop and populate an electronic Action Item Log resulting from meetings. The log shall be updated weekly and submitted monthly to the VRE PM through e-Builder, or another VRE approved project controls software, as applicable.
- 6. The CM shall compile and submit monthly CM invoices to VRE utilizing e-Builder or another VRE approved project controls software.
- 7. The Contractor will be required to submit monthly applications for payment and supporting documentation via e-Builder or another VRE approved project controls software. The CM shall then review and confirm the Contractor's invoice submittals prior to delivery to the VRE PM through e-Builder or another VRE approved project controls software.

H. **<u>Project Administrative Support</u>**

- 1. Attend Kick-Off Meetings (Pre-Construction and Construction) at or near the project site and prepare meeting minutes and site visit notes for distribution through the VRE PM.
- 2. Plan and attend monthly coordination meetings with VRE, the Contractor, and any major stakeholders who need to be kept abreast of regular updates (depending on sequencing and phasing of the schedule) – Host Railroad, Utilities, City/County, Adjacent Property Owners, Funding Agencies, etc. Meetings will be held in VRE's Alexandria Headquarters office, on site, or by conference call. Prepare meeting minutes and submit to the VRE PM within three (3) business days of the meeting.
- 3. Plan and attend weekly coordination meetings with VRE and the Contractor at the project construction site. Prepare meeting minutes and submit to the VRE PM within three (3) business days of the meeting.
- 4. Provide daily construction reports to the VRE PM including weather, manpower, equipment, major issues and work completed.
- 5. Create and populate the submittal log with the number, date received, date reviewed, actions required and approval dates. Update the log weekly and submit to the VRE PM monthly showing reviewed actions required and closeout dates.
- 6. Create and populate an electronic Request for Information (RFI) log with the number, date received, actions required, and by whom, with



suspense dates and completion dates. Circulate the log and followup on the information. Update the log at least weekly and submit monthly to the VRE PM. The log shall also be made available upon request by the VRE PM.

- 7. Create and populate an electronic general documentation log for information received, scanned, distributed and archived. Update the log weekly and submit to the VRE PM monthly.
- 8. Review the Contractor's requested change orders or claim requests. Document the validity based on the contract documents and field conditions. Recommend approval or rejection of change orders and submit to the VRE PM. The CM shall create and populate the change order log using e-Builder/Trimble Unity Construct software.

I. <u>Construction Observation and Regulatory Compliance</u>

- 1. Provide on-site construction management personnel appropriate for the type of work being performed for the duration necessary to ensure compliance with the plans and specifications.
- 2. Monitor, observe, review and record performance tests as required by specifications. Maintain third party testing and inspections logs for the VRE PM.
- 3. Monitor and track Quality Assurance and Quality Control efforts of the Contractor.
- 4. Document compliance with environmental and other permits (e.g. Erosion and Sediment Control (ESC), Storm Water Pollution Prevention Plan (SWPPP).

J. Special Inspections and Construction Materials Testing

- 1. The CM (or Special Inspections Subconsultant) shall provide sufficiently qualified personnel to monitor all major work activities and document/report all work activities. In accordance with Contract Documents, the Contractor shall provide required materials testing. Scheduling and coordinating of all inspections and testing shall match the type and pace of work activity.
- 2. The CM (or qualified Subconsultant) shall provide Special Inspection Services to observe the Contractor's operations to ensure conformance with all applicable codes and standards, including local jurisdiction requirements for Special Inspections. The Special Inspection personnel shall assist the CM in the performance of Special Inspections and coordinate with the Construction Contractor



(as applicable). The CM must document all tests, inspections, and notifications to VRE.

- 3. The CM shall provide on-site Special Inspections according to the requirements of the following:
 - a. All Special Inspections (by CM or their Subconsultants) and Construction Materials Testing (by Contractor) shall be performed in accordance with the requirements set forth in the project specifications and/or special provisions, all state and local jurisdiction requirements as well as with the local jurisdiction's special inspections program/requirements having jurisdiction over the work.
 - b. Observations, testing and inspections shall be in accordance with the requirements set forth in the project specifications and/or special provisions, all state and local requirements as well as with the local jurisdiction's special inspections program/ requirements as applicable.
 - c. Special Inspectors shall maintain all inspection and communication records in an organized manner and provide detailed records of all inspections. The inspectors' records shall provide thorough and timely documentation of the work inspected and must promptly identify all compliant and non-compliant construction and report deviations in construction.
 - d. Special Inspections personnel shall meet the requirements for such work as required by the local jurisdiction and shall be approved by VRE.
 - e. In cases where multiple trades, disciplines, or subcontractors are on site at the same time, each activity shall be tested and inspected by personnel skilled in that portion of the work.
 - f. In cases where multiple shifts are employed, the quality-control staff shall be increased as required to monitor the work on each shift.
- 4. The CM shall be responsible for the coordination and notification to VRE for Special Inspections as enumerated and required by the local jurisdiction and published in their Special Inspections Program.
 - a. Materials testing requirements for individual construction activities are specified in the technical specifications that require those activities. Requirements in those sections may also cover production of standard products.



- b. Special Inspections coordination shall be discussed at weekly progress meetings and scheduled dates for Special Inspections carried out on the two-week look-ahead schedule.
- 5. The CM shall provide Inspections and Construction Materials Testing services that shall include the following:
 - a. The testing laboratory/entity shall directly provide all written observations, tests, and inspections to the VRE PM, Construction Manager, Construction Contractor(s), and Engineer of Record simultaneously.
 - b. Reports shall include, but are not limited to, the following:
 - 1. Date issued
 - 2. Project title, description, and permit number
 - 3. Testing laboratory name, address, and telephone number
 - 4. Name of inspector
 - 5. Location of observation, test inspection or sampling
 - 6. Date and time of observation, test inspection or sampling
 - 7. Weather conditions at the time of observation, test, inspection or sampling
 - 8. Results and statement of compliance or non-compliance with the plans and specifications, of observation, test, inspection or sampling
 - 9. All reports shall include the seal of the Engineer in Responsible Charge
 - 10. Interpretation of test results when requested
 - c. The CM shall maintain a chronological record (log) of material testing, inspections, and special inspections. The log shall include, but is not limited to, the following:
 - 1. Nature of the test or inspection
 - 2. Date performed

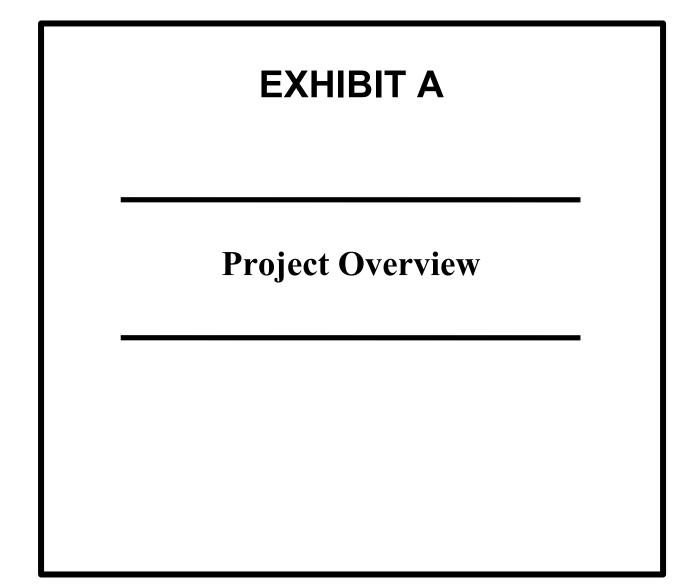


- 3. Results, causes for rejection, corrective action taken, and dates of subsequent tests and final acceptance
- 6. The CM shall be responsible for the hiring of the testing laboratory and shall ensure that the testing laboratory or its employees are <u>not</u> authorized to:
 - a. Release, revoke, alter, diminish, or increase requirements of the plans, specifications and/or requirements of all state and local requirements along with local jurisdiction's special inspections program/requirements as applicable.
 - b. Approve, accept, disapprove, or reject any portion of the work performed.
 - c. Perform any of the Construction Contractor's or Subcontractors' duties.
- 7. The testing laboratory and any associated subcontractors shall meet applicable industry standards including American Society for Testing and Materials (ASTM) E-329. The Contractor shall provide details and verification regarding the ability to meet these standards. All testing equipment shall be calibrated at intervals not to exceed twelve (12) months by devices traceable to the National Bureau of Standards or accepted values of natural physical constants.

K. Limitations of Responsibility

- 1. **Design Phase**: The duties of the CM do not relieve the engineer-ofrecord, or any entity hired to perform design work on behalf of VRE, of their obligations, duties, and responsibilities.
- 2. <u>Construction Site</u>: The duties of the CM shall not include the daily supervision or direction of the Construction Contractor's employees or subcontractors.







RFP No. 025-006 RFP Title: Construction Management Services for Construction of VRE Franconia-Springfield Station Improvements

