



Richmond Metropolitan Transportation Authority (RMTA)

All Electronic Tolling ITS & Civil Elements

ADDENDUM-01

Key date changes:

Bid Due Date – 2/11/2025, 10AM local time

Complete Contract Addendum upload date – 1/21/2025

Deadline for Inquiries – 1/31/2025, 1PM local time

OPTIONAL SUPPLIES and SERVICES and TOLL GANTRY FABRICATION, DELIVERY, & ERECTION

TABLE OF CONTENTS

| | | |
|----------|--|-----------|
| 1 | Addendum Introduction..... | 2 |
| 1.1 | Summary of Changes to the Invitation to Bid | 2 |
| 1.2 | Overview of General Manager for Additional Supplies & Services | 2 |
| 1.3 | RMTA Toll Roads and the AET Conversion Project..... | 4 |
| 1.3.1 | Powhite Parkway (Powhite)..... | 4 |
| 1.3.2 | Downtown Expressway (DTE)..... | 5 |
| 1.3.3 | Boulevard Bridge (BB) | 5 |
| 2 | Powhite Toll Gantry Fabrication, Delivery and Erection | 6 |
| 2.1 | Purpose and Scope for the Powhite AET Gantry | 6 |
| 2.1.1 | Powhite Gantry Location..... | 7 |
| 2.1.2 | General Requirements | 7 |
| 2.1.3 | Gantry Fabrication..... | 8 |
| 2.1.4 | Shop Drawings..... | 8 |
| 2.1.5 | Gantry Delivery, Erection & Installation Process | 9 |
| 2.2 | Project Management..... | 11 |
| 2.2.1 | Point-of-Contact | 11 |
| 2.2.2 | Project Schedule..... | 11 |
| 2.2.3 | Project Meetings | 12 |
| 2.2.4 | Working Meetings | 13 |
| 2.2.5 | Shop Drawing Review | 13 |
| 2.2.6 | Safety Plan..... | 14 |
| 2.2.7 | Fabrication Inspection and Testing | 15 |
| 2.2.8 | Issues/Defects REPORTS..... | 15 |
| 2.2.9 | Gantry As-Built Drawings | 16 |
| 2.3 | Administrative Requirements..... | 16 |
| 2.3.1 | Project Documentation | 16 |
| 2.3.2 | Records Keeping..... | 16 |
| 2.3.3 | Gantry Project Documentation & Tracking..... | 16 |
| 2.3.4 | Online Document Sharing and Document Management System | 16 |
| 2.3.5 | General Liability Insurance..... | 17 |
| 3 | Appendix..... | 18 |
| 3.1 | Appendix A. Design Plans | 18 |
| 3.2 | Appendix B. Price Form | 27 |

1 Addendum Introduction

1.1 Summary of changes to key dates to the Invitation to Bid

- A. Cover sheet / Invitation to Bid (IB-1) / Contract Agreement (C-2) – Bid due date is now 2/11/2025 (formerly 2/4/25) 10AM local time
- B. Invitation to Bid (IB-6) – Complete contract Addendum (finalized plans) will now be uploaded 1/21/2025 (formerly 1/15/25)
- C. Invitation to Bid (IB-6) – deadline for inquiries and questions is now 1/31/25 (formerly 1/24/25) 1PM local time

1.2 Overview of General Manager for Additional Supplies & Services

Under this Addendum (“Addendum”) for Optional Supplies & Services (“supplies and services”), the Richmond Metropolitan Transportation Authority (RMTA or the “AUTHORITY”) in Richmond, Virginia reserves the right, at its discretion, to add the role of General Manager (GM) to oversee the purchase of additional supplies and services similar to or in addition to those called for within the RMTA’S Invitation to Bid (ITB) for All-Electronic Tolling ITS and Civil Elements for the conversion of the Powhite Parkway (Powhite) to All-Electronic Toll (AET) collection.

At the discretion of RMTA, the activities identified within this Addendum, may be included to allow the GM to support the conversion of all RMTA toll collection including the Powhite, the Downtown Expressway (DTE) and Boulevard Bridge (BB) to AET including the election to extend the term of the contract to accommodate the purchase and management of such additional supplies and services.

Under this Addendum, RMTA has the right to add or modify aspects of the AET conversion of the Powhite, DTE and BB, such as increasing the scope of work, extending the timeline, or adding specific features, within a defined timeframe and under agreed-upon terms, essentially providing flexibility to the project without needing to renegotiate the entire contract; examples include: an option to add additional phases of the AET conversion, an option to change the type of materials used, or an option to extend the project completion date if unforeseen circumstances arise; all of which would require a separate negotiated agreement the identifies the additional costs and terms involved.

This is a unilateral right vested in the RMTA. The Authority is therefore not contractually bound to exercise this option for additional supplies and services with the selected GM and may, at its discretion, undertake a competitive procurement to acquire any of these additional supplies and services. ***Any optional supplies and services requested of the GM by RMTA under this Addendum shall be clearly defined including the specific materials, supplies or services to be added or modified, including any schedule requirements, limitations or conditions.***

Examples of options that may be undertaken using this optional services clause include:

- **Change order option:** Allows the RMTA to request additional work or modifications to the existing project scope by issuing a change order, with the contractor providing a price for the added work within a specified timeframe.

- **Material substitution option:** Grants the RMTA the right to substitute materials specified in the original contract with similar materials of equal or better quality if necessary due to availability or cost issues.
- **Additional materials option:** Grants the RMTA the right to acquire additional materials and supplies similar to those specified in the original contract with the contractor providing a price for the added materials and supplies within a specified timeframe.
- **Design development option:** The RMTA has the right to request additional design iterations or revisions to support changes related to the desired additional materials, supplies or services with the contractor providing a price for the added design work within a specified timeframe.
- **Phased construction option:** Allows RMTA to choose to build the additional projects elements (supplies and services) either sequentially or with concurrent overlaps with the option to proceed to the next phase based on specific conditions or approvals with the contractor providing a price for any cost reductions or additions based on the schedule changes within a specified timeframe.
- **Time extension(s):** RMTA reserves the right to extend the period for completion of any added materials, supplies, or services under this Optional Services clause beyond the contract completion date for the original contract. This may be necessary for situations when completion of the additional work would extend beyond the original contract termination date or exercise of the options clause would result in the obligation of funds that are not available in the fiscal year in which the contract would otherwise be completed. In either case, the extended contract date will not be longer than 5 years past the original contract date of completion.
- **Other options:** Optional services for these additional project elements can include: detailed site surveys, value engineering, green building certifications, specialized finishes, custom design elements, demolition services, asbestos abatement, landscaping, interior design, furniture procurement, signage installation, security system integration, and post-construction cleaning; essentially, any service that enhances the project beyond the basic construction scope of the original contract and can be added based on the RMTA's specific needs and budget.

The following includes a list of other example optional services allowed (but not limited to) by category:

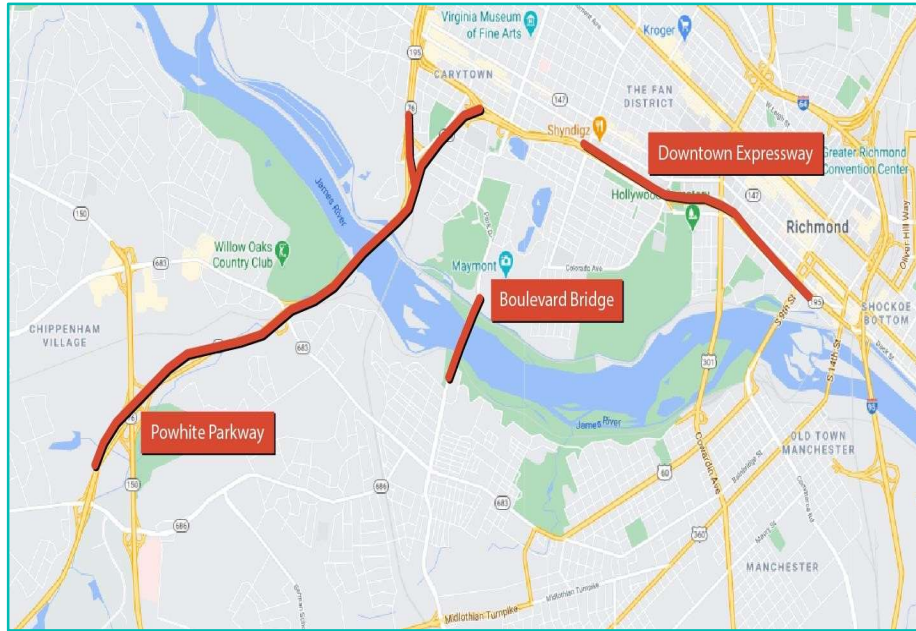
- **Construction Services:**
 - Specialized materials procurement
 - Custom fabrication
 - Historical restoration
 - Temporary structures
 - Quality control testing
- **Post-Construction Services:**
 - Warranty management
 - Building/facilities maintenance contracts
 - Landscape design and installation
 - Interior furnishing and décor

1.3 RMTA Toll Roads and the AET Conversion Project

RMTA has three toll facilities. The following brief summaries will provide background information regarding each road.

1.3.1 Powhite Parkway (Powhite)

The Powhite opened to traffic on January 24, 1973, and continues to be maintained by the AUTHORITY. It was the first section of the RMTA Expressway System to be completed. In September 1975, the Powhite Toll Plaza was widened to accommodate increased traffic. It was widened again in November 1988. At the same time, the Powhite Bridge was widened, and a new northbound on-ramp was built at the Forest Hill interchange. Also in November 1988, VDOT opened the Powhite Extension, which



connects RMTA's Powhite to western Chesterfield County. In 1992, the Powhite was widened from three to four lanes northbound between Chippenham Parkway and the toll plaza. The number of lanes north of the bridge to Cary Street was increased from four to six.

The Powhite Toll Plaza has 20 lanes, 14 physical lanes, and six Open Road Tolling Lanes (three in each direction). The Forest Hill interchange has eight lanes for on and off-ramps to Powhite. The Douglasdale ramps north of the river have two lanes connected to the parkway. Most recently, the Powhite underwent extensive construction to widen the northbound and southbound lanes.

The AET Conversion project will replace all activity at the Powhite Toll Plazas with a single overhead toll gantry (including overhead and buried electronic toll collection technology) that spans 14 lanes of bi-directional traffic including five travel lanes and inside & outside shoulders in both directions.

In addition to the Powhite, RMTA operates other toll facilities in the Richmond area, including the Downtown Expressway (DTE) and the Boulevard Bridge (BB) formerly known as the Nickel Bridge.

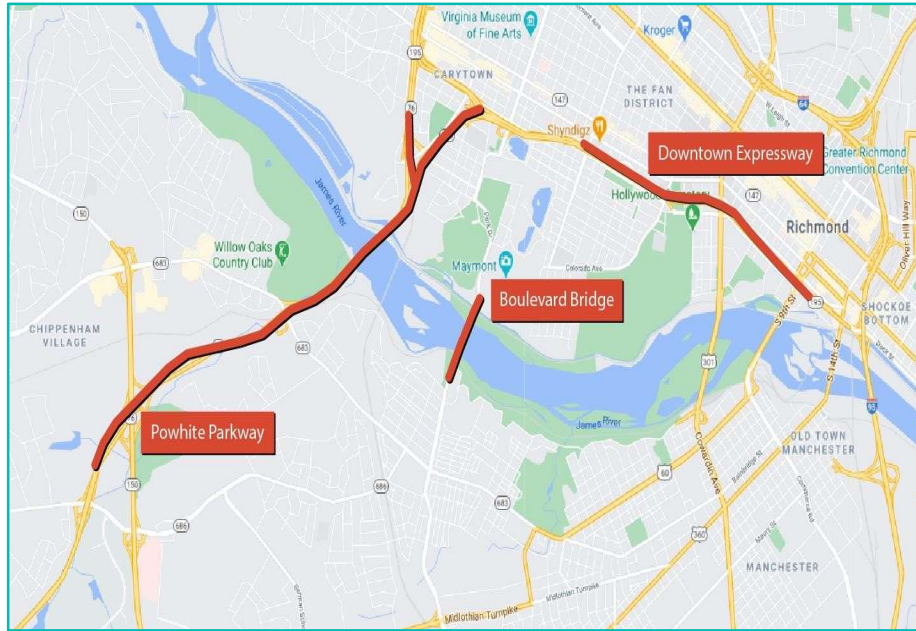
NOTE: At the discretion of RMTA, this Addendum for Optional Supplies and Services and for the potential fabrication, delivery and erection of a new toll Gantry on the Powhite may also cover the provision of infrastructure required to support the AET conversion on the DTE and BB projects.

1.3 RMTA Toll Roads and the AET Conversion Project

RMTA has three toll facilities. The following brief summaries will provide background information regarding each road.

1.3.1 Powhite Parkway (Powhite)

The Powhite opened to traffic on January 24, 1973, and continues to be maintained by the AUTHORITY. It was the first section of the RMTA Expressway System to be completed. In September 1975, the Powhite Toll Plaza was widened to accommodate increased traffic. It was widened again in November 1988. At the same time, the Powhite Bridge was widened, and a new northbound on-ramp was built at the Forest Hill interchange. Also in November 1988, VDOT opened the Powhite Extension, which



connects RMTA's Powhite to western Chesterfield County. In 1992, the Powhite was widened from three to four lanes northbound between Chippenham Parkway and the toll plaza. The number of lanes north of the bridge to Cary Street was increased from four to six.

The Powhite Toll Plaza has 20 lanes, 14 physical lanes, and six Open Road Tolling Lanes (three in each direction). The Forest Hill interchange has eight lanes for on and off-ramps to Powhite. The Douglasdale ramps north of the river have two lanes connected to the parkway. Most recently, the Powhite underwent extensive construction to widen the northbound and southbound lanes.

The AET Conversion project will replace all activity at the Powhite Toll Plazas with a single overhead toll gantry (including overhead and buried electronic toll collection technology) that spans 14 lanes of bi-directional traffic including five travel lanes and inside & outside shoulders in both directions.

In addition to the Powhite, RMTA operates other toll facilities in the Richmond area, including the Downtown Expressway (DTE) and the Boulevard Bridge (BB) formerly known as the Nickel Bridge.

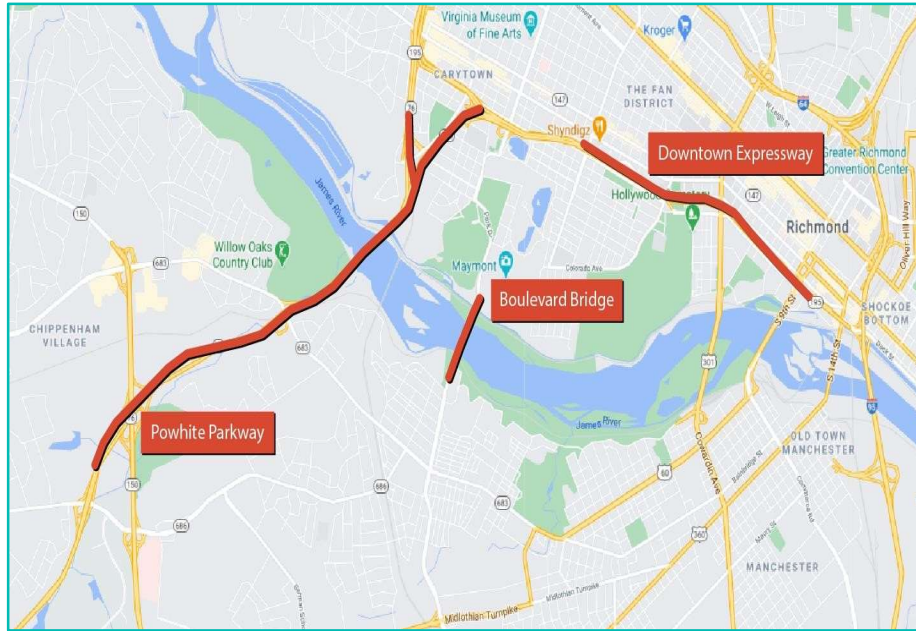
NOTE: At the discretion of RMTA, this Addendum for Optional Supplies and Services and for the potential fabrication, delivery and erection of a new toll Gantry on the Powhite may also cover the provision of infrastructure required to support the AET conversion on the DTE and BB projects.

1.2 RMTA Toll Roads and the AET Conversion Project

RMTA has three toll facilities. The following brief summaries will provide background information regarding each road.

1.2.1 Powhite Parkway (Powhite)

The Powhite opened to traffic on January 24, 1973, and continues to be maintained by the AUTHORITY. It was the first section of the RMTA Expressway System to be completed. In September 1975, the Powhite Toll Plaza was widened to accommodate increased traffic. It was widened again in November 1988. At the same time, the Powhite Bridge was widened, and a new northbound on-ramp was built at the Forest Hill interchange. Also in November 1988, VDOT opened the Powhite Extension, which



connects RMTA's Powhite to western Chesterfield County. In 1992, the Powhite was widened from three to four lanes northbound between Chippenham Parkway and the toll plaza. The number of lanes north of the bridge to Cary Street was increased from four to six.

The Powhite Toll Plaza has 20 lanes, 14 physical lanes, and six Open Road Tolling Lanes (three in each direction). The Forest Hill interchange has eight lanes for on and off-ramps to Powhite. The Douglasdale ramps north of the river have two lanes connected to the parkway. Most recently, the Powhite underwent extensive construction to widen the northbound and southbound lanes.

The AET Conversion project will replace all activity at the Powhite Toll Plazas with a single overhead toll gantry (including overhead and buried electronic toll collection technology) that spans 14 lanes of bi-directional traffic including five travel lanes and inside & outside shoulders in both directions.

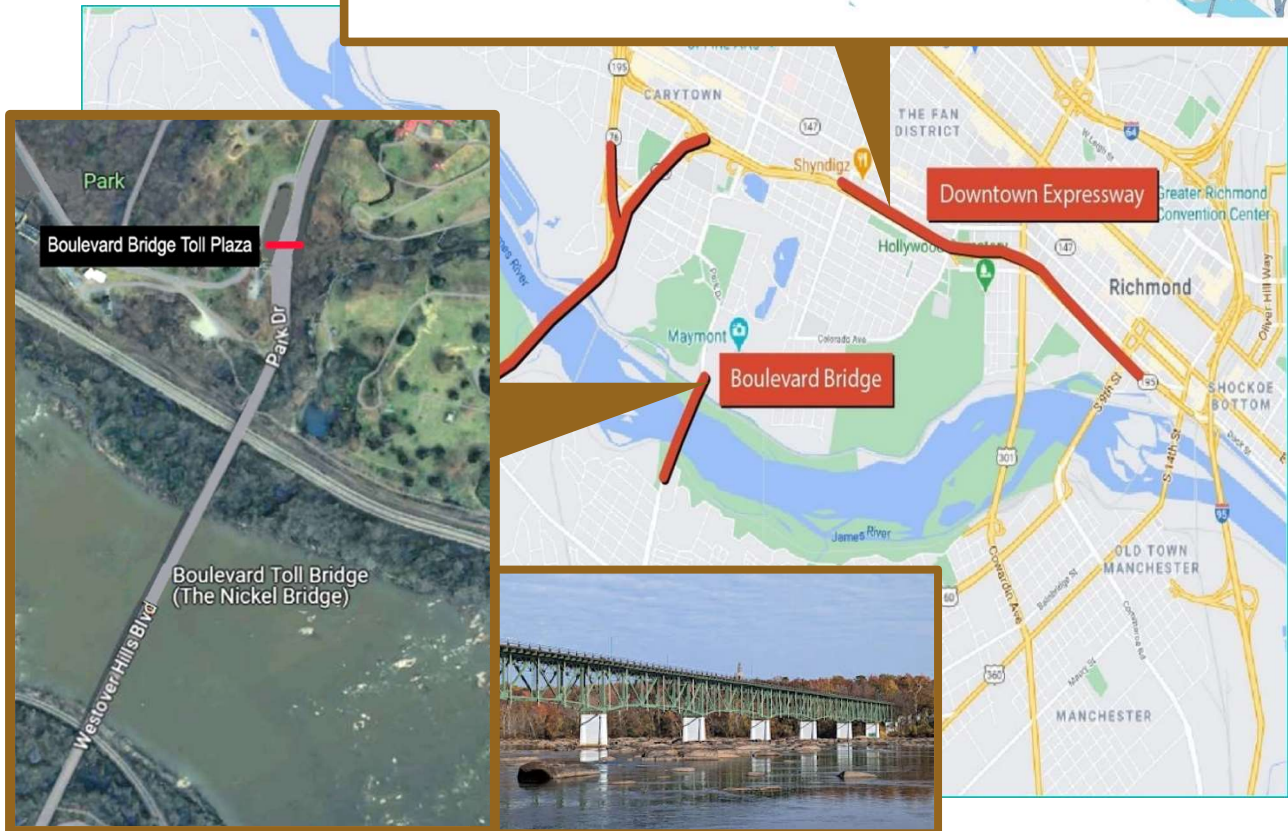
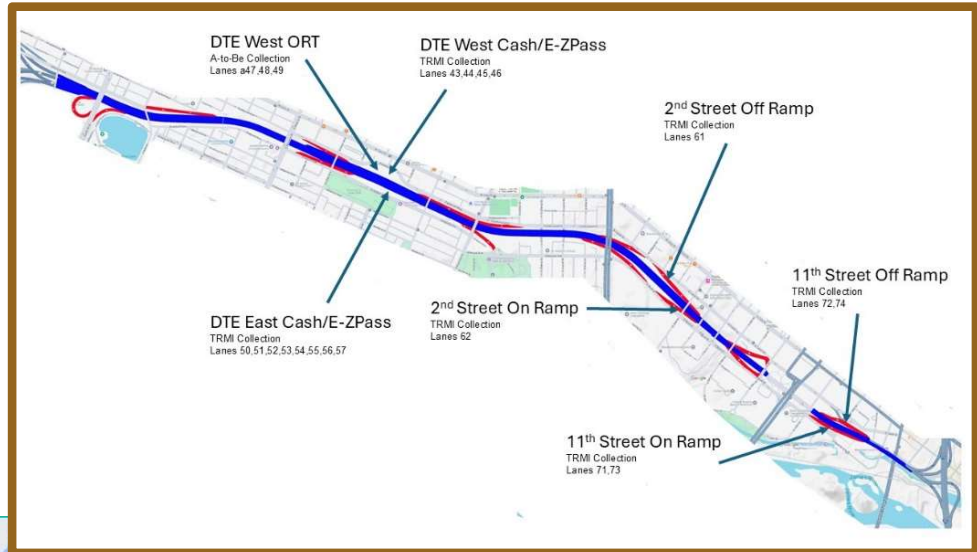
In addition to the Powhite, RMTA operates other toll facilities in the Richmond area, including the Downtown Expressway (DTE) and the Boulevard Bridge (BB) formerly known as the Nickel Bridge.

NOTE: At the discretion of RMTA, this Addendum for Optional Supplies and Services and for the potential fabrication, delivery and erection of a new toll Gantry on the Powhite may also cover the provision of infrastructure required to support the AET conversion on the DTE and BB projects.

1.2.2 Downtown Expressway (DTE)

The existing ORT gantries the existing Plazas with cash and EZ-Pass dedicated lanes are shown below.

Planning for the conversion of all tolling points on the DTE is now underway. The conversion may include the implementation of new and/or re-purposed toll collection infrastructure and technologies as well as the civil construction required to support these AET conversions.



1.2.3 Boulevard Bridge (BB)

The conversion of the BB to AET will focus on the implementation of free-flow AET Toll Collection infrastructure and technology to replace the existing manual and dedicated electronic toll at the single BB Toll Plaza located on the north side of the bridge. The planning for this conversion is also underway.

2 Powhite Toll Gantry Fabrication, Delivery and Erection

At the discretion of RMTA, the GM may be contracted to provide the fabrication, delivery and erection of a 180-foot clear span toll gantry (“the Gantry”) on the Powhite as part of the conversion to AET. **To be clear, the Gantry is an optional element. It is not mandatory for a contractor submitting on the main Invitation-to-Bid (ITB) to also submit on the gantry fabrication, delivery and erection. Therefore, a proposer to the ITB may leave the separate pricing sheet for the Gantry blank. However, if a proposer to the ITB desires, they may submit a separate bid on the Powhite Gantry erection only along with their ITB proposal and RMTA will have the right to consider the Gantry erection bid together with the ITB or separately as well. If the proposer wishes to produce a separate Gantry erection bid, they may do so using the enclosed Gantry pricing sheet (Appendix B) by showing the lump sum price for the erection and adding the notation “Erection Only” to the pricing sheet.**

If contracted, the GM shall oversee the fabrication, delivery and erection of a 180-foot clear span galvanized steel toll gantry based on the Gantry Design Package (GDP) included in *Appendix A: Design Plans*. The purpose of the Gantry is to serve as the location of the overhead toll equipment as part of the conversion of the Powhite to AET collection.

If selected to provide the Gantry, the GM shall be expected to commit the personnel and resources required to respond promptly and fully to the responsibilities required and defined in this Addendum for the fabrication, delivery and erection of the Gantry. The resulting contract (Gantry Contract) shall be consistent with and governed by the Virginia Public Procurement Act.



NOTE: This rendering is for example only. It is not meant to be considered as the basis for fabrication. The signage and aesthetic “cladding” around the Gantry supporting columns (also shown here as an example) is also not included as part of the structural design or as part of the Gantry fabrication.

2.1 Purpose and Scope for the Powhite AET Gantry

These requirements represent a critical step in RMTA’s strategic initiative to modernize its tolling infrastructure, improve operational efficiency, and enhance the overall experience for users of RMTA’s toll facilities. The selected GM can play a critical role in transforming RMTA’s tolling operations, helping to establish a state-of-the-art, customer-centric, and financially optimized AET system.

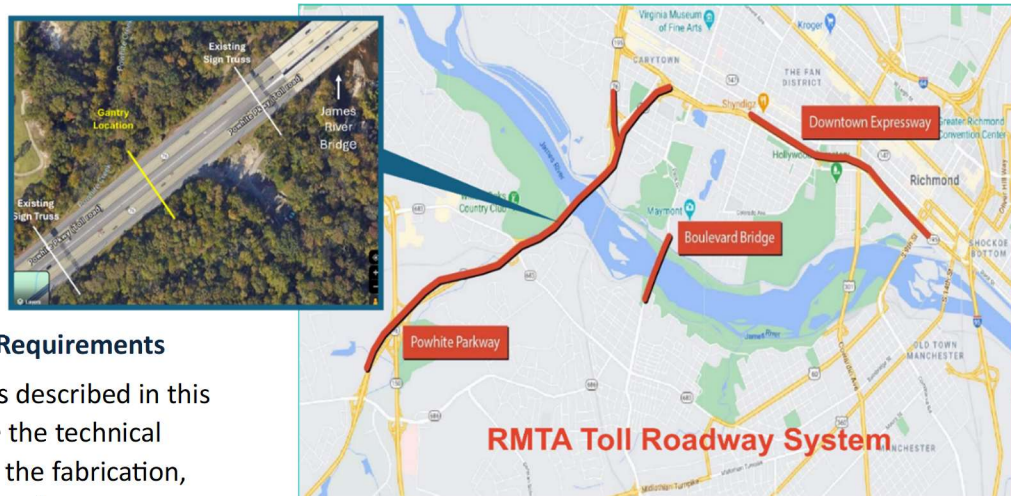
The RMTA's goal is to have the Gantry fabricated, delivered to and erected on the Powhite site, inspected and then ready for the installation of overhead electronic toll equipment ***within 24 weeks from the date of the execution of the separate Gantry Contract*** by RMTA.

The Scope of Services for the Gantry fabrication, delivery to the Powhite site and erection of the Gantry on the Powhite to accommodate the installation of the overhead toll equipment includes the following.

2.1.1 Powhite Gantry Location

The work to be performed is located on the Powhite as part of the conversion of this RMTA Toll facility to AET collection.

The Gantry site is just south of the Powhite bridge over the James River.



2.1.2 General Requirements

The requirements described in this summary include the technical requirements for the fabrication, testing, delivery, and

erection/installation of the Gantry (as shown in *Appendix A: Design Plan*). The GM must adhere to these technical specifications and design requirements. **However the means and methods for delivery, assembly and erection of the Gantry are at the discretion of the GM (with RMTA's approval).**

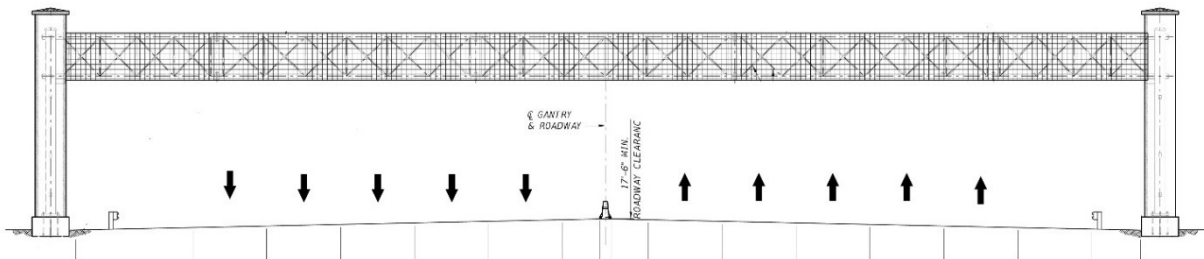
The Gantry shall be fabricated using proven and reliable materials and fabrication techniques capable of meeting RMTA's operational, maintenance, and performance requirements. The GM shall furnish, mobilize, and secure all required facilities, equipment, and resources necessary for initiating, fulfilling, and concluding the proposed Gantry Contract and may include such portions of the following as are required:

- Setting up at the various worksites, storage areas, and other facilities in compliance with RMTA requirements and any other state or local law, rules, regulations, or ordinances and the subsequent demobilization and removal from the site of said equipment, appurtenances, and the like upon completion of the work.
- Obtaining necessary permits and licenses and payment of fees as required by local, state, and federal law.
- Coordinating design, fabrication, delivery, erection & installation, and RMTA required testing by RMTA or RMTA-Designated Representatives during the various stages of the Project.
- Lighting for all work areas.
- Sampling, testing, and or certifying of materials.
- All equipment, supplies, and materials furnished under the proposed Gantry Contract shall be new and field-proven. All equipment shall meet applicable standards. The GM shall not furnish any item to RMTA that was previously used or was part of a previously purchased system, or any items that have been salvaged and rebuilt, without prior RMTA approval.

2.1.3 Gantry Fabrication

The GM shall provide engineering drawings (shop drawings) that confirm the Gantry design and support fabrication. After RMTA approval of the GM's shop drawings and plans to deliver and erect the Gantry, *to include the means and methods of the Gantry erection*, assembly and installation, the GM shall then fabricate, transport and erect a watertight galvanized steel Gantry structure to which the RMTA Toll System Integrator (TSI) will attach their tolling equipment. The GM shall ensure the Gantry is fabricated in accordance with the 2015 AASHTO Load and Resistance Factor Design (LRFD), Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 1st Edition, using a minimum wind speed of 90 miles per hour.

The GM shall erect the Gantry on the RMTA-indicated site and install (and/or assemble) all Gantry components as per the approved design and shop drawings.



The GM shall be responsible for the fabrication of the Gantry to span the entire 180-foot length and roadway clearances as indicated on the Final Design Plans included in *Appendix A: Design Plans*.

As shown in the Final Design Drawings in *Appendix A: Design Plans*, the GM shall ensure the integration of equipment-mounting plates to be used for the installation of the toll collection equipment. The Gantry structure and equipment mounting plates shall be constructed to support the equipment weights per lane as shown in *Appendix A: Design Plans* to eliminate any detrimental vibration from wind forces or drafts from vehicles passing under the Gantry. Detrimental vibration is defined as the amount of vibration that would prevent the structure from meeting the fatigue design and serviceability requirements as defined in the "2015 AASHTO LRFD Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 1st Edition."

The GM shall ensure the construction of the Gantry to accommodate a minimum 18" cable bend radius on top and bottom at entry and exit points at the Gantry uprights and at the Gantry cross members.

GM shall provide adequate safeguards against theft, damage, or loss of RMTA Gantry components in the GM's possession. GM shall be responsible for maintaining insurance against loss or damage to all Gantry components due to mishandling, improper storage, theft, etc.

The GM shall warrant the Gantry from material defects and the Warranty Phase shall commence upon the inspection and acceptance of the erected Gantry by RMTA. The Warranty Period shall be one year from the date of RMTA acceptance of the fully erected Gantry.

2.1.4 Shop Drawings

Shop drawings, also known as fabrication drawings, are detailed drawings that the GM will create and submit to RMTA after award of the Gantry Contract to ensure that all components produced by the GM are built to industry standards and applicable requirements and are structurally sound and meet current safety and project design and quality standards.

The GM's shop drawings will illustrate how the Gantry will meet the Project's design intent, provide essential diagrams, the specifications, measurements, and instructions needed to ensure that each design component fits as intended in the design as a whole and identify how the Gantry is to be assembled and erected at the construction site.

While they are based on the RMTA Final Design Construction Documents, the GM's shop drawings should contain more information including, but not limited to the following:

- Detailing and dimensions including precise measurements and specifications (size and number) of each Gantry component and how they will be connected.
- Material and finish information about the types of materials to use and the desired finishes for each Gantry component
- Assembly instructions that include step-by-step instructions for assembling the Gantry parts and components, including details on connections and fastenings
- Installation and erection information that identify any dimensions that require on-site verification
- Comparisons to the construction documents as well as any notes on changes from the construction documents to enable approval by RMTA and the structural design engineer.

All Gantry shop drawings and related design documentation shall be submitted to RMTA for review, comment, and approval. The shop drawings must be prepared, submitted and approved before the actual start of Gantry fabrication and before the first application for payment.

2.1.5 Gantry Delivery, Erection & Installation Process

During the Gantry fabrication there will be a series of meetings between the GM, RMTA, AtkinsRéalis (RMTA General Consultant) and other RMTA consultants and providers to finalize the Gantry delivery and installation requirements, structure test plans & testing, schedules, roles, contingency plans and all other details required for the successful manufacture, delivery and erection of the Gantry. The GM shall attend RMTA and consultant coordination/design meetings (virtually) and provide the necessary support as requested.

The GM will make RMTA aware of any issues requiring direction to the consultant and/or the on-site contractor(s) and RMTA will ensure the direction is communicated if appropriate.

2.1.5.1 RMTA Supplied Lay-Down Area

RMTA has provided a construction laydown area immediately next to the Powhite and within less than 500 feet of the identified location for the Gantry erection and installation as shown on the enclosed aerial photograph.

The GM will be permitted to inspect the area prior to the execution of the Gantry Contract and again prior to the delivery of the Gantry (at no cost to RMTA) and make reasonable modifications to facilitate the erection. Such modifications will be reviewed and approved by RMTA and/or its designated representatives.



The GM will also be responsible for securing their equipment within the storage area and are solely responsible for any lost, stolen and/or damage assets of the GM and it is their sole responsibility to replace/repair such assets.

NOTE: As this laydown area will also include the Gantry equipment building that houses toll collection technology and the backup generator site, RMTA will provide security fencing for vehicular access with lockable gates at the entry location from the Powhite.

2.1.5.2 Gantry Delivery, Erection & Installation Plan

Within fourteen (14) days of execution of the Gantry Contract, the GM shall prepare and submit for RMTA review and approval a Gantry Delivery Erection & Installation Plan, Schedule and Checklist for review and approval. The Plan shall include the following (at a minimum):

- A checklist that includes a description of the individual components of the Gantry and truss elements that are to be assembled on site.
- A description of the responsibilities of the GM Delivery and Erection Manager related to the transport and installation of the Gantry components.
- A high-level description of the means and methods for the Gantry delivery, assembly, erection and testing of all elements of the on-site installation.
- A project schedule as described in Section 2.2.2.

2.1.5.3 Compliance with Installation & Design Standards

The GM shall adhere to all installation standards, applicable laws, ordinances, and codes as specified in applicable standards and VDOT Standards and Details. The GM shall be responsible for all costs associated with permits, plan reviews and inspections, and any required documentation related to proper installation standards, laws, ordinances, or codes.

2.1.5.4 Cooperation with Others

The GM shall use best efforts to minimize any disruption to RMTA normal business operations (including a.m. and p.m. peak hours as applicable) when the GM is performing its erection and installation activities. The GM shall work closely with RMTA and its consultants in coordinating any activity which may affect other contractors' or RMTA's customers and operations.

The GM shall cooperate with other parties, including GMs, governmental agencies, and other RMTA providers, as required, to ensure that design and implementation functions are handled effectively, efficiently, and according to all laws, rules, regulations, and specifications of any applicable GMs, governmental agencies, and other RMTA consultants and providers.

2.1.5.5 Maintenance of Traffic

RMTA will provide all MOT for the Gantry erection. For the activities that require lane closures, the GM shall communicate all delivery and lane closure requests at least four (4) weeks in advance of the anticipated closure to RMTA for approval. GM shall anticipate that one lane in each direction will be open at all times during erection of the Gantry unless RMTA permits full closure of the Powhite and approves such a schedule in writing. **NOTE: Please see *Special Provisions in the Invitation to Bid*.**

2.2 Project Management

The following sections provide information about project management. These sections shall address how this methodology will be implemented within the GM's firm and all subcontractors, suppliers and/or other firms involved in this Project.

2.2.1 Point-of-Contact

The GM shall appoint one manager who will function as the RMTA point of contact to oversee all aspects and phases of the Gantry fabrication, delivery and erection. This management point of contact may be different for each of the three phases of the project.

2.2.2 Project Schedule

Within 14 days of execution of the Gantry Contract, the GM shall prepare and submit a separate detailed **Gantry Project Schedule** based on a Work Breakdown Structure (WBS) that includes all tasks, activities and milestones related to the development of the Gantry shop drawings, fabrication, transport/delivery, and erection/installation of the Gantry deliverables described within this Addendum.

The Gantry Project Schedule shall be maintained in Microsoft Project format (Microsoft Office MPP or newer) and shall identify all milestones and events starting with the notice-to-proceed (NTP) to the end of the Gantry erection/installation, culminating with Final RMTA Acceptance.

NOTE: The GM's bid shall also include a preliminary high-level Project Schedule of major milestones.

The final Gantry Project Schedule shall use the preliminary milestones as the baseline upon which revisions will be made for the duration of the Project. The final Gantry Project Schedule shall include activity start dates and durations, milestones dates, predecessor and successor dependencies, and a critical path representing activities without any slack. Any changes to the Project Schedule at any time are contingent upon RMTA approval.

The GM shall update and make the Gantry Project Schedule available to RMTA monthly and submit the updated version as part of the monthly progress report.

NOTE: The critical activities within the schedule that could impact the production and delivery of the Gantry shall also be evaluated within a **risk matrix** to identify any potential risks and response strategies.

The GM shall communicate to RMTA in writing any anticipated missed or late milestones. When Gantry deliverables are late or milestones are missed, RMTA may issue a Notice-to-Cure to the GM for breach of the Gantry Contract. The Notice-to-Cure may include a requirement for the GM to perform an analysis to ascertain adequate resource levels are being maintained. The GM shall provide the analysis results and any other findings, including a proposed cure, within ten (10) business days of the Notice-to-Cure. Further, the GM shall implement the proposed cure within ten (10) business days of RMTA acceptance and approval.

At least monthly, the Project Schedule shall be submitted to RMTA in MS Project format (MicroSoft Office MPP or newer) with a PDF file and associated narrative with the following updates:

- Completion status of all tasks, activities, and milestones.
- Identification of tasks, activities, or milestones that are behind schedule. Delays for critical path tasks and activities for which a recovery schedule cannot prevent a Project completion delay shall be included in the risk matrix with a mitigation strategy.

Project Schedule update files shall be version controlled.

2.2.3 Project Meetings

The following sections provide information about the different meetings associated with the Project.

2.2.3.1 Notice-to-Proceed (NTP) Kickoff Meeting

RMTA will schedule an NTP Kickoff Meeting. RMTA will distribute a meeting agenda of the subjects to be addressed. At RMTA's discretion, the meeting may be held virtually on MicroSoft Teams and, if so, the agenda will be attached to the meeting invite.

At this meeting, RMTA will:

- Discuss procedures for meetings, project correspondence, and points of contact for administrative and technical communications.
- Discuss procedures for submittals.
- Discuss procedures for processing change notices and change orders.
- Discuss monthly progress reporting and invoicing/payment process.
- Discuss progress and final payments.

2.2.3.2 Project Status Meetings

Monthly Project Status meetings will follow a defined agenda. The GM shall submit a Monthly Progress Report and a meeting agenda to RMTA at least 48 hours prior to the scheduled meeting. The Monthly Progress Meeting will be held and recorded virtually on MicroSoft Teams or Zoom.

The Monthly Progress Report and agenda shall include but not be limited to the following:

- Updated Project Schedule showing progress since the previous meeting and including any proposed changes from the latest approved Project Schedule.
- Completed work description and the percentage complete for each task in progress.
- Identification of all critical path tasks
- Risk/Issue matrix changes, including associated recommended mitigation/resolution strategies or contingency plans intended to avoid potential delays.
- Report on testing activities, including status and overview of defect tracking results (when applicable)
- Description of any pending and proposed change orders, or any change order work is in progress and the associated work status.
- Accomplishments during the reporting period
- Monthly look ahead work plan for activities to be accomplished on the project.

- Updated action items list that provides the status of the open action items, identifying and explaining action items that can be closed, and documenting new action items resulting from the discussion of outstanding issues and concerns.
- Copy of the approved final minutes of the previous meeting.

The GM shall develop and maintain an action item list that will indicate resolved items, the person assigned to follow-up for resolution, and the anticipated date for resolution. Said action item list shall include a running list of action items that have been closed, and any updates thereof shall be subject to RMTA approval. Inquiries, requests for information, and requests for solutions to problems presented during such meetings shall be answered, when possible, during the meeting. Answers provided orally at the meetings shall be recorded in the minutes.

2.2.4 Working Meetings

The GM shall schedule and conduct regularly scheduled weekly virtual working meetings held and recorded on MicroSoft Teams or Zoom to review any strategic, tactical, or operational issues that may exist on the project. At the sole discretion of RMTA, the frequency of meetings may be adjusted.

The purpose of the working meeting may include but is not limited to:

- Track the status of any critical work activities.
- Resolve any issues that require action between the monthly progress meetings.
- Review GM’s invoices for services provided.
- Resolve disputes.

The GM shall produce and deliver to RMTA at least 48 hours prior to each working meeting:

- A meeting agenda identifying potential problems, issues, and concerns to be resolved at the working meeting.
- Any documentation regarding or related to such problems, issues, and concerns.

Working meetings shall include the participation of those RMTA employees and consultants as RMTA may identify from time to time.

2.2.5 Shop Drawing Review

The shop drawing review is part of the quality management for this project. This review will ensure that the fabricated components manufactured off-site meet the design intent and fabrication standards and will support delivery to the RMTA site. It will also ensure that the GM has understood the project requirements.

Below is the step-by-step procedure for reviewing the shop drawings:

1. **Submittal Schedule:** At the **NTP Kickoff Meeting**, the GM will submit a schedule for providing shop drawings for review (to include enough time for review and re-submission). The intent is to avoid numerous submittals that burden the project schedule or the RMTA and its consultants and providers. The schedule submittal and review process can also help the RMTA team identify shop drawings that are not required for review.
2. **Design Delegation:** As part of the shop drawing schedule review, RMTA, in concert with the GM, will identify which drawings (if any) require a “sign & seal” of a professional engineer.

3. **GM's Internal Review:** The GM should review and approve all shop drawings before submitting them to the RMTA professional of record to make sure that they have determined all field measurements, field construction criteria, materials, and similar data. Upon receipt of shop drawings, the RMTA registered professional of record will first look for the GM's engineering review stamp to ensure that it has been thoroughly reviewed and approved. If the shop drawing lacks the GM's internal review stamp, it will be immediately returned to the GM.

4. **Reviewing for Design:** RMTA designated engineers will review the shop drawings to verify if the shop drawings correctly represent and implement the design specified in the RMTA construction documents. The items required for mandatory review include:

- Material specification and member size
- Piece mark, plan location, and base length
- Surface preparation and coating
- Geometry and layout
- Connection types, stiffeners and connection material specification
- Bolt type, sizes, and material specification
- Hole types and sizes
- Bolt and weld material specifications and weld geometry and fillet size using guidelines from American Welding Society (AWS D1.1, AWS D1.2), Partial Joint Penetration (PJP) groove welds that do not extend completely through the thickness of components joined (PJP groove welds shall be prohibited except those conforming to AASHTO/AWS D1.5) and Complete Joint Penetration (CJP) groove welds that extend completely through the thickness of joined components thus transmitting the full load-carrying capacity of the structural components they join.

2.2.6 Safety Plan

The GM shall develop a comprehensive Safety Plan for the project, which shall be submitted to RMTA for review, comment, and approval in accordance with the deliverable schedule. The Safety Plan shall describe the procedures that will be instituted during transport, delivery, erection and installation of the Gantry and all related components to ensure personnel safety and compliance with all applicable state and federal laws, rules and regulations, and legislation, including but not limited to OSHA, NECA, FHWA.

The GM shall ensure that all personnel are trained on the safety program prior to their involvement with the transfer of the Gantry to the transport vehicles, during the transit and delivery of the Gantry to Richmond and to their entrance to any work areas related to the lay-down, erection and installation of the Gantry and any of the Gantry components. The GM shall always be responsible for the safety of all GM personnel.

The Safety Plan shall include the following, at a minimum:

- Fully describe all GM procedures for ensuring personnel safety
- Index to all applicable OSHA, NEC, NFPA, Commonwealth of Virginia standards
- Identify all health and safety training of the GM's employees and subcontractors

The GM shall notify RMTA immediately when any conditions affecting the Safety Plan change. The GM shall update the Safety Plan document within two (2) weeks of such change in conditions.

RMTA will be responsible for notifying the GM (as soon as possible) of any potential or actual changes in conditions noted within the general Richmond area, any known changes related to transportation corridors leading to or connecting to the Powhite or any changes within the Powhite corridor that would likely have a significant impact on the GM performing its requirements.

2.2.7 Fabrication Inspection and Testing

The GM shall permit RMTA to inspect the manufacture of the Gantry and truss elements during the fabrication with advance notification from RMTA (a minimum of one week notice) and coordination with the GM to identify a reasonable date/time for such an inspection. RMTA anticipates at least two such visits – one interim (during the fabrication process) and one final, when the Gantry is ready for delivery to the RMTA erection site. The inspection is part of the invoice acceptance and payment process for RMTA to verify the progress toward completion of the Gantry fabrication and achievement of the Gantry Project Schedule, to identify any defects or issues that require resolution or curing, and to confirm the resolution of any open defects or issues. Based on RMTA's visual inspection during the fabrication, the GM may accept the identification of such issues or defects and agree to a process and schedule for resolution or curing.

If the GM does not agree with the identification of any defect or issue and should a potential materials quality issue or defect be identified that would impact the structural or operational capability of the Gantry to perform as identified on the RMTA Final Design Plans as an AET Toll Collection Gantry for RMTA, an independent materials testing facility/organization (agreed to in advance by both RMTA and the GM in conjunction with the execution of the proposed Gantry Contract) may be used to formally test any such identified materials and/or production activities (such as weld materials, fillet sizes, PJP and/or CJP welds, or bolt materials, etc.) with the resulting independent report and recommendations as the basis for any resolution or cure.

The GM shall document all such defects and issues discovered during this inspection process (either agreed to by the GM or reported by the independent lab/organization). All issues and defects shall be assigned a resolution and or cure date. This issues/defects list and schedule shall be provided to RMTA within two (2) days of completion of an on-stie inspection report for those issues agreed to by RMTA and the GM or those identified within a report from the independent testing lab/organization.

The GM shall be responsible for tracking all defects and issues identified on the list until a complete resolution or cure is achieved. All issues/defects must be resolved to the satisfaction of RMTA.

RMTA approval of any aspect of the inspection and/or testing shall not relieve the GM of the responsibility to meet all remaining Project requirements.

2.2.8 Issues/Defects REPORTS

The following progress reports shall be submitted monthly (or when requested by RMTA) by the GM to RMTA for any issues/defects on the resolution list.

- Number and listing of issues/defects identified
- Number of issues/defects closed (% complete)
- Identification of issues/defects closed (resolved/cured)
- Identification of remaining open issues/defects

2.2.9 Gantry As-Built Drawings

The GM shall prepare and submit for RMTA review and approval one (1) complete electronic set of As-Built Drawings for the Gantry in any “native” standard design file format such as MicroStation, AutoCad, etc. and one (1) complete electronic set in a PDF format. The drawings shall include the GM ‘s architecture, all schematics, assembly drawings, parts detail drawings, installation depictions, and other such drawings. The GM shall incorporate any design modifications, change orders and field installation changes that occur during the Gantry fabrications and installation.

The GM shall submit the Gantry As-Built Drawings in accordance with the Gantry Project Schedule.

2.3 Administrative Requirements

2.3.1 Project Documentation

Draft and final versions of documentation shall be delivered electronically to RMTA using online document sharing. The GM shall deliver documents in a standard editable PDF application format, which allows for electronic review and tracking changes. All documents are subject to version control. In addition to the shop drawings and other documents previously identified, the following will also be the responsibility of the GM.

2.3.2 Records Keeping

The GM shall maintain quality records and data such as records of design reviews, inspections and test results, records pertaining to nonconforming materials, change order documentation, audit results and all other records related to the Gantry Contract for no less than five (5) years after RMTA’s acceptance of the Gantry. This information shall be made available to RMTA upon request and/or 30 days after the acceptance of the Gantry.

2.3.3 Gantry Project Documentation & Tracking

The GM shall maintain a tracking tool for all deliverables/documentation associated with the Gantry project. This deliverable tracking tool will be stored in a location accessible to RMTA. The GM shall update the tool weekly.

At a minimum, the Project documentation required to be tracked shall include:

- Gantry Fabrication Schedule
- Gantry Delivery Plan & Schedule
- Gantry Erection & Installation Plan & Schedule

RMTA will utilize this tracking tool as part of the invoice payment process.

2.3.4 Online Document Sharing and Document Management System

The GM shall use a secure, online Project management/collaboration software of their choice to internally manage, share, and distribute Gantry documents and information at no cost to RMTA (e.g., SharePoint, Dropbox, Sync.com, etc.), including copies of all submitted versions of plans, drawings, and other documentation.

The GM shall provide and maintain for the duration of the proposed Gantry Contract a secure document management system. This document management system shall identify, categorize, track, and manage all Gantry shop drawings, revised design plans, original design documentation, testing reports and resolution

documents, as-built documentation, and other Gantry documents. All documentation and artifacts in the document management system shall be easily searchable and accessible by authorized users of both RMTA (and others designated by RMTA) and the GM. The GM shall provide the required licensing of the product for each user accessing the system. Updated versions of Gantry documents shall be submitted to RMTA for approval whenever revisions are made to Gantry documentation. All documentation developed by the GM for the Gantry project shall be the property of RMTA.

The GM shall provide a Documentation Lead for the duration of the Gantry Contract (may be any of the designated managers) to ensure all documentation revisions are documented and tracked using a system of version control and change control logs. The Documentation Lead shall also ensure all Gantry documentation is successfully updated when design changes, change orders, or equipment changes occur. The Documentation Lead shall ensure all Gantry documentation, particularly those related to design is maintained and remains current, incorporating any changes. If necessary, the GM shall provide RMTA staff training for accessing documents in the document management system.

RMTA may, from time to time, provide the GM with an updated list of persons authorized to use the secure online document management system, and the GM shall make the associated changes effective within two (2) business days of receiving each updated list.

2.3.5 General Liability Insurance

General liability insurance with coverage in the amount of One Million Dollars (\$1,000,000.00) each claim and, Two Million Dollars (\$2,000,000.00) in the aggregate, covering the negligent acts, errors, or omissions of the GM and/or its subcontractors related to the fabrication, delivery or erection of the Powhite Gantry. The policy coverage shall be effective from the date of commencement of all activities in connection with the Agreement. Coverage shall be extended a minimum of one (1) year beyond the completion of the services.

3 Appendix

3.1 Appendix A. Design Plans



PROJECT LOCATION
 FOWHEE PKWY GANTRY LOCATION
 500' 100' GANTRY



PROGRESS GANTRY
 489' 2"

- NOTES:
1. FOR GENERAL NOTES, SEE DRAWING S-2
 2. FOR STRUCTURE DETAILS, SEE DRAWINGS S-4 & S-4
 3. FOR FOUNDATION DETAILS, SEE DRAWING S-7

| REVISIONS | |
|-----------|------|
| NO. | DATE |
| | |
| | |
| | |

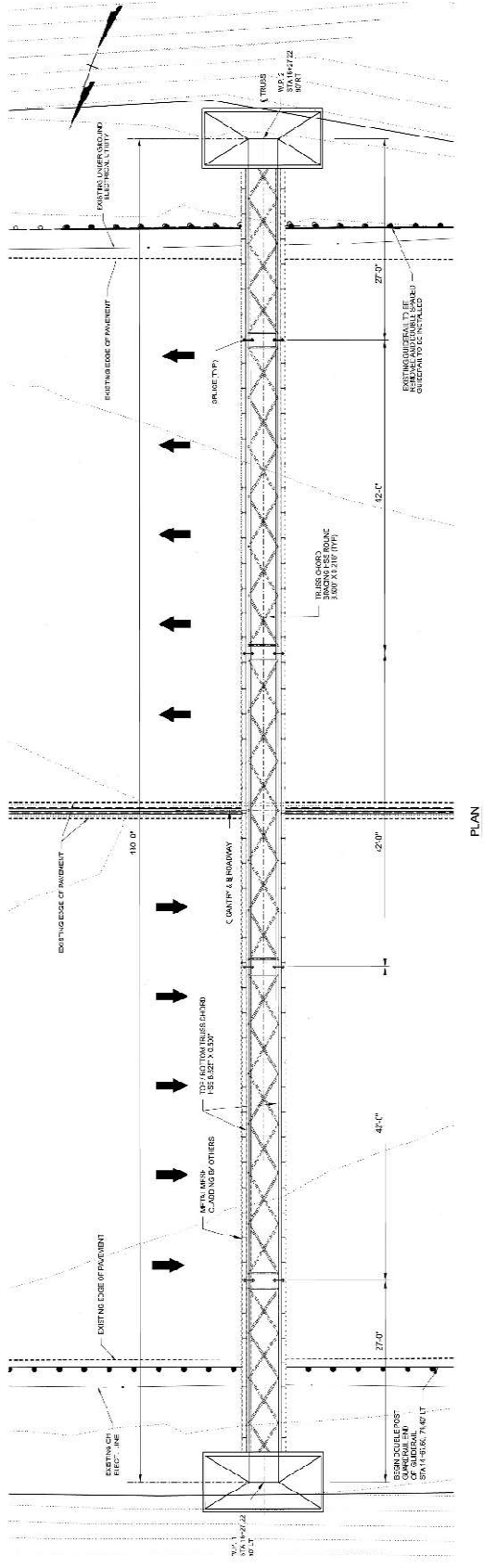
| PROJECT INFORMATION | |
|---------------------|------|
| DESCRIPTION | DATE |
| | |
| | |

| DRAWING INFORMATION | |
|---------------------|------|
| TITLE | DATE |
| | |
| | |

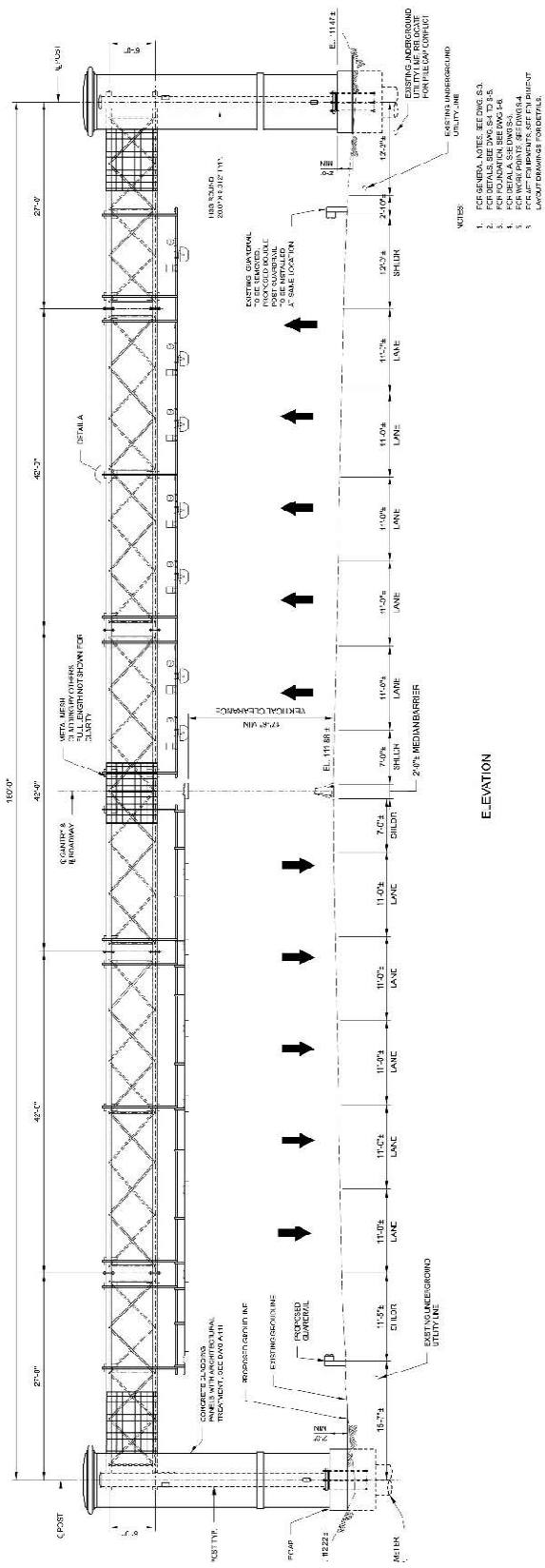
| PROJECT DATA | |
|--------------|------|
| NO. | DATE |
| | |
| | |

| DRAWING INFORMATION | |
|---------------------|------|
| TITLE | DATE |
| | |
| | |

REGINA METROPOLITAN TRANSPORTATION AUTHORITY



PLAN



ELEVATION

- NOTES
1. FOR GENERAL NOTES, SEE DWG. S-1
 2. FOR DETAILS, SEE DWG. S-4 TO S-6
 3. FOR MATERIALS, SEE DWG. S-6
 4. FOR DIMENSIONS, SEE DWG. S-6
 5. FOR WORK POINTS, SEE DWG. S-6
 6. FOR LAYOUT DIMENSIONS, SEE DWG. S-6

| | | | |
|--|-----------|---------------------------|-----|
| RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY RMTA | | GARTRY PLAN AND ELEVATION | |
| DATE | 10/16/22 | SCALE | S-1 |
| PROJECT NO. | 101022-29 | DESIGNER | |
| CLIENT | | CHECKER | |
| APPROVED | | DATE | |

GENERAL NOTES:

1. CONTRACTOR SHALL BE FAMILIAR WITH THE PROPOSED MOTION SENSITIVE TOLL EQUIPMENT TO BE MOUNTED TO THE SUPPORT STRUCTURE AND SHALL COORDINATE ALL WORK WITH THE SYSTEMS INTEGRATOR RESPONSIBLE FOR THE ERECTION OF THIS EQUIPMENT. THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO MOUNTING REQUIREMENTS FOR TOLLING EQUIPMENT. ALL EQUIPMENT MOUNTING REQUIREMENTS DEPICTED WITHIN THIS CONTRACT SHALL BE VERIFIED PRIOR TO PREPARATION OF SHOP DRAWINGS.
2. OVERHEAD ETC STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE FOLLOWING DESIGN CODES THE LATEST EDITION AS APPLICABLE:
 - A. AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" (LTS 6) DATED 2013 AND ALL INTERIMS
 - B. VDOT GUIDELINES TO AASHTO STANDARD SPECIFICATIONS LTS 6, 2013 WITH 2015 INTERIMS
 - C. AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC. (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
 - D. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9 EDITION (2020)
 - E. AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM).
 - F. AWS D1.1 STRUCTURAL WELDING CODE - STEEL
3. CONCRETE FOR FOOTINGS SHALL BE CLASS A3 (3500 psi)
4. REINFORCING STEEL SHALL CONFORM TO A615, GRADE 60, WITH A YIELD STRENGTH FOR DESIGN OF $f_y = 60000$ PSI. ALL SPLICES SHALL BE LAPPED AS PER BAR LAP CHARTS, SEE VDOT DESIGN GUIDELINES PART 2 CHAPTER 7, REINFORCING STEEL.
5. REINFORCING STEEL SHALL CONFORM TO A615, GRADE 60, WITH A YIELD STRENGTH FOR DESIGN OF $f_y = 60000$ psi. ALL SPLICES SHALL BE LAPPED AS PER BAR LAP CHARTS. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE 2" EXCEPT FOR THE FOLLOWING LOCATIONS:

LOCATION CLEAR COVER

FOOTINGS — BOTTOM AND SIDES 3 IN.
6. ALL STRUCTURAL MAIN TUBES SHALL CONFORM TO ASTM A500, GRADE C SHALL ALSO MEET CURRENT CHARPY V NOTCH TOUGHNESS IMPACT REQUIREMENTS FOR M270, ZONE 2. ALL OTHER TUBES SHALL CONFORM TO A53 GRADE B. ALL STEEL PLATES, W SHAPES AND MISCELLANEOUS SHAPES SHALL CONFORM TO A709, GRADE 50. CHORD SPLICE MATERIAL SHALL ALSO MEET THE CHARPY V NOTCH TOUGHNESS REQUIREMENTS FOR M270, ZONE 2.
7. ALL CONNECTION BOLTS SHALL CONFORM TO ASTM F3125, GRADE A325. BOLTS OVER 1 1/2" DIAMETER SHALL CONFORM TO A449. ALL WASHERS SHALL CONFORM TO F436 AND NUTS A194, GRADE 2H. U BOLTS SHALL CONFORM TO A276, TYPE 304 (STAINLESS STEEL) OR A307. FLAT WASHERS AND HEX LOCK NUTS SHALL BE USED FOR U BOLTS. ALL ANCHOR BOLTS SHALL CONFORM TO F1554, GRADE 55 S1. ALL BOLTS SHALL HAVE A FLAT WASHER UNDER THE ELEMENT BEING TURNED.
8. OVERHEAD ETC STRUCTURE SHALL BE GALVANIZED TO CONFORM TO A123. ALL HARDWARE WITH THE EXCEPTION OF STAINLESS STEEL SHALL BE GALVANIZED TO CONFORM TO A153.
9. BASE PLATES SHALL BE IN FULL CONTACT WITH ALL FLAT WASHERS. GROUT SHALL NOT BE PLACED BETWEEN THE BASE PLATE AND CONCRETE PEDESTAL.
10. ALL WELD SIZES NOT INDICATED SHALL COMPLY WITH AWS D1.1. BRIDGE WELDING CODE.
11. FOR ELECTRONIC TOLL EQUIPMENT LAYOUT AND MOUNTING DETAILS. SEE AET DRAWINGS.
12. ANCHOR BOLTS SHALL UTILIZE A STEEL TEMPLATE TO SET AND KEEP ANCHOR BOLTS PLUMB DURING FOUNDATION CONSTRUCTION. ALL ANCHOR BOLTS SHALL BE TIGHTENED USING TURN OF NUT METHOD (30° MIN. TO 45° MAX. AFTER SNUG TIGHT). COST OF ANCHOR BOLTS, NUTS, WASHERS, AND STEEL ANCHOR PLATES ARE INCIDENTAL TO THE PRICE PAID FOR CONCRETE FOR SUPPORT STRUCTURE PEDESTALS OR GRADE BEAMS.
13. THE APPROXIMATE LOCATION OF ALL KNOWN UTILITIES IS SHOWN. THE CONTRACTOR SHALL VERIFY THE FINAL LOCATION OF ALL UTILITIES SHOWN, AND THE EXISTENCE OF ANY OTHER UNKNOWN UTILITIES. PRIOR TO THE START OF ANY CONSTRUCTION OPERATIONS.
14. Design Loads

Dead Loads:


| | |
|-------------------|--------------------------------|
| MASH CLADDING | 102 LBS/100 SF, 61% VOID RATIO |
| CONCRETE CLADDING | 121 KIPS PER TOWER |

AET EQUIPMENT, SUPPORT FRAME AND PIPES (TOTAL WEIGHT FOR EACH ITEM)

| | |
|----------------------------|-----------|
| LASER SCANNER | 405 LBS |
| VISCAM CAMERA | 265 LBS |
| LED FLESH | 233 LBS |
| DVAS CAMERA | 40 LBS |
| SURVEILLANCE CAMERA | 4 LBS |
| ANTENNA | 497 LBS |
| AET EQUIPMENTSUPPORT FRAME | 459 LBS |
| PIPES | 12313 LBS |

WIND LOADS:

| | |
|------------|--------|
| WIND SPEED | 90 MPH |
|------------|--------|

| | | | | |
|---|------|----|-------------|--|
| AtkinsRéalis | | | | |
|  | | | | |
| 01 | DATE | BY | DESCRIPTION | |
| | | | | |
| | | | | |
| | | | | |

BORING NUMBER B-1 South Bound
PAGE 1 OF 1

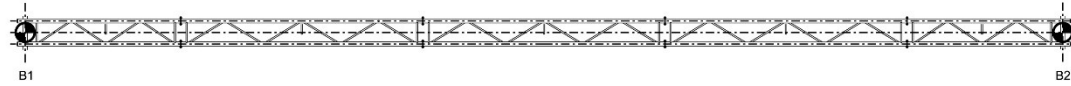
Engineering and Testing Services, Inc
5226 Indian River Road
Virginia Beach, Virginia, 23464
Telephone: 757-306-1040
Fax: 757-306-1042

ETS

CLIENT HNTB Corporation PROJECT NAME New AET Gantry-Powhite Parkway
 PROJECT NUMBER ETS-24E120 PROJECT LOCATION Richmond, VA
 DATE STARTED 5/13/24 COMPLETED 5/13/24 GROUND ELEVATION _____ HOLE SIZE 3 inches
 DRILLING CONTRACTOR FDI GROUND WATER LEVELS: _____
 DRILLING METHOD MUD AT TIME OF DRILLING --- Dry
 LOGGED BY S.Raut,EIT CHECKED BY R. Acharya, PhD, PE AT END OF DRILLING ---
 NOTES _____ AFTER DRILLING ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (ROD) | BLOW COUNTS (N VALUE) | POCKET PEN. (SP) | DRY UNIT WT. (pcf) | ▲ SPT N VALUE ▲ | | | |
|------------|-------------|---|--------------------|------------------|-----------------------|------------------|--------------------|-----------------------|----|----|----|
| | | | | | | | | PL | MC | LL | |
| | | | | | | | | 20 | 40 | 60 | 80 |
| | | | | | | | | 20 | 40 | 60 | 80 |
| | | | | | | | | □ FINES CONTENT (%) □ | | | |
| | | | | | | | | 20 | 40 | 60 | 80 |
| 0 | | 5" TOPSOIL | | | | | | | | | |
| | | (SM) IGM, Tan brown-orange f-c silty SAND with trace clay, very dense, moist Refusal @1.75 ft | SPT 1 | 57 | 4-12-28-50/3" | | | | | | >> |
| | | (SP-SM) IGM, Tan brown-orange f-c poorly graded SAND with silt, very dense, moist | SPT 2 | 89 | 22-50/3" | | | | | | >> |
| | | | SPT 3 | 80 | 30-50/4" | | | | | | >> |
| | | | SPT 4 | 100 | 50/4" | | | | | | >> |
| | | | SPT 5 | 57 | 14-50/1" | | | | | | >> |
| | | | NR 6 | 0 | 50/2" | | | | | | >> |
| | | | NR 7 | 0 | 50/2" | | | | | | >> |

Bottom of borehole at 20.0 feet.



BORING LOG LOCATION
SCALE: 1/4" = 1'-0"

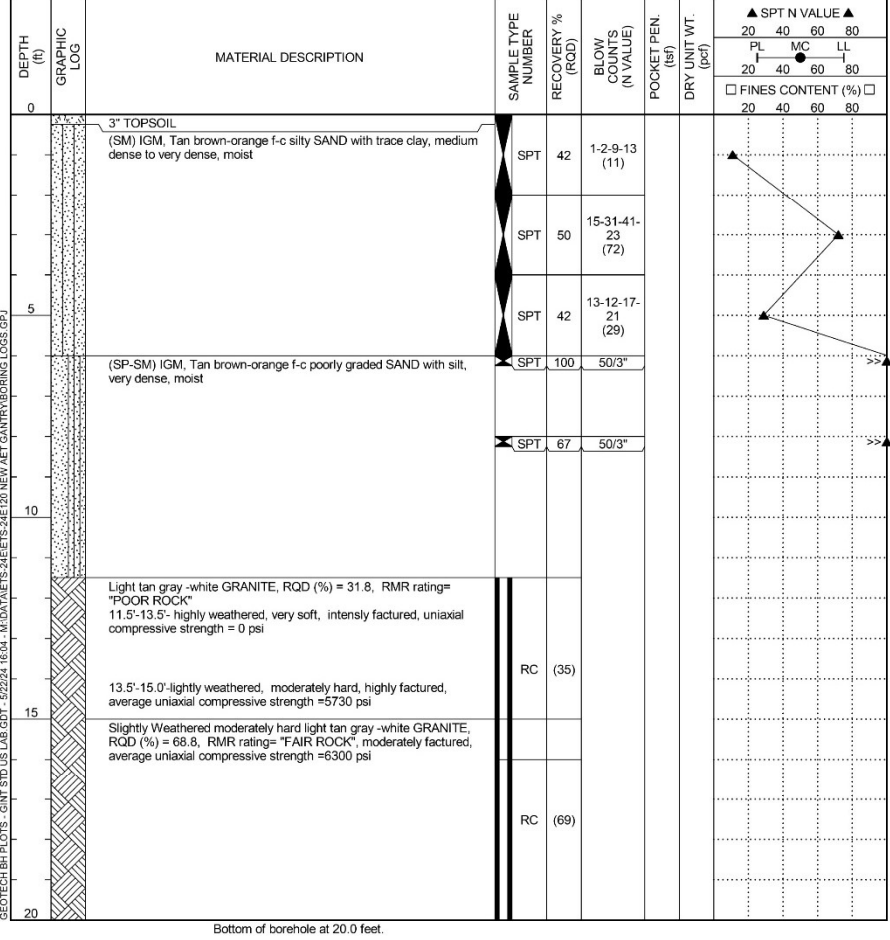
| | | | | | | | |
|--|-----|------|----|-------------|---------|---|---|
| | NO. | DATE | BY | DESCRIPTION | PROJECT | RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY RMTA | DRAWN BY: G.Gar CHECKED BY: L.Sun APPROVED BY: S.Lee |
| | | | | | | | |



Engineering and Testing Services, Inc
 5226 Indian River Road
 Virginia Beach, Virginia, 23464
 Telephone: 757-306-1040
 Fax: 757-306-1042

BORING NUMBER B-2 North Bound
 PAGE 1 OF 1

CLIENT HNTB Corporation PROJECT NAME New AET Gantry-Powhite Parkway
 PROJECT NUMBER ETS-24E120 PROJECT LOCATION Richmond, VA
 DATE STARTED 5/13/24 COMPLETED 5/13/24 GROUND ELEVATION _____ HOLE SIZE 3 inches
 DRILLING CONTRACTOR FDI GROUND WATER LEVELS:
 DRILLING METHOD MUD AT TIME OF DRILLING --- Dry
 LOGGED BY S.Raut,EIT CHECKED BY R. Acharya, PhD, PE AT END OF DRILLING ---
 NOTES _____ AFTER DRILLING ---



Bottom of borehole at 20.0 feet.



BORING LOG LOCATION
 SCALE: 1/4" = 1'-0"

| | | | | | | |
|--|-----|------|----|-------------|---------|--|
| | NO. | DATE | BY | DESCRIPTION | PROJECT | DRAWN BY: <u>G. Gar</u> CHECKED BY: <u>L. Sun</u> APPROVED: <u>S. Lee</u> |
| | | | | | | RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY RMTA |

3.2 Appendix B. Price Form

Richmond Metropolitan Transportation Authority (RMTA)

PRICE SHEET

Powhite Parkway All Electronic Toll Gantry Fabrication, Delivery & Erection



| | |
|----------------|--|
| Proposer Name: | |
| Address 1: | |
| Address 2: | |
| City: | |
| State: | |
| Zip Code: | |

Instructions: Please complete all fields in this form designated by the yellow backing. (1) Provide a single lump-sum price for all requirements identified within the **Addendum to the RMTA Powhite Parkway Civil Invitation to Bid (ITB) dated _____, 2025**. (2) Complete the authorization block below and make sure it is signed by a duly authorized representative of your company. (3) Submit this printed form packaged along with the ITB, including an unaltered copy of the Excel file of this pricing sheet (down-loaded from the RMTA website) that is completed with the same company and pricing information as on the original signed paper copy.

NOTE: It is not mandatory for a contractor submitting on the main Invitation-to-Bid (ITB) to also submit on the gantry fabrication, delivery and erection. Therefore, a proposer to the ITB may leave this separate pricing sheet for the Gantry blank. However, if a proposer to the ITB desires, they may submit a separate bid on the Powhite Gantry erection only, along with their ITB proposal and RMTA will have the right to consider the Gantry erection bid together with the ITB or separately as well. If the proposer wishes to produce a separate Gantry erection bid, they may do so using the enclosed Gantry pricing sheet) by showing the lump sum price for the erection and adding the notation "Erection Only" to the pricing sheet.

QUOTE

| Item | Description | Total Price |
|-------------------|---|-------------|
| AET Gantry | 180-Foot Clear Span Box-Girder Truss to be Fabricated from Galvanized Steel and Transported to and Erected on RMTA's Powhite Parkway in Richmond, Virginia as per the specifications within the Addendum to the RMTA Powhite Parkway Civil Invitation to Bid dated December 18, 2025. | \$ - |

| | | |
|-----------------------------------|--|-----------------------|
| Length of Pricing Validity | The pricing provided in this proposal is valid for (insert number of days from submission date): | Number of Days |
| | | XXX |

Authorized Signature:

| | |
|---------------|--|
| Name: | |
| Title: | |
| Company Name: | |
| Date: | |