

#### 1. SCOPE

1.1 This specification will detail the requirements for a Contractor to provide service, parts, maintenance, calibration, and support for various wheel press, wheel bore, and wheel truing (including all attachments) systems used for maintenance operations of rapid transit railcars at the Chicago Transit Authority (CTA)

2. GE	ENERAL INFORMATION	2
2.1	DEFINITIONS N/A	2
2.2	ACRONYMS	
2.3	APPLICABLE INFORMATION	2
3. DE	ELIVERABLES	2
3.1	PRE-AWARD	2
3.2	POST-AWARD	
4. CH	HICAGO TRANSIT AUTHORITY CONTRACT REQUIREMENTS	3
4.1	QUALITY CONTROL AND ASSURANCE	3
4.2	CONTRACTOR REQUIREMENTS	
4.3	DETAILED REQUIREMENTS	4
4.4	PERFORMANCE REQUIREMENTS N/A	9
4.5	SAFETY REQUIREMENTS	9
4.6	WARRANTY INFORMATION	
4.7	DELIVERY, STORAGE, AND HANDLING N/A	
4.8	APPROVED AND NON-APPROVED ITEM INFORMATION	9
4.9	ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS	10
5. CH	HICAGO TRANSIT AUTHORITY CONTRACT WORK INSTRUCTIONS.	10
5.1	INSTALLATION N/A	10
5.2	TESTING AND COMMISSIONING N/A	10
5.3	FINAL INSPECTION	10
5.4	FINAL ACCEPTANCE	10
5.5	DEMOLITION, STORAGE, AND REMOVAL N/A	10
6. AF	PPENDIX N/A	10



#### 2. GENERAL INFORMATION

- 2.1 <u>DEFINITIONS</u> N/A
- 2.2 ACRONYMS
- 2.2.1 CTA: Chicago Transit Authority
- 2.2.2 OEM: Original Equipment Manufacturer
- 2.2.3 QMS: Quality Management System
- 2.3 APPLICABLE INFORMATION
- 2.3.1 The version of a standard, code, statute, or guideline referenced herein that is current on the date of release applies.
- 2.3.2 Sub-sections that are "Not Applicable" to this specification are indicated with "N/A."
- 2.3.3 The Contract Document will provide information for contacting the appropriate CTA contact personnel.
- 2.3.4 The wheel press and wheel bore systems are located at the CTA's Skokie Heavy Maintenance Shop and the wheel truing (including all attachments) systems are located at the CTA's Skokie Heavy Maintenance, Midway facility and 54<sup>th</sup> Street Shops.
- 2.3.5 Contractor must provide the following items for the systems described in this specification.
  - a. Equipment Service
  - b. Replacement Components and Parts
  - c. Factory Specified Maintenance
  - d. Technical Support

#### 3. DELIVERABLES

- 3.1 PRE-AWARD
- 3.1.1 The potential Contractor must provide the following items with its bid or within five (5) business days of CTA's request:



- a. Documentation: Contractor's experience furnishing the services and parts detailed in this specification (see paragraph 4.2.1).
- b. Documentation: Contractor's references (see paragraph 4.2.2)
- c. Documentation: Manufacturer's QMS meets the requirements detailed in this specification (see paragraph 4.1)

## 3.2 POST-AWARD

- 3.2.1 The Contractor must provide the following items after award of Contract or within five (5) business days of CTA's request:
  - a. Maintenance Reports
  - b. Calibration Reports
  - c. Part information and specifications
  - d. Safety Process Plan (Services)

### 4. CHICAGO TRANSIT AUTHORITY CONTRACT REQUIREMENTS

### 4.1 QUALITY CONTROL AND ASSURANCE

#### 4.1.1 Quality Control

4.1.1.1 The Manufacturer must have an established industry defined QMS which provides specific performance and control operating procedures for materials and workmanship.

#### 4.1.2 Quality Assurance

- 4.1.2.1 The Contractor must be responsible for all inspection requirements prior to submission to CTA. The CTA reserves the right to perform any additional inspections required to assure conformity to the requirements contained within this specification.
- 4.1.2.2 The Contractor's QMS must incorporate, but not necessarily be limited to, the following:
  - a. Action criteria that will be used to identify "out of control" production by the control charts.
  - b. Properties to be measured and inspected and the testing frequencies must be stated by the Contractor.



- c. Procedures to follow when the product is deemed unsatisfactory must be listed.
- d. The Contractor's QMS must state the titles/positions of the individuals or persons in charge of correcting the unsatisfactory product.

### 4.2 CONTRACTOR REQUIREMENTS

- 4.2.1 The Contractor must be a professional business entity with at least five (5) years' experience furnishing and delivering similar services and parts to those specified in this specification. The CTA requires documentation meeting the requirements of this specification with the bid response package, or within five (5) business days of the CTA request.
- 4.2.2 The Contractor must furnish in the Contractor's bid response package a list of three (3) references, including the name of the company, contact name and phone number, to which similar services and parts have been provided within the last two (2) years. The CTA requires documentation meeting the requirements of this specification with the bid response package, or within five (5) business days of CTA request.

#### 4.3 DETAILED REQUIREMENTS

#### 4.3.1 Replacement Components and Parts

- 4.3.1.1 When required, Contractor must only furnish factory new, genuine, original equipment manufacturer (OEM) replacement components and parts for a given system. Any deviation to the requirement stated in this section must first be approved in writing by an applicable CTA Manager.
- 4.3.1.2 All replacement components or parts must be furnished in their OEM packaging and come with the standard OEM factory warranty against any potential defect in material or workmanship.
- 4.3.1.3 All existing components and parts replaced by the Contractor in a given Simmons system must be given to the applicable CTA Manager for disposition.
- 4.3.1.4 Contractor labor used to install a given replacement component or part in a given Simmons system must have a minimum one (1) year warranty on workmanship.



- 4.3.1.5 The CTA must inform the Contractor of all applicable CTA Manager names, phone numbers, e-mail addresses, etc. after award of contract for the purpose of scheduling the maintenance tasks.
- 4.3.1.6 Contractor must furnish all tools and labor necessary in order to perform the required maintenance tasks on a given Simmons system. When applicable, all necessary heavy equipment will be provided by the CTA.
- 4.3.1.7 Contractor personnel must abide by all CTA safety and security procedures and practices. This includes, but not necessarily limited to, displaying of a CTA issued visitor's pass while on CTA property.
- 4.3.1.8 All invoices issued by the Contractor to the CTA must be fully itemized.
- 4.3.2 Factory Specified Maintenance
- 4.3.2.1 Contractor must perform preventative maintenance work on a given Simmons system as agreed upon by the applicable CTA Manager and the Contractor.
- 4.3.2.2 Maintenance work must be performed between the hours of 6:00 am to 2:00 pm, Central Standard Time, not including Saturdays, Sundays, or Holidays, unless agreed upon otherwise by the Contractor and the CTA.
- 4.3.2.3 Contractor personnel performing given maintenance tasks on a given Simmons system must provide proper paperwork to the applicable CTA Manager legibly showing the equipment maintenance tasks that were performed prior to leaving CTA property.
- 4.3.2.4 Contractor personnel must inform the applicable CTA Manager of any observed equipment abnormality when performing the scheduled maintenance tasks on a given system.
- 4.3.2.5 After all required maintenance work has been performed by the Contractor on a given system, the given system must perform to factory specifications.
- 4.3.2.6 The quality of workmanship on the maintenance work performed by the Contractor must be to the satisfaction of the applicable CTA Manager.



- 4.3.2.7 After required preventative maintenance work has been performed by the Contractor on a given system, the system must perform to factory specifications.
- 4.3.3 Unscheduled/Emergency Equipment Service
- 4.3.3.1 Contractor must perform service work to a given system as directed by the CTA.
- 4.3.3.2 Contractor must be able to accept a request for service work by the CTA and perform service work during the hours of 6:00 am to 2:00 pm, Central Standard Time, not including Saturdays, Sundays, or Holidays, unless agreed upon otherwise by the Contractor and the applicable CTA Manager.
- 4.3.3.3 After receiving a request for service, Contractor must be on-site and investigating a given system within twenty-four (24) hours, not including Saturdays, Sundays, or Holidays.
- 4.3.3.4 Contractor must furnish all tools and labor necessary in order to perform the required repair work on a given system. When applicable, all necessary heavy equipment will be provided by the CTA.
- 4.3.3.5 Contractor must follow all applicable factory issued service procedures and technical service bulletins issued on a given system and must inform the applicable CTA Manager of any factory technical service bulletins, revisions, upgrades, etc. issued on a given system being serviced.
- 4.3.3.6 All existing components and parts replaced by the Contractor in a given system must be given to the applicable CTA Manager for disposition.
- 4.3.3.7 All service work by the Contractor on a given system must be done on-site. If off-site service work is required, Contractor must first obtain written permission from the applicable CTA Manager before any system component is removed from CTA property.
- 4.3.3.8 The quality of workmanship on the service work performed by the Contractor must be to the satisfaction of the applicable CTA Manager.
- 4.3.3.9 After any service work has been completed by the Contractor, the applicable system must perform to factory specifications.



## 4.3.4 Technical Support

- 4.3.4.1 Contractor, or Contractor's authorized agent, must be able to accept requests for no-cost, basic technical support services via phone or e-mail during the hours of 6:00 am to 2:00 pm, Central Standard Time, not including Saturdays, Sundays, or Holidays.
- 4.3.4.2 Contractor, or Contractor's authorized agent, must respond back within four (4) hours after receiving a given request for no-cost, basic technical support services, not including Saturdays, Sundays, or Holidays.
- 4.3.5 Maintenance/Equipment Services Tasks
- 4.3.5.1 The Contractor must provide maintenance/equipment services for the machine wheel bore that will consist of, but not necessarily be limited to, the following tasks:
  - a. Testing flatness of table parallels
  - b. Boring bar tool tip alignment
  - c. Chuck-jaw plane test
  - d. Chuck-jaw radial
  - e. Screw to nut inspection
  - f. Screw end play inspection
  - g. Bore taper testing
  - h. Bottom bushing adjustment
  - i. Operational cycling
- 4.3.5.2 The Contractor must provide maintenance/equipment services for the machine wheel press that must consist of, but not necessarily be limited to, the following tasks:
  - a. Check hoses and electrical lines are free of twist and chafing over entire range of operation after start-up.
  - b. Check all hydraulic connections are properly tightened, aligned, and secured.
  - c. Check hydraulic pump and system are properly supported and fastened.
  - d. Moving abutment and tie bars are properly aligned.
  - e. Swinging yoke, tooling, and ram extensions are properly aligned and operate smoothly.
  - f. Wheel elevators operate smoothly and evenly.
  - g. Check all movable components for freedom of movement without binding.



- h. Pneumatic system for ram extensions operating smoothly and without leaks.
- i. All terminals, operator devices, switches and solenoids properly tagged.
- j. Machine, motors, and all cabinets properly grounded.
- k. All circuits fused with proper class and rated fuses.
- I. All transformers and motors properly connected.
- m. All wire terminal connections tight and properly insulated.
- n. All sealtight connectors supplied with sealing rings and fully tightened.
- 4.3.5.3 The Contractor must provide maintenance/equipment services for the wheel truing (including all attachments) system that must consist of, but not necessarily be limited to, the following tasks:
  - a. Hydraulic Oil level.
  - b. Gear Oil.
  - c. Hydraulic filter.
  - d. Grease all Nipples on wheel truing machine.
  - e. Hydraulic system for leaks.
  - f. Friction drive rollers and replaced when worn out.
  - g. Tool Slide.
  - h. Tool Ram wipers.
  - i. Hold-down Unit.
  - j. Tails stock for head worn out and holding pressure.
  - k. Axial Guide roller.
  - I. Sliding Rail.
  - m. Belt drives for chip damage and belt tightness.
  - n. Back Lash on two Axes.
  - o. Chip conveyer and chip crusher, greased, lubricated and inspected.
  - p. Calibration using calibration Wheel.
  - q. Cutting one axle after preventive maintenance and calibration.
  - r. Shunter: Hydraulic, Batteries, hoses and toque on rail wheels.
  - s. Accu Max dust collector filters should be inspected.
  - t. Measuring Wheel should be inspected.
  - u. CNC battery should be inspected and changed when needed.
  - v. Cutting tools should be inspected.
  - w. Runout test should be performed on drive rollers, guide rollers.
  - x. Check for chip damage on cables, belts, etc.
  - y. Cabinet Air filters should be checked and replaced when needed.
- 4.3.5.4 All maintenance/service tasks must be presented to the CTA prior to any services performed by the Contractor.



- 4.3.5.5 At the conclusion of the maintenance/equipment service the Contractor must provide to the CTA representative a detailed, itemized report that includes, but not necessarily be limited to:
  - a. All repairs made.
  - Procedures and tests conducted, and test readings performed and recorded.
  - c. All results of test performed including the results of any audible testing performed.
  - d. Parts (part description, part number, quantities) repaired or replaced.
  - e. Cost estimate of suggested or recommended for future work.

### 4.4 PERFORMANCE REQUIREMENTS N/A

#### 4.5 SAFETY REQUIREMENTS

4.5.1 The Contractor must submit a "Safety Process Plan" detailing the work safety practices that must be enforced while on the CTA property or within a CTA-owned facility. The Contactor must submit a list of approved Personal Protective Equipment (PPE) that will be utilized during the procedures in the "Safety Process Plan". All PPE must be provided by the Contactor.

### 4.6 WARRANTY INFORMATION

- 4.6.1 Services, parts, and technical support must carry a Manufacturer's warranty to be free from defects in material and workmanship for the standard warranty period.
- 4.6.2 The Contractor agrees to promptly correct by repair or replacement any defect or failure of compliance that may develop within the standard warranty period. Any part or component replaced under this warranty extends the original standard warranty an additional standard warranty period.
- 4.7 DELIVERY, STORAGE, HANDLING N/A

### 4.8 <u>APPROVED AND NON-APPROVED ITEM INFORMATION</u>

4.8.1 The Contractor must only furnish and deliver CTA approved items under the terms of a given Contract. Should a potential Contractor wish to offer for CTA consideration an alternate item not currently approved, the potential Contractor may coordinate the delivery of a sample to be tested with the Procurement Administrator or Buyer. The CTA's User-Group approval will be final.



4.8.2 The time required for reviewing and/or testing each item offered will vary and depend on the applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future Contract.

### 4.9 ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

4.9.1 Potential Contractors requiring any additional information must contact the CTA Procurement Administrator or Buyer listed in the Contract Documents. Potential Contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential Contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be in violation of the provisions set forth in the Contract Documents.

#### 5. CHICAGO TRANSIT AUTHORITY CONTRACT WORK INSTRUCTIONS

- 5.1 INSTALLATION N/A
- 5.2 TESTING AND COMMISSIONING N/A
- 5.3 FINAL INSPECTION
- 5.3.1 The CTA Manager or designee will perform an inspection of the services based on established standard criteria along with this specification.
- 5.3.2 If the CTA Manager or designee deems any of the Contractor service work unsatisfactory the Contractor must bring the equipment to a satisfactory status within five (5) business days at no cost to the CTA.
- 5.4 FINAL ACCEPTANCE
- 5.4.1 The CTA Manager or the CTA's Contract Manager will issue final acceptance via email to the Contractor acknowledging the services have been completed as expected by the CTA.
- 5.5 DEMOLITION, STORAGE, AND REMOVAL N/A
- 6. APPENDIX N/A





### **DISTRIBUTION LIST:**

Sr. Mgr., Engineering & Technical Services – Rail Mgr., Rail Maintenance

### REVIEWER / Writer(s):

BB/bb - Initial Specification - 12/01/15
BB/bb - 2nd Revision - 07/01/22