

DEPARTMENTAL INPUT
CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

☒ New ☐ OTR ☐ Sole Source ☐ Bid Waiver ☐ Emergency Previous Contract/Project No. n/a
Contract
☐ Re-Bid ☐ Other LIVING WAGE APPLIES: ☐ YES ☒ NO
Requisition No./Project No.: RQMT1800009/FB-00743 TERM OF CONTRACT 1 YEAR(S) WITH 0 YEAR(S) OTR

Requisition /Project Title: Railcar Wheel Press Machine

Description: Invitation to Bid for the removal of an existing Railcar Wheel Press Machine and the purchase of new Railcar Wheel Press Machine.

Issuing Department: DTPW Contact Person: Daniel Wilson Phone: 305-884-7519
Estimate Cost: 1,000,000
Funding Source: GENERAL FEDERAL OTHER
PTP

ANALYSIS

Commodity Codes:	<u>94061</u>				
Contract/Project History of previous purchases three (3) years Check here <input checked="" type="checkbox"/> if this is a new contract/purchase with no previous history.					
	<u>EXISTING</u>	<u>2ND YEAR</u>	<u>3RD YEAR</u>		
Contractor:					
Small Business Enterprise:					
Contract Value:	\$	\$	\$		
Comments:					

Continued on another page (s): ☐ YES ☒ NO

RECOMMENDATIONS

	Set-aside	Sub-contractor goal	Bid preference	Selection factor
SBE				
Basis of recommendation: <div style="border: 1px solid black; height: 30px; width: 100%;"></div>				
Signed: <u>Brian Webster</u>		Date sent to SBD: <u>01/23/2018</u>		
		Date returned to DPM: <div style="border: 1px solid black; height: 20px; width: 150px;"></div>		

SECTION 2 - SPECIAL TERMS AND CONDITIONS

2.1 Purpose

Miami-Dade County ("the County") solicits bids to remove and replace one (1) Railcar Wheel Press Machine, as herein specified, for the Miami-Dade County Department of Transportation and Public Works ("DTPW").

2.2 Term of Contract

This contract shall commence on the first calendar day of the month succeeding approval of the contract by the Board of County Commissioners, or designee, unless otherwise stipulated in the Blanket Purchase Order issued by the Internal Services Department, Procurement Management Services Division. Contract commencement is contingent upon the completion and submittal of all required documents. The contract shall expire on the last day of the twelfth month.

2.3 Pre-Bid Conference and Site Visit (Recommended)

2.3.1 A pre-bid conference and site visit will be held on the day and at the time posted in BidSync, at the William Lehman Operations and Maintenance Center located at 6601 NW 72 Ave, Miami, FL 33166, to discuss the special conditions and specifications included within this solicitation and view the work site. It is highly recommended, but not mandatory, that a representative of interested firms attend. The "Cone of Silence" will be lifted during the conference and site visit.

2.3.2 Bidders are advised to examine the solicitation documents and site conditions carefully and be thoroughly aware of all requirements that may in any manner affect the work required. No additional allowances will be made because of lack of knowledge of the terms, conditions, specifications and site conditions. Bidders must bring this solicitation document to the conference as additional copies will not be available. Representatives from the County will be present to discuss this solicitation.

2.4 Method of Award

Award of this contract will be made to the responsive and responsible Bidder whose offer represents the lowest firm fixed price for the Work identified in this solicitation, and who meets the qualifications listed below. **Bidders shall complete all forms/affidavits as required bid submission documents.**

Minimum Requirements:

2.4.1 Bidder shall be the manufacturer of the system, or an approved dealer of a *manufacturer*. If the Bidder is the manufacturer of the system, the Bidder shall submit a letter on company letterhead attesting they are the manufacturer. If the Bidder is a dealer of the manufacturer of the system, the Bidder shall submit authenticating documentation from the manufacturer of their status as an approved dealer.

2.4.2 Bidder shall submit the contact information of three references from customers who have purchased similar systems in a Rail Vehicle System environment. These references shall agree to communicate to the County their experience with the Bidder's system. During evaluation, the County may request additional references if any of the initial references are not satisfactory to the County.

- 2.4.3 Bidder shall submit proof that the system or a similar system to the one offered by the Bidder has been in satisfactory service with a transit agency or equal in the United States for at least six (6) years.
- 2.4.4 Bidder shall submit the manufacturer's standard information sheets, catalogues, brochures or other supporting documentation to demonstrate the system offered meets or exceeds the specifications herein. Bids submitted with supporting documentation containing information indicating the system does not meet the specifications herein must be accompanied by a letter on the Bidder's company letterhead identifying those differences and describing how compliance with the required specifications will be accomplished.
- 2.4.5 Bidder shall submit factory and post installation test procedures.
- 2.4.6 The Bidder shall submit, a recommended Spare Parts List, with pricing, as applicable at the time of bid submission.
- 2.4.7 Failure to meet these requirements may result in Bidder's offer being rejected.

2.5 Method of Payment

- 2.5.1 The awarded Bidder shall receive a single payment in the full amount due at the time of Final Completion, in accordance with the awarded Bidder's bid proposal, Attachment A, as it may have been adjusted at the time payment is due.
- 2.5.2 The County's authorization of the payment request is subject to the Awarded Bidder's satisfactory completion of the contract requirements, the County may suspend or reduce the payment after finding the Awarded Bidder failed to comply with any material requirement of this contract.

2.6 Schedule

The awarded Bidder shall submit a bar chart project schedule to DTPW for approval within 15 working days after Notice to Proceed ("NTP"). The project bar chart schedule shall include but not be limited to; mobilization, lead times, fabrication, factory inspections, installation, testing, training and turnover of required documentation.

2.7 Liquidated Damages

2.7.1 Time is of the Essence

1. Upon failure to provide the County an accepted system in accordance with best commercial practices, excellent ready to work condition, and full compliance with the specifications and requirements within the period stipulated in Section 3 herein, **the awarded Bidder shall be subject to charges for liquidated damages in the amount of \$1,867.00 for each and every calendar day** that the system is not accepted by the County, after the contract term and until the County certifies in writing the work is Substantially Complete. This charge for liquidation damages is in addition to other remedies and timetable requirements listed herein.
2. Further delay after Substantial Completion will result in the Awarded Bidder being liable for any and all actual damages incurred by the County as a result of the Awarded Bidder's failure to complete all Work (including Punchlist Work), by the Contract completion date including any extensions of time. Actual damages shall include, but shall not be limited to:

- a. Cost increases in the completion and subsequent operation of the County's operations;
- b. Unreasonable inconvenience to the public and impacts to private property resulting in claims against the County;
- c. Increased costs for Contract administration;
- d. Failure to meet Contract Milestones; and
- e. Delays and increased costs to other Awarded Bidders, resulting in claims against the County.

2.7.2 Description of LDs

1. If the Awarded Bidder fails to complete the Work, or any Element or portion thereof, by end of the contract term, LDs will be due in the amount set forth in the above paragraph.
2. In no event shall the period required to remove the existing equipment and place in service the new equipment exceed 20 calendar day. For every day of delay the awarded Bidder fails to start service of the new equipment, beyond 20 calendar days, the award bidder shall be subject to charges for liquidated damages in the amount of \$1,867.00.00.
3. The accrual of LDs on an element of the work will terminate upon DTPW's issuance of a Certificate/Letter of Substantial Completion for the Work.
4. The LDs specified in the contract do not include any, and shall not be construed as, penalties.
5. The amount of LDs set forth in the work completion schedule represents a good faith estimate as to the actual potential damages The County would incur as a result of the delay in completion of the work or elements thereof.

2.8 Standard Work Day

- a. Any provisions applicable to a **Standard Work Day** set forth in the Contract Documents will apply to this Paragraph, and is hereby incorporated by reference.
- b. Unless explicitly specified otherwise herein, a **Standard Work Day is defined as Monday through Friday, 7:00 AM to 5:00 PM, excluding holidays.**

County Holidays are:

New Year's Day
Martin Luther King, Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veterans Day
Thanksgiving
Day after Thanksgiving

2.9 Work Performed Outside of Regular Work Day

When Work is to be performed during hours other than the Standard Work Day, the Awarded Bidder shall notify the County in writing not less than **twenty-four (24) hours** in advance, unless such Work is to be performed on Saturdays, Sundays or County holidays, in which case such notice shall not be less than **seventy-two (72) hours** in advance.

2.10 Prices

The price(s) bid by the Awarded Bidder shall remain fixed and firm during the term of contract. The price(s) offered shall include all labor, material, equipment, overhead, profit, and all other cost required to perform the Work.

2.11 Errors, Omissions, Interpretations

2.11.1 Awarded Bidder shall carefully and continuously study and compare all Contract Documents; and verify all figures in the Contract Documents before laying out the Work.

2.11.2 Request for Information, Notification and Awarded Bidder Performance:

- A. Should it appear that the Work to be done, or any of the matters relative thereto, is not sufficiently detailed or explained in any the County-furnished Contract Documents, Awarded Bidder shall submit a Request for Information (RFI), in writing, asking for such further written explanations as may be necessary. Awarded Bidder shall conform to the explanation provided.
- B. Awarded Bidder shall promptly notify the County of all Deficiencies (including inaccuracies and inconsistencies) it may discover in the County-furnished Contract Documents, and obtain specific instructions in writing regarding any such Deficiency, before proceeding with the Work affected thereby.
- C. Omission of any technical provisions in the Contract Documents, or the misdescription of details of Work which are necessary to carry out the intent of the County-furnished Contract Documents, or which are customarily performed, shall not relieve Awarded Bidder from performing such omitted Work (no matter how extensive) or misdescribed details of the Work. Any such omitted or misdescribed Work shall be performed as if fully and correctly set forth and described in the technical provisions of the Contract Documents, without entitlement to a Contract Modification hereunder.

2.12 Performance and References

Awarded Bidder shall perform all surveying necessary for its performance of all elements of the Work, and as required by the Contract Documents. The Awarded Bidder shall preserve all survey references and marks ("Survey References") for the duration of their usefulness. If Awarded Bidder loses or disturbs any Survey References and the County needs to replace them, such replacement shall be at the sole expense of the Awarded Bidder.

2.13 Alternative Codes and Standards

Codes and Standards not in accordance with those contained in the Contract shall not be used unless accepted by the Project Manager. If the Awarded Bidder wishes to utilize codes or standards not specified in the Contract, Awarded Bidder shall submit for acceptance, sufficient information for the Project Manager to determine Equivalency. Information shall include, but not be limited to, detailed comparison of the Substitute standard/code, the rationale for Substitution, and whether it meets or exceeds the existing standard/code specified in the Contract.

2.14 Authority and Responsibility of the County's Project Manager

- 2.14.1 The County's Project Manager has the authority and responsibility to exercise all powers, rights, and/or privileges that have been lawfully delegated to the Project Manager by the County in all matters relating to or affecting the Work and this Contract. Except as expressly specified in this Contract, the Project Manager may delegate, in writing, specifically described authority and responsibility within the scope of its authority and responsibility to Authorized Representatives.
- 2.14.2 The Project Manager is the County's primary Authorized Representative, and is the only person authorized to delegate authority to any other Authorized Representative(s).
- 2.14.3 The Project Manager's delegation of responsibility and authority to other Authorized Representative(s) shall be limited to specifically-defined authority and responsibilities. The authority, responsibilities and limitations of any Authorized Representative shall be described in the Project Manager's notice to the Awarded Bidder designating the Authorized Representative.
- 2.14.4 Nothing in this Contract shall be construed to bind the County for acts of any the County employee or any other person, or for the acts of the Project Manager or any other Authorized Representative, including its Contract Manager, that exceed the authority delegated to them herein or in any other written delegation.

2.15 Awarded Bidder Notices to the County

All Notices to the County under this Contract shall be to the County's Project Manager for the subject matter of the Notice, with a copy to the Contracting Officer. No notice shall be effective unless it was delivered to the Project Manager and to the Contracting Officer as provided in this Contract.

2.16 Overview of Awarded Bidder's Responsibilities

- 2.16.1 Awarded Bidder shall complete the Project as designed in a timely manner, in accordance with all industry practices generally accepted as standards of the industry in the State of Florida, in a good and workmanlike manner, free from defects.
- 2.16.2 Compliance with Requirements – Awarded Bidder shall provide all materials and undertake all efforts necessary or appropriate (excluding only those materials, services and efforts that the Contract Documents specify will be furnished by the County or other persons) to construct the Project in accordance with the requirements of the Contract Documents, the Schedule, all applicable Laws, all Governmental Approvals, the County-Approved Quality Assurance & Quality Control Plans, Awarded Bidder's approved Safety Program, and all other applicable safety, environmental and other requirements, taking into account Right-of-Way constraints, if applicable, and other physical limits resulting from constraints affecting the Project, so as to achieve Substantial Completion and Final Acceptance and to perform all required tests by the deadlines specified herein, and otherwise to do everything required by and in accordance with the Contract Documents.
- 2.16.3 Professional Qualifications – Awarded Bidder shall perform the Work under the supervision of persons licensed to practice the applicable function/profession in the State of Florida, by personnel who are careful, skilled, experienced and competent in their respective trades or professions, who are professionally qualified to perform the Work in accordance with the Contract, and who shall assume professional responsibility for the accuracy and completeness of the Work prepared or checked by them.

- 2.16.4 Governing Dimensions – Before commencing any contracted work, Awarded Bidder shall verify all governing dimensions at the Worksite, examine all adjoining work and activities that may have an impact on Work, and ensure that the Contract Documents (and any other documents related to the Work) accurately depict all governing and adjoining dimensions.
- 2.16.5 Means and Methods – Awarded Bidder shall be solely responsible for the performance of its Work in accordance with its own means, methods, sequences, and procedures, and for coordination of all portions of its Work in compliance with the Contract.
- 2.16.6 Performance During Disputes – At all times during the term hereof, including during any Dispute, Awarded Bidder shall perform as directed by the County, and shall comply with all provisions of the Contract.
- 2.16.7 Subcontractors & Suppliers – Awarded Bidder shall be responsible for the acts and omissions of its Subcontractors and Suppliers.
- 2.16.8 Assistance to the County – Awarded Bidder shall provide such assistance as is reasonably requested by the County in prosecuting and defending Environmental lawsuits in any and all matters relating to the Work. Such assistance may include providing information and reports regarding the Work, as well as executing declarations and attending meetings and hearings. In no event shall the Awarded Bidder be required to provide legal services.
- 2.16.9 Cooperation – Cooperate with the County and its Authorized Representatives, in their review(s) and/or inspection(s) of any portion or phase of the Work, and other matters relating to the Work.
- 2.16.10 Mitigation – Mitigate Delay in all circumstances, to the extent reasonably possible, including the re-sequencing, reallocating or redeploying of its forces to other work, as appropriate.

2.17 Awarded Bidder's Representations, Warranties and Covenants

Awarded Bidder represents, warrants and covenants for the benefit of the County that:

- 2.17.1 Status – If it is a corporation, limited partnership, general partnership, and/or joint venture, it is duly organized, validly existing and in good standing under the Laws of its jurisdiction of formation, and has full power and authority to own and operate its business and properties and perform the Work within the State of Florida.
- 2.17.2 Review of Information and Inspection of the Worksite(s) – It has, in accordance with prudent and generally accepted engineering and industry practices:
- A. Reviewed all of the information provided in the Contract (including reports provided by the County);
 - B. Inspected and evaluated the Worksite(s) and surrounding locations to the extent the Awarded Bidder deems necessary or advisable for performing all portions/phases of the Work under the Contract. These inspections and evaluations include without limitation:
 1. The character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Worksite(s), including review of the Contract Documents provided by the County.
 2. Conditions bearing upon transportation, disposal, handling, and storage of materials, Goods, and Equipment;

3. The availability of labor, water, electric power, and roads;
4. Uncertainties of weather, or physical conditions at the site;
5. The conformation and conditions of the ground;
6. The character of Equipment and facilities needed preliminary to and during Work performance; and
7. Conditions bearing upon security and protection of material, Goods, Equipment, and Work in progress.

2.17.3 Physical Requirements – As a result of its inspection and examination of the Worksite(s), and other related and surrounding sites and conditions, it is familiar with and accepts the physical requirements of the Work.

2.17.4 Feasibility – As a result of its review of all the information and its inspection and examination of the Worksite(s), it has evaluated the feasibility of performing the Contract within the Contract Time and for the Total Contract Price, and has reasonable grounds for believing and does believe that such performance, including achievement of Substantial Completion of the Project within the Contract Time, for the Total Contract Price is feasible and practicable.

2.17.5 Permits and Governmental Approvals – Based upon its review of the Contract Documents, it shall be able to obtain and keep in effect throughout the Contract Time all permits and other Governmental Approvals the Awarded Bidder is obligated to obtain in accordance with the Contract.

2.17.6 Difficulty and Cost of Work – It has estimated the difficulty and cost of successfully performing the Work, and based upon that estimate has concluded that it can successfully perform the Work at the Total Contract Price.

2.18 Independent Contractor

2.18.1 Awarded Bidder, and its Subcontractors and Suppliers of any tier, are Independent Contractors, and nothing in this Contract shall be construed to create the relationship of agent, servant, employee, partnership, joint venture or other association as between Awarded Bidder and the County. The employees and agents of one party shall not be, or be construed to be, the employees or agents of the other party for any purpose whatsoever.

2.18.2 Awarded Bidder, as an Independent Contractor, shall have responsibility for and control over the details and means for performing the Work, provided that Awarded Bidder is in compliance with the terms of this Contract. Anything in this Contract that may appear to give the County the right to direct Awarded Bidder as to the details of the performance of the Work, or to exercise a measure of control over Awarded Bidder, shall mean that Awarded Bidder shall follow the desires of the County only as to the intended results of the Work.

2.19 Awarded Bidder's Representative

2.19.1 Awarded Bidder shall have a Representative (or Project Manager) with full authority to represent and act for the Awarded Bidder. Prior to the County's issuance of a Notice to Proceed (NTP), Awarded Bidder

shall submit (for the County's review and acceptance) the name, qualifications and experience of its proposed Awarded Bidder's Representative.

2.19.2 Awarded Bidder's Representative shall act for the Awarded Bidder in all matters concerning the Work, and, subject to all requirements of this Contract, shall have the following authority and obligations:

- A. Ability to so organize the Work, and the Work of its Subcontractors, to complete the Work in accordance with the Contract and the Critical Path Schedule.
- B. Ability to delegate defined authority to other Awarded Bidder personnel (who thus also become Awarded Bidder's Representatives, as provided in this Contract, to the extent specified), subject to written notice to, and approval by, the Project Manager.
- C. During performance of the Work, Awarded Bidder's Representative shall be present at the Worksite, or have its fully-empowered delegate present at the Worksite, at all times that any Work is in progress or at any time any employee or Subcontractor of the Awarded Bidder is present at the Worksite.

2.20 Change in Awarded Bidder's Representative and Key Personnel

The Awarded Bidder shall provide the County with sufficient notification of a change to key personnel. The Awarded Bidder shall not reassign key personnel to other projects until a satisfactory replacement has been assigned.

2.21 Removal of Awarded Bidder Personnel

The Project Manager may require the Awarded Bidder to remove any person assigned by the Awarded Bidder, or by any Subcontractor or Supplier, to perform Work or furnish Equipment under the Contract, if the Project Manager considers such removal in the best interest of the County and the Work. The Project Manager's decision to require Awarded Bidder to remove any Awarded Bidder personnel, including Awarded Bidder's Representative, shall be final and binding on the Awarded Bidder. Upon such direction, Awarded Bidder shall remove the person(s) and resolve all employment or contractual issues at no cost or expense to, and shall fully indemnify, the County. Any person(s) removed for any reason shall not be re-employed on any other the County project.

2.22 Performance of Work

- 2.22.1 Awarded Bidder shall perform all Work in a skillful and workmanlike manner. All workers shall have sufficient skill and experience to perform the Work assigned to them.
- 2.22.2 All subcontracting by the Awarded Bidder shall be in strict accordance with this Contract.
- 2.22.3 The Awarded Bidder shall coordinate the Work performed by its Subcontractors and Suppliers, and be fully responsible to the County for all acts and omissions of Subcontractors, Suppliers and their employees. Any provision of the Contract referring to the acts or omissions of the Awarded Bidder shall also refer to and include the acts and omissions of all Subcontractors and Suppliers.
- 2.22.4 If any portion of the subcontracted Work is not performed in accordance with the Contract, or if a Subcontractor or Supplier commits or omits any act that would constitute a breach of the Contract, the Awarded Bidder shall cure the breach, and at the direction of the Project Manager, shall replace the Subcontractor or Supplier. The Subcontractor or Supplier shall not be employed again on the Work.

2.23 Cooperation and Coordination with Other Awarded Bidders and/or County Operations

- 2.23.1 The County reserves the right and may undertake or award other contracts for additional Work on or near the Worksite.
- 2.23.2 Awarded Bidder warrants that it has carefully reviewed the Contract Documents and all other pertinent information made available by the County that relate to the nature and scheduling of other contracts that may be awarded, and to constraints related to the County operations, and in submitting its bid/proposal and executing this Contract, has taken into account the need to coordinate its Work with that of other Awarded Bidders and/or the County Operations.
- 2.23.3 It is the express obligation and duty of the Awarded Bidder under the Contract to coordinate its Work with the work of others. The following shall apply:
- A. Awarded Bidder shall not have exclusive access to or use of Work areas or the Worksite. The County may require that Awarded Bidder use certain facilities and areas concurrently with others.
 - B. The County will endeavor to advise the Awarded Bidder of the other known parties, including the County Operations.
 - C. Awarded Bidder shall cooperate and communicate with any other Awarded Bidder performing Work that may connect, complement, and/or interfere with the Awarded Bidder's Work, and resolve any disputes or coordination problems with such Awarded Bidder.

2.24 Awarded Bidder Dependency on Work by Others

If any part of Awarded Bidder's Work depends on the work of any other Awarded Bidder or the County for proper execution or results, prior to proceeding with its own Work, Awarded Bidder shall notify the County of any discrepancies, defects, or failures to perform or complete said other work that would preclude or hinder the proper execution or achievement of the Awarded Bidder's Work.

2.25 Coordination Meetings

Awarded Bidder's Representative (or its fully-empowered delegate) shall attend such meetings and conferences, including a pre-work meeting, arranged by the County for the purpose of coordinating the Work. Attendance to such meetings and conferences by Awarded Bidder's Representative is considered a basic part of the Work, and thus Awarded Bidder shall not be entitled to any additional compensation from the County for such attendance.

2.26 Clean Up

- 2.26.1 Throughout all phases of contracted work, and until Final Acceptance of the Work, Awarded Bidder shall keep the Worksite, including storage and laydown areas used by Awarded Bidder, clean and free from rubbish, graffiti, and debris.
- 2.26.2 Before completing the Work, Awarded Bidder shall remove from the Worksite any rubbish, tools, and equipment that are not the property of the County.

- 2.26.3 Upon completing the Work, Awarded Bidder shall leave the Worksite in a clean, neat, and orderly condition satisfactory to the County.

2.27 Disposal of Waste

Unless otherwise specified in the Contract, Awarded Bidder shall make its own arrangements for disposing of waste and excess substances generated from Awarded Bidder's performance of the Work at a legal disposal site outside the Worksite, and shall pay all associated costs and obtain necessary permits, if any.

2.28 Additional Work by Awarded Bidder

Awarded Bidder shall not perform work in addition to the Work described in the Contract Documents. Any additional Work must be authorized by the County pursuant to a Contract Modification.

2.29 Unauthorized Work by Awarded Bidder

Unauthorized Work will not be paid for, will not receive an extension of Contract Time, and may be ordered removed at the Awarded Bidder's sole expense. The failure of the County to order the removal of unauthorized Work shall not constitute acceptance of such Work, nor shall it relieve the Awarded Bidder from any liability on account thereof. If the Awarded Bidder does not comply with an order of the County to remove unauthorized Work, the County may remove the Work at the Awarded Bidder's sole expense.

2.30 Conformance with Plans and Variations

- 2.30.1 All Work upon completion shall conform to the lines and elevations shown in the Contract Documents, to the extent such is made available.

- 2.30.2 Awarded Bidder shall report any variation to the County in writing, and may request approval of a variation from the Project Manager. If the Awarded Bidder fails to report or does not obtain approval of variations by the County, the Awarded Bidder shall correct the Work, and/or replace such Work to comply with the requirements of this Section, at its own expense.

- 2.30.3 Before commencing the Work, the Awarded Bidder shall verify all governing dimensions at the Worksite and shall examine all adjoining Work on which its Work is in any way dependent, according to the Contract Documents. The Awarded Bidder shall notify the County of any defective or non-conforming governing and adjoining dimensions that are observed before the Awarded Bidder begins that part of the Work.

2.31 Factory Acceptance Test

DTPW requires a Factory Acceptance Test (FAT) for the specified equipment. The Awarded Bidder shall demonstrate that the system design and manufacturing meets the contract specifications. The Awarded Bidder shall notify DTPW of the inspection testing date(s) at least thirty (30) calendar days prior to the planned test date to allow DTPW employee(s) time to arrange travel to the Awarded Bidder's facility. The FAT must be conducted formally and be witnessed by the County's Project Manager or authorized representative. If discrepancies are noted regarding the performance or compliance of the equipment to the specification, a formal record of discrepancies and nonconformities will be prepared, along with a plan for corrective action. The Awarded Bidder shall not ship the specified equipment until completing a successful FAT.

2.32 Access to the Worksite

- 2.32.1 The County will, at all times during the Contract Time, have access to the Work at all Worksites, and all documents on which the Work is based.
- 2.32.2 At any time during the Contract Time, upon reasonable notice, the County may review the documents on which the Work is based, inspect the Worksite, and review, inspect and test all Work, Equipment and all other materials wherever located (collectively “**Inspect**” or “**Inspection**”).
- 2.32.3 Such Inspection will be for the sole benefit of the County, and is in addition to those inspections and tests the Awarded Bidder is required to perform as part of its Quality Control responsibility.
- 2.32.4 Except to the extent specified in writing by the County, no Inspection shall be construed as constituting or implying Acceptance, and the County may reject or accept any Work, request Changes, or identify additional Work which must be done at any time prior to Final Acceptance of the Work. The County will not be obligated to make any Inspections and neither the Inspection of the Work, nor the lack thereof, shall relieve the Awarded Bidder of its responsibility for providing the Equipment, and completing all other elements of the Work, in accordance with the terms of the Contract.
- 2.32.5 Provided the County has given the Awarded Bidder reasonable time in its notice to prepare for any Inspection, the County may charge the Awarded Bidder for any additional costs it incurs for the Inspections, when Work is not ready at the time indicated in the notice or when an additional Inspection is necessitated by prior rejection.
- 2.32.6 The County will have access, at all reasonable times, to the Awarded Bidder's documents, calculations, supporting materials, data, and information concerning the Work, including computer programs and printouts, which the County determines are required to review the Work properly and expeditiously.
- 2.32.7 The County may reject as defective all workmanship not conforming to the requirements of applicable Law, and/or the Contract.
- 2.32.8 Awarded Bidder shall not be relieved of obligations to perform the Work in accordance with the Contract Documents by reviews, tests, inspections, statements of no objection, consents or approvals performed by any Persons, or by any failure of any Person to take such action. The reviews, inspections, tests, statements of no objection, consents, and approvals conducted by the County, its Authorized Representatives, and others Persons, do not constitute acceptance of the materials or Work reviewed, tested or inspected, and the County may reject or accept any Work or materials, request changes and/or identify additional work which must be done at any time prior to Final Acceptance, whether or not previous reviews, inspections, tests or approvals were conducted by the County, its Authorized Representatives, or any such other Persons.

2.33 The County's Remedies for Deficient Work

If any Work provided by the Awarded Bidder is Deficient, the County, by providing written notice to Awarded Bidder of such Deficiencies, may thereafter do any or all of the following:

- a. Require the Awarded Bidder to promptly segregate and remove rejected Work from the Worksite at its own expense and without any extension of Contract Time;

- b. Require the Awarded Bidder re-perform such Work and repair or replace the Work, Equipment or other material or items at the Awarded Bidder's own expense;
- c. Withhold payment otherwise due to Awarded Bidder hereunder;
- d. Seek Liquidated Damages as provided in the Special Provisions;
- e. Have such Work performed and Equipment provided by others at the sole expense of the Awarded Bidder;
- f. Terminate the Contract and obtain the remedies provided for therein. Corrected or re-performed Work and replaced or repaired Equipment shall be subject to all of the requirements of the Contract, including without limitation all standards of performance set forth in this Contract.

2.34 Work Performed without Inspection

- 2.34.1 At all times before Final Acceptance, Awarded Bidder shall remove or uncover such portions of the finished contracted Work as directed by the County. After examination by the County, Awarded Bidder shall restore the Work to the standard required by the Contract Documents. If the Work exposed or examined is not in conformance with the requirements of the Contract Documents, then uncovering, removing and restoring the Work, and recovery of any delay to any Critical Path occasioned thereby, shall be at Awarded Bidder's cost, and Awarded Bidder shall not be entitled to any time extension.
- 2.34.2 Any Work done or materials used without adequate notice to and opportunity for prior inspection by the County, or without inspection in accordance with the County-Approved Quality Assurance & Quality Control Plans, may be ordered uncovered, removed or restored at Awarded Bidder's cost and without a time extension, even if the Work proves acceptable after uncovering.
- 2.34.3 Except with respect to Work done or materials used as described in the foregoing Subparagraph, if Work exposed or examined under this Section is in conformance with the requirements of the Contract Documents, then any delay in any Critical Path from uncovering, removing and restoring Work shall be considered a delay caused by the County, and Awarded Bidder shall be entitled to a Change Order for the cost of such efforts and recovery of any delay to the schedule occasioned thereby.

2.35 Notice

Awarded Bidder shall provide Notice of Substantial Completion to the Project Manager when all of the following have occurred with respect to the Work or for an element thereof:

- a. Awarded Bidder has completed the Work (except for Punch List items and final clean-up);
- b. Awarded Bidder has ensured that all Work has been performed and substantially completed in accordance with the requirements of the Contract;
- c. All Deficiencies in the Work have been corrected (other than Punch List items);
- d. Awarded Bidder has submitted a completed As Built Schedule (except for Punch List Items); and
- e. The Awarded Bidder has ensured that the Work is ready for operation and may be operated without damage to any other Work or property on or off the Site, and without injury to any Person.

2.36 Post Installation Testing and Inspection

Within a reasonable time after the Awarded Bidder provides the Project Manager with Notice of Substantial Completion of the Work, Awarded Bidder and the County's Authorized Representative shall inspect and test installed equipment to determine its status of completion.

Post installation testing shall include at a minimum, pressing and dismantling a complete wheel and axel assembly. A complete wheel and axel assembly shall be shipped from the Lehman Yard (6601 NW 72 Ave, Miami, FL 33166) to the testing site prior to pre-shipment testing and back upon satisfactory completion of the test; the awarded bidder shall be responsible for all shipping costs.

2.37 Substantial Completion

- (1) The Work shall be deemed Substantially Complete when, in the opinion of the Project Manager, there are no material and substantial variations from the Contract and the Work is fit for its intended purpose. Upon Substantial Completion the Project Manager shall issue a Certificate of Substantial Completion. The issuance of this Certificate shall not relieve the Awarded Bidder from its obligation hereunder to complete the Work.
- (2) When the Awarded Bidder is of the opinion that the Work is Substantially Complete, Awarded Bidder may submit to the Project Manager a written request that the Project Manager inspect the Work so as to determine whether Substantial Completion has been achieved. Upon such request, the County must respond within twenty-five (25) days of its receipt with either (i) a Certificate of Substantial Completion or (ii) an explanation of the reasons why the Work is not Substantially Complete, including a list of open items necessary to achieve Substantial Completion. Nothing in this Paragraph precludes the Project Manager from making a determination of Substantial Completion in the absence of a request therefor by the Awarded Bidder.
- (3) Substantial Completion cannot be achieved until all deliverables including but not limited to training, spare parts, manuals and other documentation requirements of the Contract have been completed or delivered and approved.
- (4) If the County, in its sole discretion, elects not to take possession of the Work upon Substantial Completion, the Risk of Loss remains on the Awarded Bidder until the County decides to take possession of the Work or until Final Completion as defined below.
- (5) The Work remaining after Substantial Completion shall be known as "Punchlist Work." The Punchlist Work shall be limited to minor omissions and defects except the Project Manager may in his sole discretion, include Work which cannot be done until the County or third persons perform other work which is not the Awarded Bidder's responsibility under the Contract. The Project Manager shall issue a Punchlist with the Certificate of Substantial Completion.
- (6) Upon Substantial Completion, the Awarded Bidder shall remove its tools, materials and equipment from the Work Site, except for the tools, materials and equipment needed to complete the Punchlist Work, or unless otherwise authorized in writing by the Project Manager.

2.38 Request for Acceptance of Final Completion

Within **ten (10) Days** after the Awarded Bidder determines that all Work as required in the Contract is fully completed, and all required submissions and deliveries to the County specified in the Contract have been made, it shall give the Project Manager a written Request for Final Acceptance specifying that the Work is

completed, the date on which it was completed and stating:

- (1) All of the Awarded Bidder's and Subcontractors' personnel, supplies, equipment, waste materials, rubbish and temporary facilities have been removed from the Worksite;
- (2) Awarded Bidder has complied with all requirements associated with closeout of the Contract.
- (3) Awarded Bidder has delivered to the Project Manager a Notice of Completion for the Work in recordable form and meeting all statutory requirements.

2.39 Final Completion

- (1) The Project Manager shall advise the Awarded Bidder of the time reasonably required to complete all the Punchlist Work. The time set by the Project Manager to complete Punchlist Work shall be no more than ninety (90) days from the issuance of the Certificate of Substantial Completion. When in the opinion of the Project Manager the Punchlist Work is properly completed, the Project Manager shall issue a Letter/Certificate of Final Completion.
- (2) In the event of an emergency or if the Awarded Bidder fails to diligently perform the Punchlist Work, the County may complete the Punchlist Work, either by its own forces or by other Awarded Bidders. The County's costs thereof will be deducted from the payment due to the Awarded Bidder, except that if the County completes the Punchlist Work because of an emergency, then the amount deducted from the payment shall be based on the Awarded Bidder's costs for completing the Punchlist Work. If such costs exceed the amount due the Awarded Bidder, the Awarded Bidder shall immediately upon demand pay such excess to the County.
- (3) Acceptance of all Work by the County shall occur when in the opinion of the Project Manager, the Work is complete in all respects including any outstanding items contained in the Punchlist provided with the Letter/Certificate of Substantial Completion. Upon Acceptance the Awarded Bidder shall be given a Letter/Certificate of Final Completion.

2.40 Partial Acceptance

If portions of the Work (having independent utility) are completed in advance of the deadlines specified herein, the County shall have the right to accept them in advance of the deadline for completion of the entire Project. Any such partial Acceptance shall follow a procedure similar to that required for Substantial Completion, modified as specified by the Project Manager. The Project Manager will also determine the effect of such partial Acceptance on Awarded Bidder's responsibility for maintenance during work and on its Warranty obligations.

2.41 Responsibility for Maintenance, Loss and Damage

Upon the Project Manager's issuance of a Letter/Certificate of Substantial Completion, the County, shall be responsible for the maintenance, loss, or damage to the Work or any element thereof, except as follows:

- 2.41.1 The Project Manager's issuance of a Letter/Certificate of Substantial Completion will not relieve the Awarded Bidder of its obligations to complete the Work or any element thereof, the non-completion of

which was not disclosed to the County (regardless of whether such nondisclosures were fraudulent, negligent, or otherwise);

- 2.41.2 The Awarded Bidder's action, negligence or breach of this Contract or the warranty causes loss or damage to the Work or any element thereof;
- 2.41.3 The Work or any element thereof remains within the custody or control of the Awarded Bidder, or;
- 2.41.4 Responsibility remains with the Awarded Bidder pursuant to the terms of the Letter/Certificate of Substantial Completion.

2.42 Responsibility to Complete the Work

Notwithstanding any other provision of this Contract that could be interpreted to the contrary (including in Contract Documents of higher precedence), it shall be the Awarded Bidder's continuing responsibility to complete and deliver every element, and the integrated whole, of the Work in accordance with all of the requirements of the Contract. The issuance of a Letter/Certificate of Substantial Completion by the Project Manager for any element, or for the whole of the Work, shall not be construed to relieve the Awarded Bidder of this responsibility, or any part thereof. If, after the issuance of a Letter/Certificate of Substantial Completion, the County discovers any Deficiency, or item not completed or otherwise requiring correction or remedial action, whether or not the item appears on any Punch List or other list of clean up items, the Awarded Bidder shall correct the Deficiency, complete the item or otherwise remedy the condition to bring it in to full compliance with the Contract.

2.43 The County Inspection and Acceptance

- 2.43.1 Awarded Bidder has determined that the entire Work is fully completed, including satisfactory completion of inspections, tests, and documentation, including without limitation the As Built Schedule, specified in the Contract;
- 2.43.2 All Punch List and clean-up items are completed.
- 2.43.3 The Project Manager has received and accepted the assignment of all Subcontractor's, manufacturer's and Supplier's Warranties, all "As-Built" drawings and all other deliverables required under the Contract;
- 2.43.4 All Equipment, special tools, spare parts or other Equipment purchased by the Awarded Bidder as provided in the Contract have been delivered to and accepted by the Project Manager free and clear of Liens;
- 2.43.5 The County will inspect the Work and within **sixty (60) Days** thereafter will either:
 - a. Reject the Request for Final Acceptance, specifying the Deficiencies or uncompleted portions of the Work; or
 - b. Issue an executed **Letter/Certificate of Final Acceptance** and record the Notice of Completion with the County Recorder.
- 2.43.6 If the Project Manager rejects the Request for Final Acceptance, specifying Deficiencies or uncompleted portions of the Work, the Awarded Bidder shall, at its own cost and expense, promptly remedy the Deficiencies or uncompleted portions of the Work. Thereafter, the Awarded Bidder shall again give the

Project Manager a written Request for Final Acceptance of the Work, in accordance with the above process.

- 2.43.7 Any failure by the County to inspect or reject the Work or to reject the Awarded Bidder's Request for Final Acceptance as set forth above shall not constitute or imply Acceptance by the County of the Work for any purpose, nor imply approval of the Awarded Bidder's Request for Final Acceptance.
- 2.43.8 Without limiting any other provision of the Contract relating to continuing obligations that extend beyond Final Acceptance, the Awarded Bidder's responsibility for injury to persons and/or property arising from its duties and obligations under the Contract, shall survive Final Acceptance.
- 2.43.9 Awarded Bidder will not be relieved of its obligations to complete any element of the Work, or any portion or item thereof, the non-completion of which was not disclosed to the County (regardless of whether such nondisclosures were fraudulent, negligent, or otherwise) prior to Final Acceptance of the Contract. Awarded Bidder shall remain obligated after Final Acceptance of the Contract, under this Paragraph and all other provisions of the Contract that expressly or by their nature extend beyond and survive Final Acceptance, to correct all such undisclosed items.

2.44 Warranty

Awarded Bidder warrants that the Work shall be free of deficiencies, shall be fit for use for the intended function, and shall meet all of the requirements of the Contract.

- 2.44.1 Without in any way limiting Awarded Bidder's Warranties with respect to the Work, Awarded Bidder shall obtain from all Subcontractors, manufacturers and Suppliers, and assign and deliver to the County all Warranties, including extended Warranties provided by such Subcontractors, manufacturers and Suppliers and from all other persons extending Warranties.

All such Warranties shall:

- A. Survive Final Acceptance, and all the County and Awarded Bidder inspections, tests and acceptances, and;
- B. Shall run directly to and be enforceable by the Awarded Bidder and the County.

- 2.44.2 Upon receipt from the County of notice of a failure of any of the Work to satisfy any Subcontractor or Supplier Warranty or other obligation, Awarded Bidder shall enforce or perform any such Warranty or other obligation as a part of Awarded Bidder's other Warranty obligations hereunder. The County's rights under this Section shall continue until the expiration of the later of the Awarded Bidder's Warranty (including extensions for rework) or Subcontractor's or Supplier's Warranty or extended warranty. Until such expiration, the cost of any Work (including re-engineering, if applicable) or Equipment (including taxes and shipping) shall be at the sole cost and expense of the Awarded Bidder.

2.45 Commencement and Duration

Warranties shall commence upon the Project Manager's issuance of a **Letter/Certificate of Final Acceptance ("Warranty Commencement Date")** and shall remain in effect until **one (1) year** after the Warranty Commencement Date or such longer period as may be specified in the Contract ("**Warranty Period**"). Subcontractor's, manufacturer's or Supplier's Warranty Periods shall be for the longer of the above stated Warranty Period or the Warranty Period specified in the particular Warranty.

2.46 Warranty Claims

If the County determines that any of the Work contains Deficiencies any time within the Warranty Period, the County will claim and Awarded Bidder shall correct, repair or replace such Work at its sole expense. Awarded Bidder shall respond to the County's Warranty claim within **one (1) working day**, and shall repair the Deficiency within **five (5) Days thereafter**. If the Deficiency cannot be repaired within said five (5) Days, Awarded Bidder, within that ten days, shall submit a schedule for completion of repairs, subject to the acceptance of the Project Manager, and shall diligently proceed to complete the repairs within the approved schedule. If any Deficiency affects operation of the Work, or any essential element thereof, the County may, in its sole discretion, require Awarded Bidder to complete repairs in less than **five (5) Days**.

2.47 Warranty on Corrected Deficiencies

Awarded Bidder's Warranty shall continue, as to each corrected Deficiency, until the later of:

- A. The remainder of the Warranty Period; or
- B. **One (1) year after** Acceptance by the County of any corrected Work.

2.48 The County Right to Correct Deficiencies

If Awarded Bidder fails to remedy Deficiencies or otherwise comply with this Warranty or any other Warranty in this Contract, or fails to propose a timely and adequate remedy, the County, after notice to Awarded Bidder, may perform or have performed by Third Parties the necessary remedy, and the costs thereof shall be borne by Awarded Bidder.

2.49 Emergencies

In case of an Emergency or hazard to health or safety requiring immediate curative action, the County will notify Awarded Bidder, and Awarded Bidder shall immediately take such action(s) as it deems necessary, notifying the Project Manager of the action(s) taken as soon as possible but no later than **one (1) working day** thereafter. If Awarded Bidder does not undertake immediate curative action, the County may without prior notice undertake such action as is necessary to correct the hazard or deal with the Emergency, and the cost thereof shall be borne by the Awarded Bidder.

2.50 No Waiver

Nothing in this Contract shall be construed to constitute a waiver or disclaimer, or limit, negate, exclude or modify in any way any warranty in this Contract.

2.51 Acceptance of Non-Conforming Work

If the Project Manager accepts any nonconforming Work without requiring it to be fully corrected, Awarded Bidder shall reimburse the County a portion of the Total Contract Price in an amount equal to the greater of:

- A. The difference in the value of the Work, plus the present value of additional operating costs, if any, caused by such nonconforming Work; or
- B. Awarded Bidder's cost savings in not correcting the Work. In either case above, Awarded Bidder shall, in addition, reimburse the County's costs to make the determination, including but not limited to staff costs, experts, tests and other actions necessary to make a determination. Such reimbursements shall be payable to the County within **ten (10) Days** after the Awarded Bidder's receipt of the County's demand for payment.

2.52 Other Remedies

The Warranties herein are in addition to all rights and remedies available under the Contract or applicable Law, and shall not limit Awarded Bidder's liability or responsibility imposed by the Contract or applicable Law with respect to the Work, including liability for design defects, latent defects, strict liability, negligence or fraud. To the extent that any Warranty from any person other than the Awarded Bidder would be voided in whole or part by reason of any act or omission of the Awarded Bidder, Awarded Bidder shall be fully liable to the extent of said Warranty.

2.53 Spare Parts

The County's spare parts, if ordered, shall not be used to repair warrantable failures and defects. The security, control, shipping, and disposition of Awarded Bidder owned parts shall be the responsibility of Awarded Bidder. Damage to the County's property caused by the Awarded Bidder shall be the sole responsibility of the Awarded Bidder and shall be corrected at Awarded Bidder's expense.

2.54 Protection

Awarded Bidder shall protect existing structures, equipment and vegetation (collectively "**Existing Improvements**") within and adjacent to the Worksite and shall exercise due caution to avoid damage to such Existing Improvements.

26.2 Repair and Replacement

Unless otherwise provided, Awarded Bidder shall repair or replace all Existing Improvements damaged or removed by Awarded Bidder. Repairs and replacements shall be at least equal to Existing Improvements and shall match them in finish and dimension.

2.55 Responsibility for Work

Except as otherwise specified in this Paragraph, Awarded Bidder shall be solely responsible for Equipment delivered and Work performed until the Project Manager issues a **Letter/Certificate of Substantial Completion**, or **Letter/Certificate of Final Acceptance**, if no Letter/Certificate of Substantial Completion is issued. Partial Substantial Completion of a portion of the Work shall only relieve Awarded Bidder of responsibility for the Equipment delivered and Work performed that are covered by the partial Substantial Completion.

2.56 Awarded Bidder's Worksite Inspection

Awarded Bidder represents that it has inspected the Worksite and surrounding area, and has taken steps reasonably necessary to ascertain the nature and location of the Work to be constructed, and that it has investigated and satisfied itself as to the general and local conditions that could in any way affect the Work or its cost.

2.57 Awarded Bidder's Representation

29.2.1 Awarded Bidder further represents that it has satisfied itself as to the character, quality, and quantity of surface and subsurface substances or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Worksite and a review of all documentation relating to the Worksite and the Work, including, without limitation, the following:

- A. Documents describing any exploratory Work performed by the County;
- B. Reference Documents;
- C. The County-furnished Contract Documents; and
- D. Other information made available to the Awarded Bidder, or available as public record.

2.57.1 Any failure of the Awarded Bidder to take the actions described in this Paragraph shall not relieve Awarded Bidder from responsibility for properly estimating the difficulty and cost of successfully performing the Work or for proceeding to successfully perform the Work without additional expense to the County.

2.57.2 Awarded Bidder is solely responsible for any conclusions or interpretations it makes based on its investigation of conditions affecting the Work, including its interpretation of any Contract Documents and/or any Reference Documents made available by the County.

2.58 Notice of Discovery of Differing Site Conditions

2.58.1 Awarded Bidder shall, before any of the existing conditions are disturbed, provide immediate oral and/or electronic mail notice of the discovery of such conditions to the County's Authorized Representative, followed by written notice to the Project Manager of the discovery within twenty-four (24) hours thereafter, of any of the following subsurface conditions:

- A. **Type 1 Condition:** Subsurface or latent physical conditions at the Worksite differing materially from those indicated in the Contract;
- B. **Type 2 Condition:** Unknown physical conditions at the Worksite of any unusual nature that differ materially from those ordinarily encountered in and generally recognized as inherent in Work of the character provided for in the Contract.
- C. **Type 3 Condition:** Substances that Awarded Bidder believes may be Hazardous Substances that are required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of Law.

2.58.2 If Awarded Bidder encounters substances or conditions during performance of the Work that it reasonably believes to be a Type 1 Condition or Type 2 Condition, Awarded Bidder shall not disturb the condition or interfere with the County's right or ability to investigate, but may continue Work in the area.

2.58.3 If Awarded Bidder encounters substances during performance of the Work that it reasonably believes to be a Hazardous Substance, a Type 3 Condition, Awarded Bidder shall not disturb the condition and shall suspend Work in the immediate area of the suspected Hazardous Substances until the County authorizes it to resume.

2.58.4 The County reserves the right to use other labor forces to investigate and to perform work to determine the nature and extent of any Hazardous substance(s) from the area.

2.58.5 The County will promptly investigate the conditions, and if it finds the conditions do materially differ, or do involve previously unknown Hazardous Substances, and cause a decrease or increase in Awarded Bidder's cost of, or time required for, performance of any part of the Work, that condition shall constitute a Differing Site Condition and the County will make an adjustment in Contract Time and/or Total Contract Price as agreed upon.

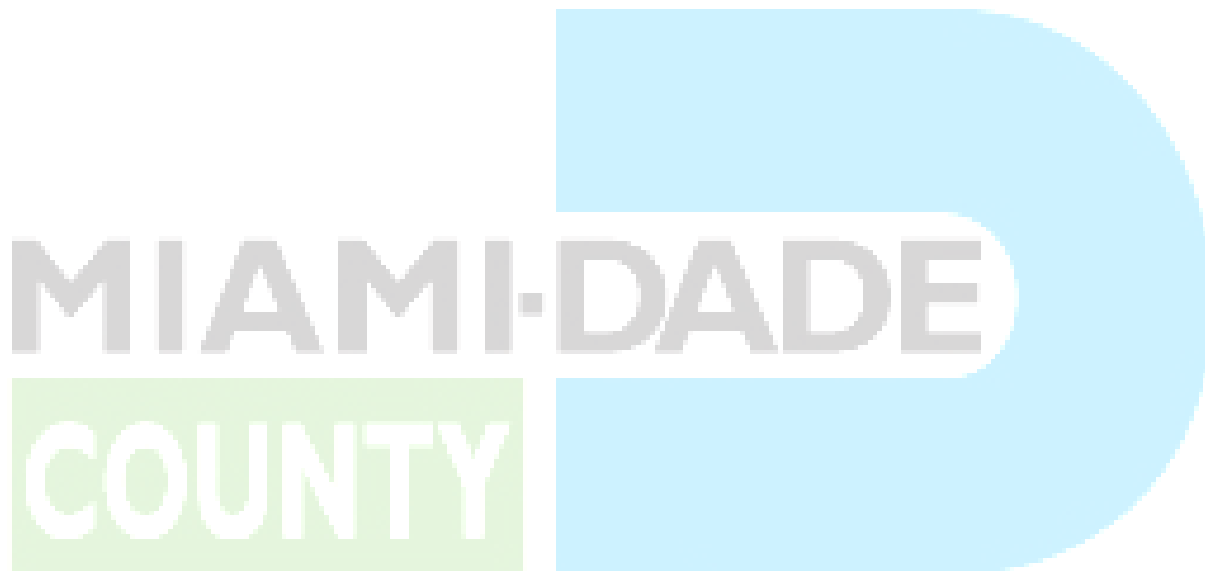
2.59 Claims Regarding Differing Site Conditions

Awarded Bidder shall not be entitled to any remedy for an asserted Differing Site Condition if it does not give the County both:

- A. Timely notice of the asserted Differing Site Condition, as required in this paragraph; and
- B. An opportunity to investigate prior to the asserted Differing Site Condition being disturbed.

2.60 Proceed With Work

If a Dispute arises related to a claim of a Differing Site Condition, Awarded Bidder shall proceed with all Work to be performed under the Contract and shall not be excused from any provision of the Contract, including without limitation, the Scheduled Completion Date.



SECTION 3 – TECHNICAL SPECIFICATIONS

3.1 Scope of Work

Awarded Bidder shall perform the Work as fully described in the Technical Specification, Section 3. The Awarded Bidder shall furnish, construct, and provide construction management work as required to: 1) remove an existing Railcar Wheel Press Machine (see Attachment A); and 2) furnish and install, complete in place, a new Railcar Wheel Press Machine. The new machine is required to support the new railcar procurement of up to 136 cars.

3.2 Removal of existing Wheel Press Machine

The Contractor shall provide all labor, material, and equipment required to remove and relocate an existing Wheel Press Machine located at the installation site of the new Wheel Press Machine. The Contractor will have access to an existing overhead crane, which can be used to transport the existing machine from its installed location to an entry point at a maintenance shop, located at Lehman Yard, 6601 NW 72 Ave, Miami, FL 33166. The Contractor shall bear all responsibility for placing the existing equipment at an outside location, within the William Lehman Center, as approved by DTPW's Project Manager

3.3 Application

The pressing on and off of Heavy rail wheels, bearings, ground rings and gearboxes or parts of gearboxes of the wheel sets as per drawing number D99-61574.

Technical requirements / Wheel set data:

Total Wheel set weight	kg / lbs	max.	2.500 / 5510
Axle lengths	mm / inch	max.	2.500 / 98,4
Wheel diameter	mm / inch	max.	1.100 / 43,3
Seat diameter	mm / inch		120 -160 / 4,72-6,3

3.4 Installation

Complete installation of awarded wheel press machine to include electrical, pneumatic and hydraulic to existing DTPW structure. After completion of installation and testing, Safety certification must be approved by DTPW Engineering.

Twenty-four (24) hour on-call service department to respond in the event of system failures. If unable to resolve remotely, forty-eight (48) hour response with on-site technicians to make necessary repairs.

3.5 Maintenance contract / guarantee claims

DTPW request option for a Maintenance Contract to perform regularly scheduled maintenance to include twenty-four (24) hours, five days a week, response time to minimize machine down time.

3.6 References

Bidders must provide a comprehensive listing of service proven wheel set assembly presses for comparable tasks with a least ten (10) years with favorable feedback.

3.7 Technical availability of wheelset assembly presses

Ensure wheel press availability of 96% when the machine is used properly and all maintenance and servicing measurements are taken into account.

3.8 Description of scope of supply

3.8.1 Base frame

- Closed, very rigid press frame in stress-free annealed welded construction
- Lower part of the press frame with low overall height for optimum access as well as easy loading and unloading of the press station
- Basic inserts for pressing-on and pressing-off with oil-injection (small basic insert with max. force applicable 1000 kN)
- Manually, stepwise positioning of the basic inserts for axial and radial movements
- All foundation anchors, adjusting bolts and shims

3.8.2 Cylinder

- Press cylinder/s of high quality steel, honed cylinder contact surfaces
- Hardened, hard chromium-plated and ground piston rods
- Piston/s with locking element
- Low-wearing and easily interchangeable sealing elements

3.8.3 Hydraulic unit

- Separate hydraulic unit/s for each cylinder, parallel cylinder movement possible
- Oil tank with oil level indicator, fill and vent filter; tank capacity minimum 250 liters
- Drive via variable-speed, axial piston pumps, power control, low-noise pump arrangement in design
- Drive with AC servomotor and converter
- Oil filter with clogging indicator (optical)
- Safety valves for protection of the hydraulic system against overload
- Stepless press force adjustment with pressure proportional valve
- Preselection of the max. admissible press forces
- Pressure gauge
- Piston holding valve for axle fixing in the event of a power failure, for at least 20 min.
- Measuring connections for fault diagnosis

3.8.4 Machine operation

- Automatic-operation, on- and off-pressing operations and positioning of the wheelsets in the press by the wheelset assembly
- Precision hand lever control (joystick) for manual mode

3.8.5 Electrical equipment

- Electric control arranged in closed control cabinet, degree of protection IP 54
- Elapsed-hour meter
- Emergency off button on control desk and the opposite press cylinder

3.8.6 Drive technology

Drive technology of wheelset assembly presses shall be high maintainable and a minimum of interference. Different drive concepts (pneumatic, hydraulic, and electric) are acceptable, Concept should center on the maintenance efforts are minimized and also the maintenance works are significantly facilitated with view to defect location and fault correction.

3.9 Measuring and control device

Pressing process shall be controlled and documented according to the pertinent specifications. In addition, shall be able to program recurring sequences of motions for all work pieces for greater operating efficiency.

Scope of supply:

- Digital length measuring system
- Pressure transducer including pre-amplifier
- measuring and control computer

Hardware:

- Standard industrial PC with operating system Windows 7
- Color LC graphic display, 24" monitor, touch screen
- Two-process system for visualization and control functions
- Profibus connection for all drives and measuring probes
- Management of 999 different work piece parameter sets
- Alphanumeric, splash proof keyboard
- Interfaces: 1 x COM1, 1 x COM2 / R 232, 4 x USB 2.0, 1 x

Ethernet: 10/100/1000 bps

- Hard disk: min. 80 GB, 500 GB optional
- CPU Intel Core 2 Duo P8400, 2 x 2,26 GHz
- DDR2-RAM: min. 2048 MB
- Keyboard installed in a splash-proofed drawer

Software:

- Clear and simple graphic operator interface
- Sequence of operations programmable work-specific as required
- Ram displacement/speed profile appropriate to respective press operation variable for distance and axial and radial eccentricity with filter functions for surface defects
- Display of force-displacement curve on screen and as printout
- Plain text fault diagnosis on screen for machine and control faults

Additional Requirements:

- Measuring cabinet with printer draw in IP 54 (dust-tight design)
- A4 b/w laser printer for printing out data logs
- The operation language is English

3.10 Measuring device

- Heavy duty roll rail guiding system with pre-tensioned carriages, installed at the upper column of the press (x-axis)
- Basic plate for the measuring arm, fixed to the carriages of the x-axis
- Both axis (axially, radially), freely manually moveable

- Absolute encoders for both axis
- Measuring head, hardened, for detection of the running treads and wheel flanges
- Additional measuring function for run out measurements in axial and radial direction of wheel and with brake discs.

3.11 Safety devices

The execution of the entire system including the technical documentation and safety devices conform to the CE Machinery Directive, no other standard considered.

3.12 Software for measuring curve evaluation (AAR S-659, RP631)

Checking of the force-displacement curves with respect to gradient, discontinuity or force reduction shall be carried out automatically by the computer.

This check takes place automatically. A test log is extended by the result of the check of all individual criteria. The software is delivered ready.

3.13 Software for press off test

During the press-off test 48 hours after the pressing-on procedure the specified pressing force will be applied to the wheels while the wheel must not move.

3.14 Tools and engineering for wheel set as per drawing D99-61574

Tools as per nominal diameter of the pressing seats and the bearing seats shall be included

Scope of supply:

- Pressing tools mounted on the main tool of the basic insert
- Pressing tools mounted on pressing cylinder
- Pressing sleeves to protect the axle ends and the axle from damage during process
- Adapters
- Engineering incl. tooling plan
- Pre-acceptance tests at Awarded Bidder facility and final acceptance at customer's site

Material: Heat treated steel or wear resistant plastic

3.15 Wheelset transport carriage with mechanical height adjustment

The wheelset transport carriage shall make sure that the axis wheelset are being held in position as well as being pre-centered during the pressing procedure. It can be moved manually into/out-of the press on running rails which are located in front of the press.

The wheelset carriage can also be used as pre-assembly stand on which the components can be pre-fitted to the axle before pressing. It can be loaded by crane from above outside the press.

Scope of supply:

- Sturdy carriage with four easy running wheels
- Gear box support

- Guide rails to allow radial displacement of the gear box support in relation to the axle supports.
- Clamping arm to avoid the wheelset from tilting during pre-assembly.

3.16 Options

3.16.1 Alternative to 3.2 Wheelset transport carriage

Manipulator to pick up complete wheelsets or axles from the floor or other interface stations, transfer them to the wheelset press for the pressing application, transport the wheelsets and then place them in a designated area.

3.16.2 Electric rotation device for assembled wheelsets

For automatic rotating the work piece during final control of runout of the wheels. If preferred, the wheelset could also be rotated by hand by the operator.

Scope of supply:

- Assembly plate
- Electric motoric rotary drive, installed at the centering device
- Electric equipment
- Servo motor for radial movement

Rotation moment on diameter 1200 mm: appr. 120 Nm

3.17 High pressure pump, automatically operating

To produce an oil pressure bond between the axle seat and wheel hub in order to support and simplify the pressing off operation. The oil pressure separates the fitting area. The hub floats on top of the oil film. Therefore the fitting areas do not get damaged and the demounting force will be reduced.

The automatic activation is part of the pressing program

Technical data:

Operating pressure, max.	bar	max.	2500
Oil tank volume	l		20
Installed power	KW		2,2

Scope of supply:

- Pressure transducer with oil tank, installed at the cylinder column
- Oil filling (mineral oil HLP 46 according to DIN 51525)
- Manometer connection
- Manometer, display zone 0 - 2500 bar, in scales of 50 bar
- One High-pressure hose NW 5 incl. flanged fitting for pressing-off one component.

3.18 Training

Three (3) Training classes will be provided as part of this contract. Each class shall be a minimum of one (1) week in length to ensure complete understanding of the supplied equipment.

3.19 Tryout parts

For optimization of the process factory testing one wheelset, in good condition and geometry as the wheelsets that later have to be pressed later on the wheelset assembly press. The wheelset shall arrive at Awarded Bidder's facility approx. six weeks prior to the pre- acceptance date as agreed upon by contract. The corresponding costs are to be borne by the seller.

3.20 Calibration of the wheelset press

In the event a calibration of the wheelset assembly press is required by the operator or the end-user, this must be effected at the installation location by an external, certified company. The company's manufacturer of the wheelset assembly press is not allowed to effect the calibration.

The presence of the Awarded Bidder's technician if necessary during the calibration and approval of the wheelset assembly press by an external company is permissible.

3.21 Organization

Before starting any Work, the Awarded Bidder shall submit for the County review and acceptance, an organization chart showing the proposed organization established by the Awarded Bidder for the performance of the Work, including:

1. Lines of authority, responsibility, and communication;
2. Office organizations, if any; and
3. Names, titles, and functions of all the Awarded Bidder's key personnel.

3.22 Operating Manuals and Drawings

The awarded Bidder shall provide five (5) hard copies and one (1) electronic copy of operating manuals. One (1) set of electronic preliminary drawings must be submitted and approved by DTPW prior to the fabrication of lifting equipment and commencement of any work. DTPW shall have two (2) weeks to review and approve preliminary drawings, followed by two (2) weeks to review and approve any subsequent changes or modifications to the preliminary drawings. One (1) electronic and two (2) hard copies of final drawings shall be submitted and approved by DTPW prior to the release of payment to the awarded Bidder.

3.23 Quality Assurance

The awarded Bidder shall submit and maintain a quality assurance program that will ensure compliance with equipment specifications. The program shall be made available to DTPW Engineering or their designee upon request. Records and standards which provide sufficient evidence of quality, accountability and traceability shall be maintained by the awarded Bidder. DTPW's engineers or designee must have access to maintenance records at all times, and such records shall remain complete and available to DTPW for the duration of the contract. Upon completion of the work the awarded Bidder shall submit to DTPW a written notice of completion which certifies that the system is ready for operation. Failure to comply with this section will be cause for rejection of the contract.

3.24 Quality Control Program

The awarded Bidder shall submit a Quality Control Program, within ninety (90) days after NTP, consisting of appropriate documentation to be signed and dated by a representative of the awarded bidder that demonstrates that quality control will be effectively monitored throughout production. The Quality Control Program must be approved by DTPW's Project Manager.

3.25 Submittals

- 3.25.1 Bidder shall submit the contact information of three references from customers who have purchased similar systems. These references shall agree to communicate to the County their experience with the Bidder's system. During evaluation, the County may request additional references if any of the initial references are not satisfactory to the County.
- 3.25.2 Bidder shall submit proof that the system or a similar system to the one offered by the Bidder has been in satisfactory service with a transit agency or equal in the United States for at least six (6) years.
- 3.25.3 Bidder shall submit the manufacturer's standard information sheets, catalogues, brochures or other supporting documentation to demonstrate the system offered meets or exceeds the specifications herein. Bids submitted with supporting documentation containing information indicating the system does not meet the specifications herein must be accompanied by a letter on the Bidder's company letterhead identifying those differences and describing how compliance with the required specifications will be accomplished.
- 3.25.4 Bidder shall submit factory and post installation test procedures.