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ATTACHMENT B – REFERENCES

ATTACHMENT C – WisDOT MBE PROGRAM, AWARENESS, COMPLIANCE & ACTION PLAN

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ATTACHMENT I – BONDING FORM

# GENERAL INFORMATION AND SCOPE

The Wisconsin Department of Transportation (WisDOT or DOT), through its Purchasing Unit (Purchasing), requests bids to establish a contract for upgrades at the Kenosha SWEF 21 located on NB IH 94 in Kenosha County. Upgrades will be made to the Weigh-In-Motion (WIM) system, static scale, and permanent signing. Warranties on the static scale and WIM systems shall also be included as a part of this contract.

The resulting contract shall be governed by the attached Standard Terms and Conditions unless specifically modified in this Request for Bid document. Conditions of bid that include the word "must" or "shall,” describe a mandatory requirement.

## Scope

Work consists of upgrading new electronics in the SWEF building and CMS signs as outlined in SPV.105.001 Weigh-In-Motion System and the static scale deck/electronics as outlined in SPV.105.003 Static Scale System. Permanent signing relating to the SWEF in advance of the site will also be replaced.

## Definitions

The following definitions are used throughout the RFB documents:

Agency: The Wisconsin Department of Transportation

Bidder/Vendor: A company or individual submitting a bid response to this RFB

Contractor: Bidder awarded the contract

Department: The Wisconsin Department of Transportation

DVB: Wisconsin –Disabled Veteran-Owned Business is a business certified by the Department of Commerce under s. 560.0335(3).

DOT or WisDOT: The Wisconsin Department of Transportation

MBE: Wisconsin-certified Minority Business Enterprise is a business certified by the Department of Commerce under s. 560.036(2)

P-Card: Procurement card (State credit card)

State: The State of Wisconsin

## Contract Term

The contract effective date shall be the date of the notice of award letter and will continue for 90 calendar days. The scale shall not be closed for more than 60 calendar days during the contract term and shall not be broken up into multiple segments. All work, including site restoration and cleanup shall be completed prior to the end of the contract term. Failure to complete all work within the contract term may result in the assessment of liquidated damages in accordance with section 4.5.

# BIDDER QUALIFICATIONS AND REQUIREMENTS

To be eligible for a contract award, you must be qualified and able to provide the following:

##### 2.1 Bidder must supply references as required in section 3.2.2.3 Submittals of SPV.105.001 Weigh-In-Motion System. Use Attachment B to list references.

##### 2.2 Bidder must be prepared to provide WisDOT Purchasing a Certificate of Insurance prior to award and maintain the minimum limits specified prior to issuance of a Purchase Order. All policies must be issued with a 30-day cancellation notice, by an insurance company licensed to do business in the State of Wisconsin, with a minimum AM Best rating of A1, and signed by an authorized agent.

##### 2.3 Bidder must disclose if any State of Wisconsin employee would provide services relating to the agreement resulting from this solicitation. See Supplemental Standard Terms and Conditions, section 4.0, Dual Employment or 5.0, Employment.

##### 2.4 Insurance Responsibility: The contractor performing services for the State of Wisconsin shall:

###### 2.4.1 Maintain worker's compensation insurance as required by Wisconsin Statutes, for all employees engaged in the work.

###### 2.4.2 Maintain commercial liability, bodily injury and prop­erty damage insurance against any claim(s) which might occur in carrying out this contract. Minimum limits shall be one million dollars ($1,000,000) per occurrence and two million dollars ($2,000,000) aggregate for bodily injury and property damage including products liability and completed operations. Provide motor vehicle insurance for all owned, non-owned and hired vehicles that are used in carrying out this contract. Minimum limits shall be one million dollars ($1,000,000) per occurrence combined single limit and two million dollars ($2,000,000) aggregate for automobile liability and property damage.

###### 2.4.3 The state reserves the right to require higher or lower limits where warranted in the state’s discretion.

###### 2.4.4 Name the State of Wisconsin as an additional insured as to the work being performed and provide certificate of insurance prior to start of work.

##### 2.5 Bonding: Prior to award of the contract, the contractor shall provide a performance and payment bond in a format provided by the Department. The value of each bond shall be the value of the contract minus the unit prices for the warranty items (SPV.0105.802 and SPV.0105.804). Bonds shall remain in place until 1 year after completion of COT. Use Attachment I to provide proof of bonding.

# SPECIFICATIONS

Wisconsin DOT Standard Specifications are the minimum acceptable requirements for this contract. All specifications are defined as mandatory minimum requirements unless otherwise stated. Purchasing reserves the right to delete any specification or condition of bid if no bidder is able to comply with a given specification or condition of bid. Failure to meet specification requirements shall disqualify your bid.

## WisDOT Standard Specifications

Bid sheet items listed on the miscellaneous quantities schedule include references to bid items that are covered by Standard Specification and Standardized Special Provision sections. Furnish materials and construct as the plans show and the engineer directs conforming to the requirements of the following sections shown in Attachment G:

Section 635 Structural Steel Sign Supports

Section 636 Concrete Sign Supports

Section 637 Signing

Section 643 Traffic Control

STP-616-030 Fence Safety, Item 616.0700.S

Additionally, the contractor shall furnish materials and construct as the plans/specs show work necessary to complete the contract work of items SPV.105.001 and SPV.105.003. All work completed as a part of these items shall conform to the requirements of the following sections of the Standard Specifications shown in Attachment G:

Section 619 Mobilization

Section 652 Electrical Conduit

Section 653 Pull Boxes and Junction Boxes

Section 654 Bases

Section 655 Electrical Wiring

Section 656 Electrical Service

Section 657 Poles, Arms, Standards, and Bases

Section 670 General Requirements for Intelligent Transportation Systems

Section 671 Intelligent Transportation Systems – Conduit

Section 674 Intelligent Transportation Systems – Cable

## Weigh-In-Motion System, SPV.0105.001

### Description

This special provision describes the work to install new OPEN/CLOSED signs as a part of the existing Weigh-In-Motion (WIM) system at the Kenosha Safety and Weight Enforcement Facility (SWEF). The electronics in the existing scale house will also be replaced. The entire system includes OPEN/CLOSED signs, existing ramp WIM, existing static scale signage, and incorporates upgraded static scale electronics (load cells) that will perform auto-calibration of the ramp WIM.

The sorting decisions shall be based on compliance of speed, side to side balance, axle-to-axle balance within tandem, axle spacing, axle weights, axle group weights, bridge formula (front and rear), and gross vehicle weights with the pre-set tolerances.

### Materials

3.2.2.1 Introduction

3.2.2.2 Removals/Existing Utilities

3.2.2.3 Submittals

3.2.2.4 WIM System Operational Overview

3.2.2.4.1 Ramp WIM System

3.2.2.4.2 Ramp Lane Control System

3.2.2.5 WIM System Functional Requirements

3.2.2.5.1 Ramp

3.2.2.5.1.1 Ramp

3.2.2.5.1.2 Automatic USDOT Reading System

3.2.2.5.1.3 Enforcement Camera Systems

3.2.2.5.1.3.1 Overview Camera System

3.2.2.5.1.4 Ramp WIM Settings

3.2.2.5.2 Scale House

3.2.2.5.2.1 Weigh Station System Operational Overview

3.2.2.5.2.2 Vehicle Display Windows

3.2.2.5.2.3 Virtual Graphics Display

3.2.2.5.2.4 Manual Override Console

3.2.2.5.3 Weigh Station Computer

3.2.2.5.4 Scale Manager

3.2.2.6 Conduit and Pull Boxes

3.2.2.7 Changeable Message Signs (CMS)

3.2.2.8 System Acceptance

3.2.2.8.1 System Review

3.2.2.8.2 Acceptance Tests

3.2.2.8.2.1 Factory Acceptance Tests

3.2.2.8.2.2 Site Acceptance Test

3.2.2.8.2.3 Continuous Operating Test (COT)

3.2.2.9 Training

3.2.2.10 Warranty

3.2.2.11 Materials

3.2.2.12 Standard Products

3.2.2.13 Lightning Protection

* + - 1. Introduction

The WIM System shall include various components that interact together. The components shall include the following:

* WIM sensors
* Axle and loop detection
* Overview image camera
* License Plate Reading (LPR) System with optical character recognition
* Automatic USDOT Reading (AUR) System with optical character recognition
* IIS Smart Roadside Interface
* OPEN/CLOSED Sign inserts
* Weigh Station Computer system
  + - Station PC
    - Virtual Graphics Display
    - Scale Manager
    - Vehicle Display
    - Override Console
    - Data Collection System
* Existing Static Scale Signage
* Existing Overheight Detector
* On-site Communication System
* Cellular Modem for remote communication

The IIS Smart Roadside screening system shall be added to this site by others. The WIM Vendor shall coordinate with and successfully interface two-way communication with the IIS Smart Roadside system.

The scope of work is to complete the following work strictly per these provisions and associated plans.

* + - 1. Removals/Existing Utilities

The following shall be removed:

1. Existing OPEN/CLOSED CMS sign at station 9+89
2. Existing OPEN/CLOSED CMS sign at station 25+09

The location of the existing wiring/conduit connecting the scale house to the existing CMS signs is assumed to run along the right shoulder of the Kenosha SWEF ramp and WB IH 94 based on existing plan information. The exact location(s) is(are) to be verified in the field during construction.

Supply and install the following:

1. Overview image cameras, License Plate Reading (LPR) system, and Automated USDOT Reading system including support structure
2. New LED OPEN/CLOSED signs as specified in section 3.2.2.7 along with the electronics to control the signs
3. New electronics for the SWEF building utility room
4. New electronics for the SWEF building operations area including printer
5. WIM system software
6. All conduit and wiring as required. Conduit shall be sized to accommodate additional future wiring
7. Cellular modem for remote access of system
   * + 1. Submittals

Prior to manufacturer approval and the contract being executed, the Contractor shall provide the following:

1. List a minimum of five Weigh Stations and provide the owner's name, address, persons to contact and telephone numbers of similar enforcement installations in the United States.
2. The Contractor shall furnish electronically collected accuracy performance data from a pre-existing system to the engineer. This data shall be in a common database and include WIM records (axle and gross) and static (platforms and gross) weights that have been electronically collected (manually entered data will not be accepted). This report shall contain at least 20,000 vehicle records.
3. The Contractor shall furnish 3rd party verification of the new static scale system components passing an 80,000 amperes lightning strike test.

At the pre-construction conference, the Contractor shall furnish:

1. The engineer with written documentation and information of the new static scale components
   1. Manufacturer's name
   2. Model number, supported by descriptive material for, but not limited to, the standard package system
   3. All accessories identified
2. Submittals shall be supported by descriptive material such as
   1. Catalogs
   2. Cuts
   3. Diagrams
   4. Other data published by the manufacturer, to demonstrate to the engineer the Contractor's intent to comply with the Technical Special Provisions and plan requirements
3. If the Contractor wishes to replace equipment in addition to what is outlined in this special provision, proper submittals will need to be included on all additional equipment.

The System manufacturer shall submit the following:

1. Equipment drawings
2. General arrangements
3. Foundation requirements including camera reader pole and CMS structure. All new foundations to be stamped by a PE licensed in Wisconsin.
4. Circuit diagrams
5. Field wiring diagrams
6. Instruction manuals
7. Bill of Materials
8. Manufacturer’s product data
9. Certified test reports
10. Material certifications

The Contractor shall submit six complete sets of full size drawings. The Contractor shall:

1. Design all overhead structures and foundation supports including camera reader pole and CMS structure. All foundations to be stamped by a PE licensed in Wisconsin.
2. Submit shop drawings along with the supporting calculations to the engineer for review and approval.
3. Obtain a professional engineer licensed in the State of Wisconsin to document, sign, and seal all structural drawings.

Two weeks prior to the Continuous Operating Test (COT), the Contractor shall supply the following to the engineer for the maintenance of the System

1. Narrative description of system operation in detail
2. Narrative technical description of the following:
   1. Major system component interaction
   2. Subsystem component interaction
3. Drawings:
   1. Major system component operation/interconnection
4. Schematics shall reveal diagrams related to troubleshooting/maintenance including:
   1. Jumper and switch settings on all PCB’s for normal operation
   2. As-built drawings shall show type and location of all conduits, pull boxes, junction boxes, loops, traffic signs, and directional signals
5. Technical documentation on all accessories used in the system (OPEN/CLOSED signs, CMS, etc.)
6. Contractor shall provide names and phone numbers of contacts that user may contact for technical help

Acceptance of bid or approval of shop drawings by the engineer does not relieve the Contractor of the responsibility or the necessity of furnishing material and/or performing work as required by the plans and these provisions, nor from the requirements of the Continuous Operating Test (COT) as contained within these provisions.

The equipment approved by the engineer shall be provided and installed according to the plans and these provisions. If the equipment proposed by the Contractor becomes unavailable, the engineer may approve in writing alternate equipment proposed by the Contractor due to the unavailability of the originally specified equipment.

* + - 1. WIM Systems Operational Overview
         1. Ramp WIM System

Commercial vehicles approaching the Weigh Station shall be directed into the right-hand lane by means of a CMS sign along with signing provided by the project. A vehicle approaching the Weigh Station shall enter the site and pass over the existing Ramp Weigh-In-Motion (WIM) system, which is embedded in the exit ramp.

The WIM shall collect axle weight and spacing, vehicle speed, classification and other relevant data to create a vehicle record. An overview camera shall capture an image of the passing vehicle which shall be combined with the vehicle record. Based on a comparison of the vehicle record to the parameters set by the Weigh Station system, the WIM system shall make a sort decision and advise the driver to either proceed to or bypass the static scale via the existing Ramp Lane Control System located over the ramp. However, the actual sorting operation can be overridden by the operator using the virtual graphics display or override control in the Weigh Station. Non-violating vehicles may be randomly selected from the ramp for visual inspection at the scale house.

The automated OPEN/CLOSED signs shall also be able to be controlled by a physical switch on the Override Console.

The system shall be able to collect continuous WIM data for statistical analysis. The data collection system shall save vehicle information in a compressed format complete with a date and time stamp. As a result, the information can be downloaded, and with the aid of commercially available software, the user shall be able to generate reports based on user inputs. The stored data must be remotely accessible by cellular modem communications.

All vehicle information, including violation information, shall be determined in real time and shall be displayed on the scale house operator console in vehicle display windows.

* + - * 1. Ramp Lane Control System

The existing Ramp Lane Control System shall be used to communicate with the driver after the vehicle analysis has been completed. The Ramp Lane Control System shall be controlled by electronics in an interface cabinet, which receives the sort decision from the Weigh Station Computer.

The Virtual Graphics Display shall provide manual control to the Weigh Station for the operation of the Lane Control Sign.

The components of the system shall provide heartbeat communications so the System health can be monitored.

* + - 1. WIM Systems Functional Requirements
         1. Ramp

Once entering the site, an Overview camera, USDOT and License Plate image of the passing vehicle shall be combined to create the vehicle record. Using optical character recognition, the USDOT and license plate read shall be included in the vehicle record. The license plate jurisdiction shall be a part of the license plate read. The combination of USDOT, license plate number, and license plate jurisdiction shall be checked against the IIS Smart Roadside system for non-weight violations.

Automatic USDOT Reading System

The AUR system shall be capable of collecting, storing, and transmitting all commercial vehicle license plate images and OCR data to the Weigh Station Computer for configurable periods. The OCR read accuracy shall meet 77% of readable numbers.

LPR System

The LPR system shall capture an image of the commercial vehicles license plate to be linked with the vehicle record. The camera shall be capable of black-and-white near-infrared images during daytime and nighttime operation. The camera system electronics, which shall be located with the other system electronics, shall store the image and shall link it with the correct vehicle record. The LPR system shall be capable of collecting, storing, and transmitting all commercial vehicle license plate images and OCR data to the Weigh Station Computer for configurable periods. The OCR read accuracy on license plates shall meet 77% of readable plates including jurisdiction at night.

Enforcement Camera Systems

The enforcement camera system shall consist of an overview image camera mounted alongside the roadway on the SWEF ramp. The overview camera system shall capture an image of passing commercial vehicles to be linked with the vehicle record as an identifier. The camera shall be capable of full color photos during daytime operation, and black-and-white near-infrared images during nighttime operation. The camera system electronics, which shall be located with the other system electronics, shall store the image and shall link it with the correct vehicle record.

Overview Camera System

The Overview Camera System shall consist of the following system components:

1. Color and Black/White video cameras
2. Illuminator system
3. Video capture system

The video system shall monitor traffic flow on the ramp. It shall capture still images of trucks for identification and enforcement purposes. The images shall be displayed on an operator interface located in the scale house. Each vehicle record number shall be displayed with the vehicle image.

A camera shall be provided and installed on a pole located near the entrance to the ramp. The camera shall provide overview images of the passing commercial vehicles, detailing their cab and side. Color images shall be provided for daylight use, and black/white images shall be provided for night use.

The overview capture system shall be located in one of the System Electronics. The overview capture system shall provide control and display facility to display image outputs from one source to one monitor.

Ramp WIM Settings

Using the Weigh Station Computer, the operator may set the random sort percentage. Random sorting allows the operator to require a set percentage of compliant trucks to report to the static scale. This allows the enforcement officials to perform random safety checks on otherwise compliant trucks.

The Weigh Station Computer system shall receive the WIM record from the roadside WIM electronics at the ramp location. The Weigh Station Computer contains electronic records that shall be used to ascertain weight compliance. After the Weigh Station Computer creates the WIM record, it shall immediately begin to analyze the data contained in the record in order to determine whether the vehicle weights and dimensions are within local compliance regulations. If the measured vehicle weight is within the allowable limits, the driver shall be directed to the bypass lane by the existing lane control signal. If the vehicle is not compliant or if it is randomly selected for inspection, the driver shall receive a message to report to the static scale lane.

The Weigh Station Computer system shall provide safety features to detect and prevent backups and unsafe conditions. These shall include:

1. An audible message to alert operators of a backup of the Weigh Station ramp
2. Automatically close the Weigh Station if a backup occurs on the exit ramp from IH 94. An audible message shall sound to alert operators. Once the backup has cleared the station shall automatically reopen in that direction.

Operators shall have the capability to override the automatic close on the Override console.

* + - * 1. Scale House

Weigh Station System Operational Overview

The Weigh Station system shall be all new and located in the scale house. It shall process data from the ramp WIM electronics and static scale, for central monitoring and control of the facility operation. The system shall provide two operator displays at the scale house. The operator can monitor vehicle movements, view and print reports and adjust system parameters, alter message signs, etc.

The Weigh Station System shall be made up of the following components:

* Vehicle Display Window (displays will vary by manufacturer)
* A Virtual Graphics Display
* An Override Console
* A Weigh Station Computer
* Static Scale Manager

Vehicle Display Windows

The Vehicle Display Window shall display:

* sequence number
* time and date
* class
* speed
* gross vehicle weight
* lane-time and date
* direction of travel
* OCR read of the vehicles license plate and jurisdiction
* OCR read of the vehicles USDOT number
* violations highlighted in red
* right and left wheel weights per axle with violations highlighted in red
* individual axle weights with violations highlighted in red
* individual, front bridge, rear bridge, and full vehicle spacing
* tandem weights as measured by the WIM electronics with violations highlighted in red
* front and rear bridge weights as measured by the WIM electronics with violations highlighted in red
* thumbnail image of the vehicle from the overview camera.
* thumbnail image of the USDOT number
* thumbnail image of the vehicle license plate

A vehicle record shall be displayable in either graphic form or in text form. Another alternate shall be a tabular view of all records in the queue.

The length from axle to axle shall be shown on a linear scale with axle spacings plotted below the scale line. Red text for an axle shall indicate the location of an overweight axle or axle group.

The display of vehicle record must show the following violation information in addition to dimension and weight violations:

1. Vehicle speeding
2. Credential

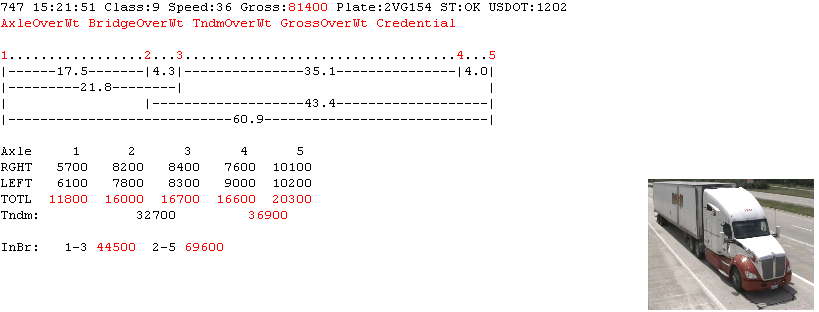
The vehicle display windows shall allow the following options at any time without going to alternate screens or menus:

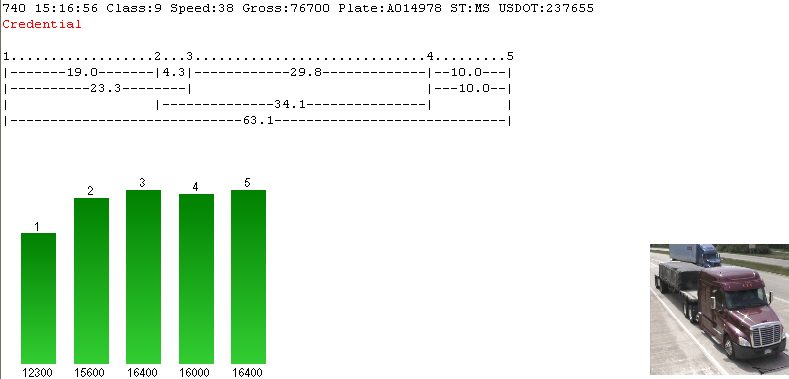
1. Freeze vehicle record

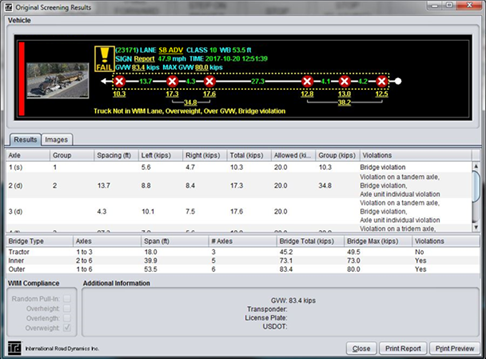
2. Print vehicle record

3. Double click on the overview thumbnail image to see a larger view

Each vehicle record shall contain a digital image of all vehicles and shall be similar to the following acceptable examples:



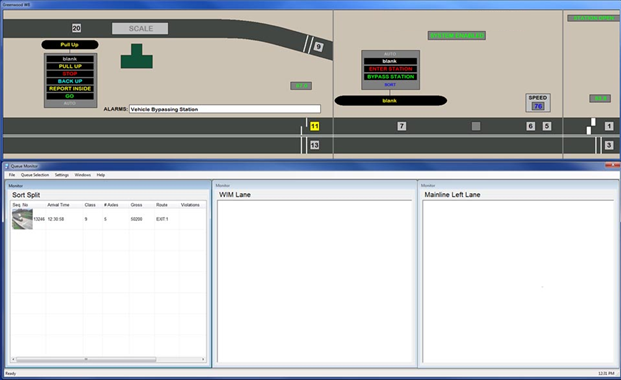


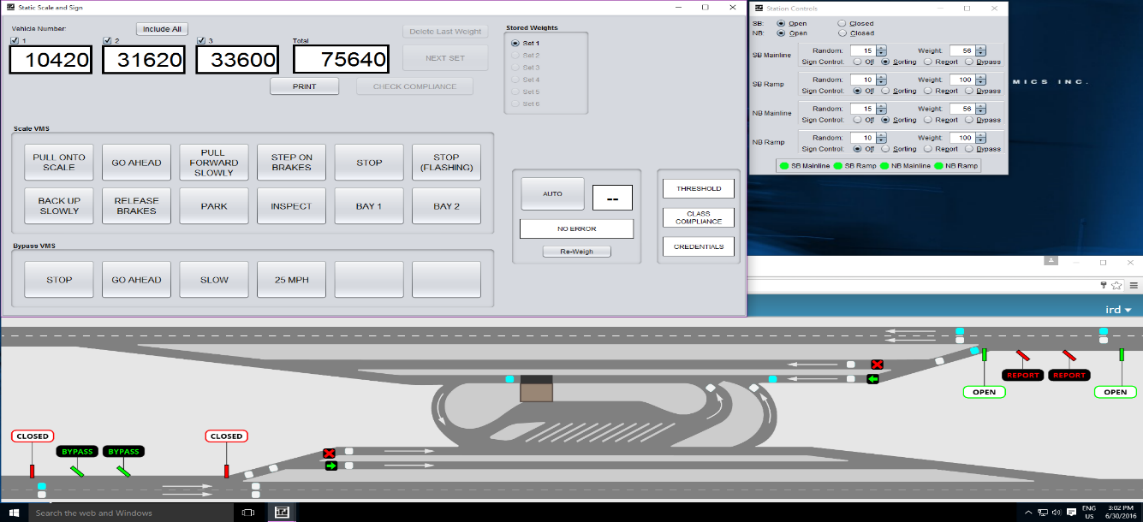


Virtual Graphics Display

The Virtual Graphics Display shall provide software representing the overhead layout of the Weigh Station on the Weigh Station Computer to provide control and monitoring of the Weigh Station. The graphics display must be software based. The Station Console shall provide the ability for an operator in the Weigh Station to select the control operation of the lane control system on the ramp manually. The graphics display shall have visual indicators to identify the mode of control of system signs and signals. In addition, vehicle movement information shall be displayed using indicators on the graphical panel. It shall provide the following functions:

1. Select automatic sort control of each system or the manual control by the operator
2. In manual control of the Ramp Lane Control System by an operator, it can be set for all vehicles to proceed to the static scale or bypass lane
3. Real-Time monitoring of the Weigh Station operation by showing indicators when the appropriate sensors are activated and deactivated including loops
4. Graphics representing the color and status of the directional signals, graphics shall continuously display the status of the overhead signals, OPEN/CLOSED signs, and static scale message sign
5. The Weigh Station system must provide an audible warning for the following conditions:
6. WIM scale backup
7. Weigh Station violator
8. Weigh Station automatically closing because ramp is backed up
9. Weigh Station is automatically reopening because ramp has cleared
10. Vehicle waiting on the static scale
11. Include a 22-inch (minimum) widescreen flat panel monitor with speakers and shall interface with the Weigh Station Computer. This monitor shall be one of the two monitors located at the Weigh Station Computer
12. Provide a graphical representation of the Weigh Station layout with symbols to indicate the function of vehicle tracking devices
13. Allow for a true manual control of all signs
14. Shall be similar to the acceptable images below with the layout matching site conditions



Manual Override Console

A Manual Override Console shall be provided as an interface that allows the operator to override the ramp WIM in order to gain control of various system components. The console shall include control of the OPEN/CLOSED signs. The console shall also include the ability to control the static scale message sign and turn the scoreboards on/off.

The override console shall provide the ability for the operator to manually override all signals and signs. It shall be a minimum of 24” long and 10” wide with large push buttons and switches to allow officers to quickly locate and change signal controls when override is required. The Override Console must be operationally independent of the weigh-in-motion interface electronics, the Virtual Graphics Panel, and the Weigh Station Computer to control all signs and signals. The override console shall remain operational even if the Weigh Station Computer is not functioning.





* + - * 1. Weigh Station Computer

The Weigh Station Computer shall be:

1. An Intel microprocessor-based computer with the Microsoft Windows 8.1 or 10 operating system.
2. Have the following minimum features and configuration:
   1. Most current PC standards for memory, hard drive, and other hardware
   2. Two 22-inch (minimum) widescreen flat screen color monitors with non-glare screen
   3. Keyboard
   4. Mouse
   5. System utilities and diagnostic software
   6. Surge protection
   7. System password protected lock for user access restriction
   8. All access ports, cables and accessories to provide a working computer

The Weigh Station Computer shall provide the following functions:

1. Perform mainline and ramp sort operation
2. Weigh all vehicles travelling in the right lane
3. Classify and weigh all vehicles travelling on all instrumented lanes of the highway with WIM sensors
4. Perform weight compliance analysis on vehicles in accordance with Department regulations
5. Monitor safety conditions of the facility these include:
6. A WIM scale back up
7. Ramp back up
8. Static scale lane back up
9. Perform sorter operation in accordance with decisions based on weight compliance analysis, other violations (speeding, improper maneuver, sudden speed change, etc.), Virtual Graphics panel Override console selection, safety conditions, and operator selected action
10. Insert sequence numbers for vehicle records for tracking purposes
11. Display of vehicle record in multiple queue windows
12. Track vehicle movement in the execution of sorter operation
13. Control message display of the lane control system to synchronize with the movement of a vehicle being tracked
14. Provide vehicle records for those that have been sorted to or come to the static scale
15. Provide real time display and control of the static scale
16. Allow operators to automatically sequence vehicles across the static scale or manually weigh by accumulating axles
17. Automatically determine and provide operators feedback based on whether a vehicle is actually overweight based on axle spacing, axle, axle group, gross, and front/rear bridge weights based on Wisconsin regulations
18. Automatically or manually release vehicles that are not overweight based on Wisconsin regulations and do not have other violations
19. Allow operators to print weight tickets
20. Provide audible message alarms to alert operators of conditions that may require their attention
21. Provide reports on system operation
22. Perform data collection, data storage, file management and report generation functions for collected vehicle information
23. Allow adjustment of WIM and system settings

The Weigh Station system shall have application programs to detect prolonged power failure conditions to initiate orderly shutdown operation.

* + - * 1. Scale Manager

The Scale Manager shall be software located on the Weigh Station Computer and facilitate processing vehicles that are sorted or volunteer to come to the static scale. As officers primarily focus on vehicles that are potential violators this shall be the main screen that they work with. The screen shall also give the operator the ability to control system settings and view and run reports. It shall provide the following functions:

* 1. Interface with the static scale indicator and WIM systems
  2. Display and accumulate static scale weights and display WIM data for the vehicle that is positioned on the static scale
  3. Provide adjustable thresholds to each steer axle, axle, tandem, front bridge, rear bridge and gross weight based on Wisconsin regulations for axle spacing and weight
  4. Automatically check weights to thresholds and release vehicle if in auto mode or alert operator of violation with audio and visual alerts
  5. Automatically or manually allow operators to control the static scale sign with buttons matching the sign messages
  6. Provide the following features within the display

1. Selectable auto release
2. Display shift counts
3. Violations displayed in red
4. Zero scale
5. Reset Scale
   1. Print requirements include
6. Site identification
7. Time and date
8. License plate
9. USDOT number
10. Individual weights (axles and axle groups)
11. Gross weight
12. WIM axle spacing
13. Thumbnail image of vehicle
    1. Shall continuously show updated static scale counts for each shift for the day
    2. Utilities
    3. View individual live raw counts for static scale load cells
    4. Allow remote diagnostics access

If a vehicle is not positioned properly or is a weight violator the operator shall be notified by visual and audio alarms and the vehicle shall not be auto-released when in auto-sequencing mode.

To eliminate costly calibrations, the Weigh Station System shall electronically interface with the ramp WIM system for auto-calibration. On a continuous basis the Weigh Station System shall ensure WIM accuracy and calibration of the sensors in the ramp WIM.

Calibration of the ramp WIM shall be automatic and performed by electronic recording of WIM and static weights on 50 vehicles from the vehicle stream which are loaded to within 75% of the legal allowable limit. Auto-calibration shall be done with different factors for speed range and vehicle class to provide more accurate results. The settings shall allow for a minimum of 10 different speed ranges and 13 different classes to be used.

Acceptance testing shall confirm the WIM accuracy performance which shall be verified in a report. This report shall be created by continuous (24/7) electronic recording of vehicles from the vehicle stream. The actual stable static weights and WIM weights shall be saved in a common database to determine WIM scale accuracy compliance, as opposed to the method described in ASTM E 1318-09. This information is to be easily accessible to state personnel in reports and shall be printed on a weekly basis throughout the continuous operating test and in everyday use of the Weigh Station afterwards.

The accuracy requirements required under ASTM E1318 for a Type III WIM shall be met except those listed in the WIM sensors section above.

All reports shall be available from the Scale Manager in one central place to view reports. The following reports shall be available:

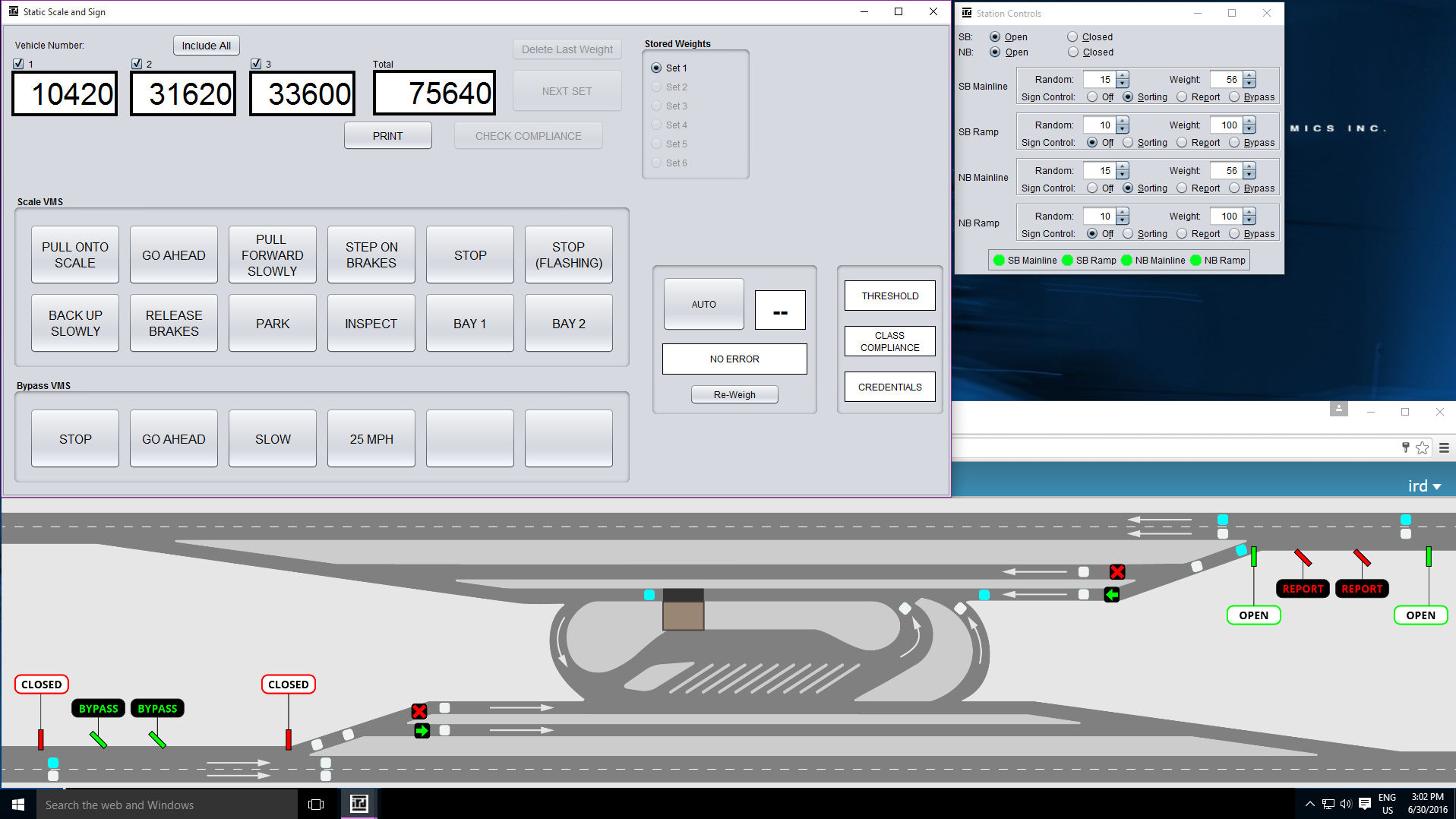
* 1. Number of vehicles across the WIM by class, hour, and shift for a selected period
  2. Number of vehicles across the WIM by hour, and shift for a selected period
  3. Axle and GVW weights by class for a selected period
  4. Number of vehicles by weights, by class and by hour for a selected period
  5. Number of vehicles across the static scale by class, hour, and shift for a selected period
  6. WIM accuracy performance by class for a selected period

A selected period for report generation shall include starting date and ending date. Reports shall be generated manually by operator action. Reports shall have an option to display a chart view, and to be exported into Microsoft Office compatible formats.

The Scale Manager shall have utility programs to do the following:

* 1. Set up and configure the operation of the ramp WIM system
  2. Set up and configure the operation of the ramp sort system
  3. Initiate and reset traffic counting operation of the WIM System
  4. Perform maintenance functions of the Weigh Station systems





* + - 1. Conduit and Pull Boxes

All cables shall be in conduit unless specifically approved by the engineer. All conduit and pull boxes shall meet the requirements of standard spec 652 and 653.

All materials shall comply with the "National Electrical Code" and the current standard specifications, and special requirements by the Department weigh-in-motion and automatic vehicle identification system specifications. Duct seal shall be used to seal all conduits in the cabinets and in all junction boxes. All conduits shall have a polyethylene pull string with at least 210-pound break strength left in place at completion of construction.

Separate conduits shall be used for AC/DC power and low voltage signal cables. Low voltage signal cables shall include video, digital communication, sensor signal cable, and sensor excitation cables where voltage is under +/- 20 volts DC. Conduits for video and RF cables shall be of a large enough size to accommodate the maximum bend radius using factory 90-degree “bends”. Conduits shall be sized to accommodate additional future wiring.

All cables shall be in conduits unless specifically approved by the engineer.

* + - 1. Changeable Message Signs (CMS)

Furnish and install two OPEN/CLOSED changeable message signs. Each unit to be 2-message, 1-way, LED blank out signs with white illumination.

1. Messages shall be formed by rows of white LED pixels
2. All letters shall be 18-inch series E formed by single rows of LED pixels
3. Dimming option with photocell shall be provided
4. 120 VAC shall be required for activation of messages
5. 2 1/2-inch aluminium angle shall be provided top and bottom for mounting
6. Exterior of sign housings shall be wet painted, semi-gloss black enamel
7. Utilized existing wiring to the maximum extent practicable and install new wiring as required to the new OPEN/CLOSED sign mounted on the existing sign structure S-30-25 and at STA 9+89
8. Communication with the OPEN/CLOSED signs shall have feedback communication to the scale house as to whether the signs are functioning properly.
9. At the existing sign structure S-30-25, provide all materials required to mount the OPEN/CLOSED changeable message sign to the aluminium I5x3.7 vertical sign supports provided under bit item “Signs Type I Reflective SH”. Coordinate locations of supports with Type I sign manufacturer.
10. At STA 9+89 provide all materials required to mount the OPEN/CLOSED changeable message sign to the steel W12”x16” vertical sign supports provided under bit item “Sign Supports Structural Steel HS”.
    * + 1. System Acceptance

The complete WIM System shall be accepted subject to fulfilling the following conditions:

* 1. System review
  2. Acceptance tests (meeting WIM, LPR and AUR accuracy on a weekly basis).
  3. Training
     + - 1. System Review

The potential WIM Vendor shall submit six copies of a system layout and cut sheets for each individual site prior to award of their subcontract. These layouts shall be submitted to the engineer for review. Approval shall be either from the engineer or designated representative. If the potential WIM Vendor does not fully meet the specifications the engineer may instruct the prime Contractor to select another vendor.

A preliminary on-site meeting shall be held after all of the old electronics have been removed to verify no equipment is being reused and to discuss Contractors' plans for the routing of conduits, cables, and placement of equipment.

* + - * 1. Acceptance Tests

The complete WIM System, all-inclusive as contracted, shall be designed, built and tested by the Vendor, and as proof of operation, the systems, overall and singularly, shall be tested at various times according to the test specifications. All field tests shall be performed by the WIM Vendor and observed by the engineer with all reports submitted to the engineer.

Factory Acceptance Tests

Prior to shipment of any equipment, Factory Acceptance Tests shall be performed for each system to verify the equipment operating as described in the contract documents and in accordance with the test specifications approved by the engineer. The Factory Acceptance Tests shall include at minimum the following:

1. A physical inspection to verify that the quality of material and workmanship satisfy specified requirements and standards and that the equipment and software under test are complete and ready for delivery.
2. A functional test to verify that the equipment and software operate as described in the contract documents.
3. A performance test to verify that the equipment satisfies performance and operation criteria.

For the purpose of these tests the equipment and software shall be configured as nearly as possible to the final configuration. Any field inputs not available at the factory test site shall be simulated to provide a close approximation to actual site conditions.

Site Acceptance Test

After all the equipment and software have been installed at the site, the Vendor shall run tests to ensure that all equipment shall operate as specified therein contract documents. These tests shall be witnessed or conducted by the engineer within one week of the manufacturer notifying the engineer that the system is ready for testing.

The camera systems shall be tested at the sites to verify that the images taken at daytime and night time are clear and integrated properly with the vehicle record from the systems. The Vendor shall collect data observed by the engineer and provide the results of the images taken for the duration of the testing during day and night time operation. Success shall be determined by images that are non-blurred, crisp, properly integrated, and correctly read with the vehicle data received by the systems.

Continuous Operating Test (COT)

Following successful completion of the Site Acceptance Test, a Continuous Operating Test shall be conducted for a period of 180 calendar days. Within 5 days of receiving notice from the engineer verifying the Site Acceptance Tests were successful and the COT may begin, the contractor must begin the COT. Once the COT is initiated, the WIM sorting system must pass the COT within 240 calendar days of the initiation date. In no case will the COT be extended beyond 240 days. To successfully pass the COT, the weigh station and its weigh sorter system shall:

1. operate for a period of 180 total calendar days under normal traffic conditions and without being deemed "off-line" as described below
2. perform a reasonable portion of the 180 total calendar days during adverse/cold weather months and
3. accrue less than four (4) strikes

The system will be deemed "off-line" when:

1. The system fails whereas the complete system does not operate fully with the static scale accuracy for a period of 60 consecutive minutes or more after the contractor has been notified and granted access to the system.
2. The system does not provide accurate sorting of vehicles for a period of 60 consecutive minutes or more after the contractor has been notified and granted access to the system.
3. The weekly WIM accuracy test fails to report WIM accuracy of 90% or greater within one calendar week\*.

\* Note: The Department will endeavor to maintain staffing at SWEF a minimum number of hours to ensure that 80 qualifying vehicles are compliance checked (static scale) per week. If 80 qualifying vehicles are not compliance checked in that week, then those results will roll over to the following week and the combined 2-week period will be evaluated for 90% accuracy per above.

System manufacturer shall perform the in-motion calibration tests of WIM subsystem after installation is completed and prior to beginning the burn-in period. Contractor shall provide the engineer one week’s notice of the in-motion calibration tests.

* SYSTEM manufacturer shall provide calibration weights
* COT period begins two weeks after the completion of installation and certification of the static scale
* COT cannot begin until the static scale has been certified
* Contractor shall submit a detailed test plan to the engineer for approval no later than 90 days after notice to proceed
* For the COT period, the SYSTEM shall be fully operational under normal traffic conditions and operate trouble free (defined as any error that shall not reset by means of rebooting PC) for a period of 180 calendar days.
* Only one reboot per shift shall be allowed
* The engineer shall check the accuracy performance by printing an accuracy report from an electronic database which is created and stored on the Weigh Station Computer
* The report for WIM accuracy must be printed from the Weigh Station Computer by the engineer and met weekly during the COT period
* WIM accuracy on all vehicles loaded above 60,000 pounds and traveling between the speeds of 10 to 80 miles per hour shall be as follows:

a. Axle weights +/- 15% (95% of trucks)

b. Tandem weights + /-10% (95% of trucks)

c. Gross weights +/- 6% (95% of trucks)

d. Axle spacing +/- 6 inches or 5% (95% of axles), whichever is greater

This database shall be created by continuous electronic recording of vehicles from the vehicle stream, which are loaded to within 75% (60,000 lbs.) of the legal allowable limit.

The actual stable static weights and WIM weights shall be stored in this common database to determine WIM scale accuracy compliance, as opposed to the method described in ASTM E1318.

The images and OCR reads from the LPR and DOT reader shall be captured over a week and a report generated showing how each image was read and total read rate percentages for readable plates including jurisdiction and numbers. The images shall be provided for engineer verification. The read rates must exceed meet or exceed these specifications.

The contractor shall not be allowed onsite nor have remote access during the COT, unless accompanied by a preapproved Department representative and has preapproval from the engineer. Any system maintenance or evaluation of the WIM system during the COT must be requested in writing to the engineer a minimum of 3 calendar days prior to the requested access period. Access will only be allowed by the engineer at their discretion.

If problems of any kind are encountered during the COT, the SYSTEM manufacturer shall be informed, and problem(s) shall be simultaneously witnessed by the engineer and Contractor. If a problem is confirmed by all, a strike shall be assessed, and the problem shall be corrected.

The engineer will notify (by phone and email) the Contractor if the WIM system experiences an interruption in service and is off-line. The Contractor shall immediately acknowledge this formal notification. Upon notification, the Department and Contractor shall follow the procedures outlined as follows:

* Within 24 hours of notification by the engineer, the contractor shall be on-site to investigate and correct the situation.
* Within 48 hours (excluding Saturdays, Sundays and Holidays) of notification by the engineer, the contractor and the engineer shall meet to discuss the failure and probable causes of the failure.

An additional strike will be given for each consecutive 7-day period that the equipment is deemed “off line” due to WIM system failure.

If any strike falls within the final 28 days of the COT, the COT would be extended until one of the following has been met:

* The COT successfully runs for a period of 28 calendar days under normal conditions and achieve a level of service without interruption; or
* The COT fails and the system is rejected due to its failure and four strikes.
* The COT extends beyond 240 days and the system is rejected.

The COT shall demonstrate to the satisfaction of the engineer that the weigh-in-motion/static enforcement system has been constructed and consistently meets the performance requirements of the plans and of these Special Provisions.

The COT shall be the basis for acceptance or rejection of the systems as a result of demonstrated performance. If the system is rejected and there have been more than four strikes and re-starts of the COT, the Department may then exercise its rights as provided in Section 108 of the contract's Standard Specifications. The parties shall negotiate, in good faith, an acceptable resolution. Liquidated damages may be applied between strikes and restarts. Following such negotiations, if the same are unsuccessful, the engineer may execute the performance bond. Notwithstanding the foregoing, the Contractor shall retain/be entitled to receive all amounts paid or payable to the Contractor in accordance with the following payment schedule, agreed-to by the parties:

PAYMENT

1. Payment upon safe and secure delivery of all equipment 20%

at a storage location approved by the engineer

2. Complete installation of the entire SYSTEM 35%

3. Completion of calibration and burn-in 35%

4. Completion of the COT to the satisfaction of the engineer 10%

The engineer will issue a Certificate of Final Acceptance upon successful completion of the Continuous Operating Test and training program.

The WIM acceptance procedure for the Weigh Station system shall be based off of officers printing the database comparison of mainline WIM and static scale weights and the WIM accuracy meeting project specifications.

* + - 1. Training

The Vendor shall set up and conduct formal training programs for the State Patrol personnel on the operation, maintenance and installation of the system components of the complete WIM System. The training shall include the following:

1. Two half-day operator training sessions providing an introduction to the operation and installation of the complete Weigh Station system including the static scale and the functions to be performed. A class size of up to eight individuals per session can be expected.

2. Two one-day "hands-on" guidance sessions for operators in the operation of the systems. A class size of up to four individuals per session can be expected. This training shall occur during the first two days of the Continuous Operating Test.

The training program shall be scheduled the week following the completion of the operations test.

The cost for the first training sessions shall be included in the contract price. The Department will, from time to time review any future training requirements. The WIM Vendor shall agree to provide future and additional training sessions upon receipt of requests from the Department. The Department will reimburse the WIM Vendor the cost of providing additional training sessions on a per diem basis and at a rate agreed upon by the Department at the time of the request. The Department will provide classroom space for the training session.

The vendor shall provide six hard copies and an electronic file of the WIM System Operator's Manual. The manual shall contain detailed information and instructions covering all aspects of the WIM system.

* + - 1. Warranties

The WIM vendor shall warrant all new subsystems and system components as supplied and installed for five (5) years from the date of issuance of the Certificate of Final Acceptance of the WIM System by the engineer. This warranty and associated maintenance work are defined and covered under a separate bid item, Weigh-In-Motion System Warranty Maintenance.

* + - 1. Materials

Materials for the project shall be new. Materials used in the construction of this equipment shall be of good commercial quality entirely suitable for the intended purpose. Materials shall be free from all defects and imperfections that might affect serviceability of the finished product.

* + - 1. Standard Products

The equipment shall be constructed of standard material, so that the prompt and continuing service and delivery of spare parts may be assured. The component parts need not be products of the same manufacturer.

* + - 1. Lightning Protection

Ground rod(s) and lightning protection shall be provided as per manufacturer’s requirements. All system components and equipment shall be properly grounded.

### (Vacant)

### Measurement

The Department will measure Weigh-In-Motion System, completed in accordance to the contract and accepted, as a single complete unit of work.

### Payment

The Department will pay for the measured quantity at the contract unit price under the following bid item:

|  |  |  |
| --- | --- | --- |
| ITEM NUMBER | DESCRIPTION | UNIT |
| SPV.0105.001 | Weigh-In-Motion System | LS |

Payment is full compensation for furnishing and installing all materials; and for furnishing all labor, supervision, equipment, calibrating and testing, training, tools and incidentals necessary to obtain a Certificate of Final Acceptance of the WIM system.

Weigh-In-Motion System Warranty Maintenance and Signs Type II and their corresponding supports will be paid under separate bid items.

## Weigh-In-Motion System Warranty Maintenance, Item SPV.0105.002.

### Description

Provide warranty and maintenance service for the weigh-in-motion scale system for a period of five (5) years. This system includes weigh-in-motion sensors, cameras, system components and ancillary equipment. Provide routine maintenance on all major systems, system components and ancillary equipment at 12-month intervals. Provide emergency repair services on an as-required basis.

* + - 1. Warranty Bond

The contractor shall provide a warranty bond for the Weigh-In-Motion System Warranty Maintenance. The bond will be in effect for the entire five-year warranty period beginning when the Weigh-In-Motion Scale System is completed, operational and accepted. The bonding company must have an AM Best rating of “A-“ or better and the contractor will provide proof of a five year bond commitment before execution of the contract.

The warranty bond amount will be for $75,000. The bond will ensure the proper and prompt completion of required warranty work following completion of the contract work, including payments for furnishing all labor, equipment, and materials used according to this specification.

The contract bond, which remains in effect for one year beyond the completion of the project, will also include warranty work as described in this article. For the remaining four-year warranty period, provide documentation that the warranty bond will be provided in a single term four-year warranty bond.

Failure of the contractor or its surety to issue the warranty bond will be considered a default and will result in forfeiture of the face amount of the bond to the Department.

All warranty work will be as prescribed in this article. At the end of the warranty period, the contractor will be relieved of the responsibility to perform further warranty work, provided all previous warranty work has been completed.

Maintain insurance, in the course of performing warranty work, as specified in standard spec 107.26 throughout the five-year warranty period.

### (Vacant)

### Construction

The WIM vendor shall warrant all subsystems and system components as supplied for five (5) years from the date of issuance of the certificate of final acceptance of WIM System by the engineer.

The warranty shall cover all WIM system components, hardware and software, included in the contract for any defects in material and workmanship. This shall include:

1. All loops and WIM sensors on site
2. Interface operations and system electronics
3. WIM cables, connectors, terminal strips and back-up batteries
4. New notification signs and structures
5. Communication systems
6. All enforcement cameras and equipment
7. New components of the Compliance System
8. Electrical power wiring and conduit
9. Weigh Station computer system
   1. Scale Manager
   2. Vehicle Display
   3. Station PC
   4. Override Console

The warranty agreement shall include all:

1. Emergency repair service
2. Routine maintenance service at 12-month intervals
3. Mobilization, parts, labor and shipping
4. Equipment updates, upgrades, modifications and recalls
5. System interface and electronics updates, upgrades, modifications and recalls
6. Traffic control
7. Training for major system updates or upgrades
8. Operator refresher courses

The weigh-in-motion system shall be warranted by the WIM vendor, in writing, against defects in or from material, workmanship, lightning, and to perform as required by these technical special provisions, giving proper and continuous service under all conditions required and specified, or which may reasonably be inferred, for a period of five (5) years from the date of acceptance. The written vendor’s warranty shall be furnished to the engineer by the vendor at the time the equipment performance supporting data is submitted. The new components of the complete system shall be warranted by the manufacturer, in writing, against defects in or from material, workmanship, lightning, rodents and perform as required by these technical special provisions for the specified period or as described above from the date of final acceptance of the project.

The operation and maintenance of all IIS Smart Roadside equipment, as well as all IIS Smart Roadside-related subsystems, shall be warranted by IIS Smart Roadside. This equipment will not be included within the scope of the warranty as seen in this specification.

* + - 1. Scheduled Maintenance Services

The scheduled maintenance service shall include the following:

1. Signal checks and testing measures on all loops
2. Verify proper operation of loops from Virtual Graphics interface in building
3. Visually inspect WIM sensors from shoulder for cracks and unusual damage
4. Visually inspect roadway around WIM sensors for deterioration or issues that could impact the sensors
5. Check and record WIM sensor reading on each sensor in roadside cabinet
6. Visual inspection and cleaning of system cabinets and electronics
7. Ensure each roadside cabinet has rodent protection in place and is pest free
8. Ensure wires are secure and conduit is in place
9. Ensure battery backups are operating
10. Cabinet mechanical condition inspection
11. Clean or replace each roadside cabinet air filter
12. Heating, ventilation and air conditioning check
13. Verify drawings are located in cabinet
14. Verify proper power, ground, and lightning protection
15. Structural integrity check of all new poles and structures
16. Test all message signs and signals are operating
17. Inspection and verification of computer communication systems
18. Camera inspection, testing and maintenance, including cleaning of camera lenses
19. Parts, labor and shipping
20. Mobilization and traffic control necessary to perform the maintenance services
21. Perform WIM accuracy tests and adjust as required to comply with standards
22. Provide WIM accuracy test print outs to WisDOT

A report shall accompany the scheduled maintenance service and shall be submitted to the Department. The report shall include:

1. Pass/Fail grading of all loops and sensors
2. A checklist of all components checked as listed above, as well as the location of the components and comments on their general state
3. A checklist and commentary detailing whether each component (as listed above) met standards or required repairs
   * + 1. Emergency Repair Services

Emergency repair services shall be completed on an as-required basis. The maximum response time for emergency repair services shall not exceed 48 hours after written receipt of notice by fax, phone, or email. The vendor shall initiate on-site repairs within 3 business days of notification. Some components of the system are not readily available and require lead time for delivery before being installed. These will be handled on a case by case basis. Emergency repair services shall include all parts, labor, shipping, mobilization and traffic control necessary to perform the work.

* + - 1. Operator Refresher Courses

In conjunction with the scheduled maintenance services, the Vendor shall provide Operator Refresher Courses on the operation of the entire WIM system upon request. The courses shall have a maximum duration of four (4) hours and shall be scheduled before or after the annual maintenance service. The course attendees shall be determined by the Department.

### Measurement

The Department will measure Weigh-In-Motion System Warranty Maintenance, completed in accordance to the contract and accepted, as a single complete unit of work.

### Payment

The Department will pay for the measured quantity at the contract unit price under the following bid item:

|  |  |  |
| --- | --- | --- |
| ITEM NUMBER | DESCRIPTION | UNIT |
| SPV.0105.802 | Weigh-In-Motion System Warranty Maintenance | LS |

Payment is full compensation for providing the warranty bond, all warranty maintenance service and emergency repair service for a period of five years and shall include all labor, tools, parts, shipping, mobilization, traffic control and incidentals necessary to perform the maintenance service.

## Static Scale System, Item SPV.0105.003.

### General

Upgrade the existing commercial vehicle static scale with new electronics as described in these provisions. In addition, remove and replace the existing static scale concrete deck. Equipment to be from a manufacturer experienced in design, construction, and operation of equipment for the purpose required.

###### Data acquired from the Static Scale System described in this specification must be such that it may be readily associated with other data for the same vehicle into a record that coherently represents data acquired from weigh-in-motion, static scale, and enforcement camera systems. The following specifications represent the minimum static scale requirements.

### Materials

**The Static Scale**

The existing static scale substructure and superstructure will remain and is to be reused.

Furnish and install one motor truck scale deck with weighing platforms of 42’-11” x 12’ wide, 22’-11” x 12’ wide and 15’-3” x 12’ wide placed end to end. Equipment to consist of parts designed to act as a unit by a manufacture experienced in design, construction, and operation of equipment for the purpose required.

1. The deck surface shall be 10” thick concrete, having a minimum compressive strength of 4000 psi.
   1. The deck shall be lined along the bottom with 3/16 STM-A36 steel plate or galvanized deck sheeting, a double reinforcing mat shall be set into place the length and width of the scale deck, and the deck channel to have studs welded to the steel to form a composite structure when the concrete is added. The reinforcing mat and deck channel studs are to relieve surface tension in the concrete caused by expansion and contraction.
   2. The color admixture shall be reddish-brown (Federal Standard Color No. 31136) or similar color approved by the engineer. Add colored admixture to the mix per manufacturer’s written instructions in a pre-measured bag and not added by weight of cement content. Admixture shall be a colored, water-reducing, admixture containing no calcium chloride with coloring agents that are lime proof and UV resistant.
2. The scale platform shall be treated with a protective surface treatment conforming to standard spec 502.

**Load Cells**

The load cells for the steer platform (platform 1) shall be replaced. The existing load cells will be removed and left at a designated location on-site. The new load cells shall meet the following:

1. The weighing elements shall be stainless steel hermetically sealed load cells to guard against moisture ingression and barometric effects.
2. The cells shall have moisture protection to IP 68 standards.
3. Load shall be applied to the cells without the use of links, bolts, pins cables or flexure.
4. All load cells shall be self-centering.
5. Load cells shall provide an analog or digital signal output.
6. The load cells shall be a minimum of 50 tons capacity each, and each cell must have stainless steel, braided covering on the load cell cable.
7. All load cells must be manufactured of stainless steel.
8. The scale shall have self-diagnostic capabilities able to identify load cell problems and failure.
9. The scale shall be able to identify each load cell individually.
10. The scale shall have the ability to view all of the load cells in the scale system simultaneously.
11. Diagnostics to have the capability to predict the failure of a cell before it actually happens to prevent down time. The diagnostics are to measure load cell counts (not weight) to determine reliability of the load cells. The following diagnostics shall be available at a minimum:
    1. Individual cell not responding
    2. Individual cell negative out of range
    3. Individual cell command failed
    4. Individual cell enclosure breach
    5. Power up Zero
    6. Major and minor overvoltage or overcurrent
    7. Major and minor under voltage
    8. Individual cell not found
    9. All errors shall be logged in the static scale electronics with the capability to be emailed when an error occurs
12. The design shall permit the individual load cells to be matched and the scale sections to be electronically calibrated.
13. Load cell shall have been tested by a 3rd party lab and have passed a simulated lightning strike up to 80,000 amperes. Documentation to be provided with submittals verifying this.

The load cells for the drive and trailer platforms (2 & 3) shall be reused.

* + - 1. Technical Specifications

After upgrades the scale shall have the new electronics shall be capable of meeting the following:

|  |  |
| --- | --- |
| Maximum Capacity (tons) | 100 tons |
| Dual Tandem Axle Capacity (lbs.) | 70,000 lbs |
|  |  |
| (Concentrated Load Capacity (CLC) is not the same as dual tandem axle capacity) | |
| Scale Accuracy | 0.1% |
|  |  |
| Load Cells: |  |
| Load Cell Type | Rocker Column |
| Rated Capacity | 50t (100,000 lbs) |
| Safe Overload | 200 % |
| Ultimate Overload | 300 % |
| Safe Sideload | 100% |
| Material | Stainless Steel |
| Load Cell Cable | 4 conductor 22 AWG Shielded |
| Load Cell Cable Protection | Stainless Steel Outer Jacket |
| NEMA Rating | 6P |
| Rated Excitation | 5 to 15 Volts |
| Temperature Compensation Range | -10 to +40 °C |

* + - 1. Static Scale Electronics

The existing scale instrument will be removed and returned to WisDOT. Furnish and install one new electronic instrument to drive the upgraded scale. Equipment to consist of parts desired to act as a unit by a manufacturer experienced in design construction, manufacture of electronic components, and operation of equipment for the purpose required.

The scale instrument and all peripheral devices should be designed to function as a unit. The equipment shall have the following specifications:

1. Static scale indicator

2. Microprocessor based item(s) for

a. Scale read out

b. Control and data handling functions

3. The scale instrumentation shall be compact and approved by the Engineer Manufacturer shall provide proof that the instruments have been in use successfully for at least two years.

4. Provide microprocessor-based digital instrument with Ethernet weight output to the static scale PC and the monitor for totalizing and printer controls.

5. This connection shall provide diagnostics of static scale load cells (load cell raw counts) to the static scale PC.

6. Provide with software diagnostics to facilitate fault finding.

7. Provide a certificate of conformance from the NIST Handbook 44, latest adopted edition.

8. The static scale instruments shall include:

a. Must be able to power up to 4 scale platforms

b. All instrument setup functions and calibration sequences are programmable through the keyboard/display. No at-scale adjustments required for these functions.

c. Minimum of 15 updates per second

d. One display showing individual axle weights and the summation of the individual weights

e. Shall be suitable for desktop or set-in mounting, level or at angle

f. Display the raw counts of each individual load cell without disconnecting any of the load cells from the system

g. Perform all static scale instrument set-up functions via static scale internet explorer web pages. Download to instrument via Ethernet connection.

h. Selectable increments size from 20 to 50,000.

i. Display up to 1 part in 10,000

j. Internal resolution 1 part in 1,000,000

k. Setup functions stored in nonvolatile RAM memory

l. Adjustable digital filtering

m. Adjustable automatic zero maintenance

n. Serial ASCII output port configuration for connection to computer. Baud rate to be selectable from 300 to 9600

o. Motion detection should be selectable from ±0.5, ±1.0, ±2.0, ±3.0 increments

p. Display verification test

q. Display height at .5 inches with wide angle view

r. Static scale instruments shall meet the current specifications of the NIST Handbook 44, current adopted edition

s. The instrument shall be UL/CSA listed

t. Provide one button printing of weight ticket or axle accumulation

* + - 1. Static Scale Operation Specifications

1. The completed static scale will work along with the WIM system to provide all the functionality described in the Weigh-In-Motion System special provisions.

2. The scale instrument shall be capable of assigning each load cell with its own unique identification number and shall be capable of displaying the weight reading of each individual load cell through the instrument without disconnecting any of the load cells from the system.

3. The scale instrument shall communicate with each individual load cell.

4. The scale instrument shall be capable of being programmed and calibrated in pounds or kilograms.

5. The display shall be a full color graphic, alphanumeric LED back-lit display with the capability to prompt the operator through all operations with true alpha characters. Segmented LED alphanumeric displays are not acceptable.

6. The scale instrument shall communicate static scale weights to the Scale Manager on the central Weigh Station computer to display weights on the computer system screen, and to allow the accurate weighing of the truck on the static scale.

7. The scale instrument shall have a program to accumulate up to 19 axle and axle groups and print 8.5 x 11 weight tickets that is independent of the WIM system. This program should work as a backup in case the Station system is not working.

8. The instrument shall have the capability to run multiple scales as a standard unit. Adding extra boards at a later date is to be considered not meeting specifications. The instrument shall have self-diagnostics built in that allow the technician to view all load cell outputs simultaneously.

9. Simultaneous viewing of digital load cell output allows for fast easy analysis of the scale operating system. Viewing cell outputs one at a time is not acceptable.

10. The system shall have the ability to be 100% calibrated from within the scale house. Corrections or calibration adjustments at the scale through summing boxes are not acceptable.

11. Surge Voltage Protection on the system shall be optically isolated at each load cell, and transformer coupled from the instrument.

12. Scale shall have the ability to be analyzed via remote software.

13. The scale instrument shall have the ability to be programmed via remote software.

14. Remote software diagnostics shall allow simultaneous viewing of all load cells in counts, and actual weight that each individual load cell is sensing. Viewing of cells one at a time is not acceptable.

15. Remote software service shall be capable of displaying load cell zero calibration counts, current zero counts and actual mV/V output of each cell simultaneously. A printed report of this information is possible from the remote software.

16. Remote software service shall be capable of performing a self-test on all communications ports and report the current setup.

17. Original calibration values shall have the capability to be retrieved and stored via remote software.

18. Original configuration values shall have the capability to be retrieved and stored via remote software.

19. For non-commercial applications, scales shall have the capability to be set up and calibrated via remote software.

* + - 1. Ticket Printer Requirements

Provide the following:

1. Provide one laser-type printer
2. Minimum print speed of 12 pages per minute
3. Minimum print quality of 600 dpi
4. Minimum 8 Mb of memory
   * + 1. Scoreboard Sign Requirements

The existing scoreboards will remain and be reused. The system shall be capable of utilizing the existing scoreboards.

### Construction

The Static Scale System vendor shall warrant and maintain all subsystems and new system components as supplied and installed for five years from the date of acceptance by the engineer. This warranty and associated maintenance work are defined and covered under a separate bid item, Static Scale System Warranty Maintenance

### Measurement

The Department will measure Static Scale System, completed in accordance to the contract and accepted, as a single complete unit of work.

### Payment

The Department will pay for measured quantity at the contract unit price under the following bid item:

|  |  |  |
| --- | --- | --- |
| ITEM NUMBER | DESCRIPTION | UNIT |
| SPV.0105.003 | Static Scale System | LS |

Payment is full compensation for removal and disposal of old equipment along with furnishing and installing all materials; making the system operational; testing; providing required training and warranties; and for furnishing all labor, supervision, equipment, tools, and incidentals necessary to complete the contract work.

## Static Scale System Warranty Maintenance, Item SPV.0105.004.

### Description

Provide warranty and maintenance service for the new Static Scale System components for a period of five years. Upon completion of construction, power wash and remove debris from the entire static scale pit. The sump pits should be protected with fabric or other measures to prevent debris from getting into the pits whenever cleaning is occurring. Provide routine maintenance on all major systems, system components, and ancillary equipment in the spring of the year at annual intervals. This maintenance is to include the existing load cells/equipment remaining in place along with newly installed load cells/equipment. Power washing and debris clean up shall coincide with the annual maintenance schedule. The existing load cells/equipment are not covered under the warranty portion of this item but are covered under the maintenance portion. Provide emergency repair services on an as-required basis.

The static scale equipment shall be warranted by the manufacturer, in writing, against defects in or from material, workmanship, lightning, and to perform as required by these technical special provisions, giving proper and continuous service under all conditions required and specified, or which may reasonably be inferred, for a period of five years from the date of acceptance. The manufacturer's routine maintenance schedule shall be stated. The written manufacturer's warranty shall be furnished to the Department by the Contractor at the time the equipment performance supporting data is submitted. The warranties shall also state they are subject to transfer to the Department.

The new static scale equipment weighing instruments, load cells, and hardware shall be warranted by the manufacturer, in writing, against defects in or from material, workmanship, lightning, and perform as required by these technical special provisions for the period of five years or as described above from the date of final acceptance of the project.

* + - 1. Warranty Bond

The contractor shall provide a warranty bond for the Static Scale System Warranty Maintenance. The bond will be in effect for the entire five-year warranty period beginning when the Static Scale System is completed, operational and accepted. The bonding company must have an AM Best rating of "A-" or better and the contractor will provide proof of a five-year bond commitment before execution of the contract.

The warranty bond amount will be for $25,000. The bond will ensure the proper and prompt completion of required warranty work following completion of the contract work, including payments for furnishing all labor, equipment, and materials used according to this specification.

The contract bond, which remains in effect for one year beyond the completion of the project, will also include warranty work as described in this article. For the remaining four-year warranty period, provide documentation that the warranty bond will be provided in a single term four-year warranty bond.

Failure of the contractor or its surety to issue the warranty bond will be considered a default and will result in forfeiture of the face amount of the bond to the Department.

All warranty work will be as prescribed in this article. At the end of the warranty period, the contractor will be relieved of the responsibility to perform further warranty work, provided all previous warranty work has been completed.

Maintain insurance, in the course of performing warranty work, as specified in standard spec 107.26 throughout the five-year warranty period.

### (Vacant)

### Construction

* + - 1. Maintenance Services

Scheduled maintenance services shall be performed annually. The scheduled maintenance service shall include the following:

1. Visual inspection of the static scale system

2. Calibration of the scale

3. Lubrication of load cells and bumpers (new and existing)

4. Power washing of the scale deck and pit with 2500 psi minimum pressure washer and disposal of debris

5. Parts, labor and shipping

6. Mobilization and traffic control necessary to perform the maintenance services

A report shall accompany the scheduled maintenance service and shall be submitted to the Department. The report shall include:

1. Calibration process and results

2. Work completed

3. Evaluation of the static scale system

4. Other comments

* + - 1. Emergency Repair Services

Emergency repair services shall be completed on an as-required basis. The maximum response time for emergency repair services shall not exceed 48 hours after written receipt of notice by email or fax. The vendor shall initiate on-site repairs within three calendar days of notification. Emergency repair services shall include all parts, labor, shipping, mobilization and traffic control necessary to perform the work.

### Measurement

The Department will measure Static Scale System Warranty Maintenance, completed in accordance to the contract and accepted, as a single complete unit of work.

### Payment

The Department will pay for measured quantity at the contract unit price under the following bid item:

|  |  |  |
| --- | --- | --- |
| ITEM NUMBER | DESCRIPTION | UNIT |
| SPV.0105.004 | Static Scale System Warranty Maintenance | LS |

Payment is full compensation for providing warranty and all maintenance services and emergency service for a period of five years and shall include all labor, tools, parts, shipping, mobilization, traffic control and incidentals necessary to perform the maintenance services.

## Traffic Control Project (1030-31-72), Item SPV.0105.005.

### Description

The work under this item includes providing, erecting, maintaining, moving, and removing temporary traffic signs, drums, barricades, arrow boards, and lights as required for the project.

### Materials

All devices used shall conform with the requirements of standard spec 643.

### Construction

The contractor shall have available at all times sufficient experienced personnel to promptly install, remove and reinstall the required traffic control devices and to route traffic in order to perform the operations.

During the life of the contract, the contractor shall provide 24-hour a day availability of equipment and forces to promptly restore barricades, lights, or other traffic control devices that are damaged or disturbed. In no case shall any barricade, light or other traffic control device be out of service for more than two hours. The cost to maintain and restore the above items shall be incidental to the Traffic Control Project item and no additional payment will be made.

No equipment, vehicles, or construction materials shall be parked or stored within 30 feet of the edge of the traffic lane of any roadway carrying freeway traffic during nonworking hours except at locations and periods of time approved by the engineer. At such locations, the material and equipment involved shall not constitute a hazard to the traveling public.

All construction vehicles shall yield to all through traffic at all locations. All contractor’s vehicles or equipment operating in the live traffic lanes shall be equipped with a hazard identification beam (Flashing yellow signal light, 8-inch minimum diameter). The flashing yellow light shall be activated when merging into or exiting a live traffic lane. The flashing yellow beam shall only be operated when entering or exiting traffic lanes or when parked or operating on shoulders.

The contractor shall not disturb, remove or obliterate any traffic control signs, advisory signs, shoulder delineators or beam guard in place along the traveled roadways without approval of the engineer.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency.

No operation shall proceed until all traffic control devices for such work are in the proper location.

The cost of traffic control will be paid for under this item, Traffic Control Project (1030-31-72). Drums, signs, barricades, flashing lights, and arrow boards will be incidental to the bid item and will not be paid separately.

### Measurement

The Department will measure Traffic Control Project (1030-31-72), completed in accordance to the contract and accepted, as a single complete unit of work.

### Payment

The Department will pay for measured quantity at the contract unit price under the following bid item:

|  |  |  |
| --- | --- | --- |
| ITEM NUMBER | DESCRIPTION | UNIT |
| SPV.0105.005 | Traffic Control Project (1030-31-72) | LS |

Payment is full compensation for providing for providing, constructing, assembling, hauling, erecting, re-erecting, maintaining, restoring, and removing traffic signs, drums, barricades, and similar control devices, including arrow boards; and for partially or fully covering or uncovering signs as required by the project plans.

# SPECIAL TERMS AND CONDITIONS

## Contract Quantities

The estimated quantities for each item are identified on the “BID PRICE SHEET”.

## Warranty

All warranty for the contract work shall be covered as described under items SPV.0105.002 Weigh-In-Motion System Warranty Maintenance and SPV.0105.004 Static Scale System Warranty Maintenance.

## Subcontracting or Third Party Payments

All subcontracting shall be pre-approved by WisDOT. Subcontractors must abide by all terms and conditions of the contract. The prime Contractor shall be responsible for all subcontractor(s) work and payment. The WisDOT will not pay any subcontractor or third parties directly.

## Confidentiality

Contractor acknowledges that some of the data and documentation it may become privy to in the performance of this contract is of a confidential nature. Contractor shall make all reasonable efforts to ensure that it or its employees and subcontractors do not disseminate such confidential information.

Contractor or its employees and subcontractors will not reuse, sell, or make use in any format the data researched or compiled for this contract for any venture, profitable or not, outside this contract.

Contractor agrees to observe complete confidentially with respect to all aspects of any confidential information, proprietary data and/or trade secrets and any parts thereof, whether such contents are the State's or the manufacturer's, bidder's, or distributor's whereby Contractor or any Contractor's personnel may gain access while engaged by the State or while on State premises.

The restrictions herein shall survive the termination of this contract for any reason and shall continue in full force and effect and shall be binding upon the Contractor or its agents, employees, successors, assigns, subcontractors, or any party claiming an interest in this contract on behalf of or under the rights of Contractor following any termination. Contractor shall advise all Contractors’ agents, employees, successors, assigns and subcontractors which are engaged by the State of the restrictions, present and continuing, set forth herein. Contractor shall defend and incur all costs, if any, for actions that arise as a result of noncompliance by Contractor, its agents, employees, successors, assigns and subcontractors regarding the restrictions herein.

## Liquidated Damages

This shall be surety for fulfillment of the contract(s) including quality, performance and delivery under the terms of this Request for Bid. Liquidated damages shall consist of $250.00 per calendar day for failure to deliver according to the contract terms. Liquidated damages will be deducted from payments on the invoice covering the late shipments, if the invoice is of sufficient amount to cover the liquidated damages. If the invoice is not of a sufficient amount to cover the liquidated damages on a particular shipment, the agency will request cancellation of the invoice and a credit to cover the balance. Additional liquidated damages may be assessed as outlined in 3.2.2.8.2.3 Continuous Operating Test (COT).

## Invoicing Requirements

Invoices/Purchase Order:

WisDOT must meet a statutory mandate to pay or reject invoices within 30 days of receipt by WISDOT. Before payment is made, WisDOT must verify that all invoiced charges are correct as per this contract. Only properly submitted invoices shall be officially received for payment. Thus, your prompt payment requires that your invoices be clear and complete in conformity with the instructions below.

All invoices must be itemized showing:

* + - * Purchase order number
      * Vendor name
      * Remit to address
      * The complete product description as stated on your bid
      * Prices per the contract

Send invoice to the bill-to address shown on the Purchase Order.

## Reporting Requirements

WisDOT shall have the right to audit, review, examine, copy, and transcribe any pertinent records or documents held by the Contractor related to this contract. The Contractor shall establish, maintain, report as needed, and submit upon request records of all transactions conducted under the contract. All records must be kept in accordance with generally accepted accounting procedures. All procedures must be in accordance with federal, State of Wisconsin and local ordinances.

## Order of Precedence

In the event of contract award, the contents of this RFB (including all attachments), RFB addenda and revisions, the bid response from the successful bidder, and additional terms agreed to, in writing, by WisDOT and Contractor shall become part of the contract.

The following priority for contract documents will be used if there are conflicts or disputes:

1. The Contract Award document
2. Official Purchase Order
3. Bid response as accepted by WisDOT
4. WisDOT Request for Bid

## Completion Date

Contract award is expected within 14 calendar days of the bid date and the contractor shall provide the Certificate of Insurance in accordance with Section 2.2 of the Special Conditions. The contractor shall begin work within 14 calendar days of the contract award and shall complete all work within 90 calendar days. Liquidated damages in accordance with Section 4.5 of the Special Conditions may be assessed for failure to complete the work within 90 calendar days.

# BID PROCEDURE AND INSTRUCTIONS

## Reasonable Accommodations

The Department will provide reasonable accommodations, including the provision of informational material in an alternative format, for qualified individuals with disabilities upon request. If you require information in an alternate format in order to respond to this bid or if you need accommodations at a bid opening/vendor conference, contact: Kevin Diehl, 608-261-0124, [kevin.diehl@dot.wi.gov](mailto:kevin.diehl@dot.wi.gov). If you think you need accommodations at a bid opening contact Kevin Diehl, 608-261-0124, [kevin.diehl@dot.wi.gov](mailto:kevin.diehl@dot.wi.gov) or Wisconsin Telecommunications Relay System (TTY) at 1-800-947-3529.

## Questions

If a vendor discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in this RFB they shall notify the Facilities Engineer named below of such error and request modification or clarification of the bid document.

Any communications or questions regarding the specifications, or special conditions of bid should be written and submitted to the purchasing agent shown on the bid cover sheet and below as soon as possible, but no later than March 16, 2018. Purchasing will respond to questions by issuing an official addendum, posted on VendorNet.

Any correspondence or submitted documents must include the bid number.

**Submit in writing via email to:**  [Bill.Wondrachek@wi.gov](mailto:Bill.Wondrachek@wi.gov)

## Bid Submission

Bidders must submit the original and 1 copy of all required materials for acceptance of their bid by the date and time listed on the Bid cover sheet. Any bids received after that time and date will be rejected. Receipt of a bid by the State mail system does not constitute receipt of a bid by Purchasing, for purposes of this RFB. Also refer to the Bid Response Instructions. Use one of the options below for return of the bid. Faxed and e-mailed bids are not accepted.

U.S. Mail: UPS, Fed Ex, etc.:

Purchasing Purchasing

WI Department of Transportation WI Department of Transportation

4802 Sheboygan Ave., Room 751 4802 Sheboygan Ave., Room 751

PO Box 7396 Madison, WI 53705

Madison, WI 53707-7396

All bids are to be packaged, sealed, and show the following information on the **outside of the package:**

* Vendor's Name and Address
* Request for Bids Install WIM System Racine SWEF #22
* Request for Bids # XXXXX
* Bid Due Date XXXX

Because of increased building security, access to the WisDOT Purchasing Office is restricted and may cause delay if hand delivering your bid. Allow ample time for security clearance to room 751.

## Method of Bid

Bidder must submit a unit price for each item and a total price as designated. All prices must be quoted in U.S. Dollars.

Bidder must bid on the enclosed bid price sheet. (Attachment H)

## Bid Response Requirements

In order for your bid to be considered, the following information must be provided. Fill out and submit your bid and 1 copy by the due date and time listed on the bid cover page. Include:

* Bid Cover (Signature) Pages
* Addendum Cover (Signature) Page(s), if applicable to this bid request
* Bid Price Sheet(s)
* Vendor Information Sheet, Attachment A
* References Sheet, Attachment B
* MBE Program Awareness, Compliance & Action Plan, Attachment C
* Bidder Response Sheet, Attachment E

Failure to provide the forms/information with your bid submittal may disqualify your bid. WisDOT encourages all bidders to print their submission double-sided to save paper.

## Incurring Costs

The State of Wisconsin is not liable for any cost incurred by a bidder in the process of responding to this RFB.

## Vendornet Registration

Registration on the State of Wisconsin’s VendorNet System (http://vendornet.state.wi.us) is available free of charge to all businesses and organizations that want to sell to the state. Registration allows a vendor to:

* Register for a bidders list for commodities/services that the vendor wants to sell to the state.
* Receive an automatic e-mail notification each time a state agency, including the University of Wisconsin System campuses, posts a request for bid (RFB) or a request for proposal (RFP) with an estimated value over $50,000 in their designated commodity/service area(s).
* Receive an e-mail notification of addendums/amendments relative to the RFB or RFP.

Only vendors registered, with a valid e-mail address, at the time the RFB or RFP is posted will receive e-mail notifications of addendums/amendments. Vendors who obtain the RFB or RFP from a third party; through the public notice website <http://publicnotices.wi.gov>; or other means assume responsibility for checking for updates to the RFB or RFP.

Only vendors registered with the State of Wisconsin’s VendorNet will receive future official notice for this service/commodity.

To obtain information on the state’s bidder registration, please visit the VendorNet Web site at <http://vendornet.state.wi.us>. Assistance is available from the VendorNet Information Center   
(1-800-482-7813); in the Madison area, 264-7898.

# BID OPENING, ACCEPTANCE AND AWARD

## Bid Opening

Bids will be opened on the date and time listed on the front cover page. Names of the bidders will be read aloud at that time. WisDOT will issue an official addendum and post on VendorNet should a need to change the bid open date and/or time occur.

## Bid Acceptance

WisDOT shall review all materials submitted in response to this bid in an identical manner to determine specification compliance. Bids which do not comply with specifications contained in this RFB WILL be rejected by the State. The State retains the right to accept or reject any or all bids, or accept or reject any part of a bid deemed to be in the best interest of the State. The State shall be the sole judge as to compliance with the specifications contained in this RFB.

## Method of Award

The contract will be awarded to the lowest cost responsive, responsible bidder that meets the specifications.

## Minority Business Participation

The Wisconsin Department of Transportation is committed to the promotion of minority businesses in the State’s purchasing program. Authority for this program is found in Wisconsin Statutes 15.107(2), 16.75(3m), and 16.755.

Bidders who feel that they qualify, should seek certification from the Wisconsin DOA and mark “yes” on page 2 of the RFB. Details of program certification are located at: <http://www.doa.state.wi.us/index.asp?locid=169>.

Bidders are strongly urged to use due diligence to further this policy by setting up subcontracts to state-certified Minority Business Enterprises (MBE) and/or by using such enterprises to provide goods and services incidental to this contract (second-tier suppliers), with a goal of awarding 5% of the contract cost to such enterprises. An MBE means a business certified, or certifiable, by the Wisconsin Department of Administration under Statute 560.036(2).

Bidders must submit the attached WisDOT MBE / DVB Program Awareness, Compliance & Action Plan (Attachment C) indicating their proposed utilization of state-certified minority businesses for this contract. Contact the State’s Minority Business Manager for assistance in locating certified firms at (608) 267-3293 or the WisDOT Minority Business Program Coordinator at (608)-267-3293. A listing of State of Wisconsin certified minority businesses, as well as the services and commodities they provide, is on the State-certified MBE web site: [www.doa.wi.gov/mbe](http://www.doa.wi.gov/mbe)

Monthly reports (Attachment D) are requested to be submitted to the WisDOT Minority Business Program Coordinator, itemizing the deliveries and cost of items or services provided by certified firms. Reports should state the costs for the previous contract month. The Department reserves the right to verify with listed firms their involvement as subcontractors or second-tier suppliers.

## Disabled Veteran Owned Business

Wisconsin statutes support purchasing goods/services from Disabled Veteran-owned businesses located in Wisconsin. Bidders are strongly urged to use due diligence to further this policy by setting up subcontracts to state-certified Disabled Veteran-Owned Businesses (DVB) and/or by using such enterprises to provide goods and services incidental to this contract (second-tier suppliers), with a goal of awarding 5% of the contract cost to such enterprises. A DVB means a business certified, or certifiable, by the Wisconsin Department of Administration under Statute 16.283 (3).

"Disabled veteran" means a person who is verified by the Department of Veterans Affairs as being all of the following at the time the person applies for certification:

1. A veteran as defined in s. 45.01(12),
2. A resident of this state, and
3. A person who is in receipt of an award from the U.S. Department of Veterans Affairs of a service–connected disability rating under 38 USC 1114 or 1134 of at least 30%.

Bidders who feel that they qualify, should seek certification from the Wisconsin DOA and mark “yes” on page 2 of the RFB. Details of program certification are located: <http://www.doa.state.wi.us/section.asp?linkid=191&locid=0>

Monthly reports (Attachment D) are requested to be submitted to the WisDOT, Purchasing Unit, itemizing the deliveries and cost of items or services provided by certified DBV firms. Reports should state the costs for the previous contract month. Any use of DVB firms can be reported via e-mail to [DOTTIPSCOrrespond@dot.wi.gov](mailto:DOTTIPSCOrrespond@dot.wi.gov). WisDOT reserves the right to verify with listed firms their involvement as subcontractors or second-tier suppliers.

## Contract Cancellation

This Contract may be terminated by either party under the following conditions:

A. Please review section 13.0 and 24.0 of the Standard terms and Conditions of Bid. WisDOT may terminate the contract at any time at its sole discretion by delivering 30 days written notice to the Contractor.

If the problem is service performance, Contractor will be warned either verbally or in writing of unsatisfactory performance and intent to cancel this contract. Contractor will be given a period of time to ‘cure’ the performance. If the performance does not improve Contractor will be given 30 days written notice that the contract will be cancelled.

Upon termination, WisDOT’s liability will be limited to the pro rata cost of the services performed as of the date of termination.

1. In the event the Contractor terminates the contract, for any reason whatsoever, it will require written certified letter notification delivered to the Department purchasing agent not less than 30 days prior to said termination. The Contractor will, in turn, refund the Department, within 30 days of said termination, all payments made hereunder by the Department to the Contractor for work not completed.
2. If at any time the Contractor performance threatens the health and/or safety of WisDOT, WisDOT has the right to cancel and terminate the Contract without notice.
3. If the Contractor fails to maintain and keep in force the insurance as provided in section 23.0 of the Standard Terms and Conditions, WisDOT has the right to cancel and terminate the Contract without notice. If the Contractor fails to maintain and keep in force required certificates, permits, and licenses will be cause for contract termination.
4. If at any time a petition in bankruptcy shall be filed against the Contractor and such petition is not dismissed within 90 calendar days, or if a receiver or trustee of Contractor's property is appointed and such appointment is not vacated within 90 calendar days, WisDOT has the right, in addition to any other rights of whatsoever nature that it may have at law or inequity, to terminate this Contract by giving 90 calendar days notice in writing of such termination.

## Certification for Collection of Sales and Use Tax

The State of Wisconsin shall not enter into a contract with a vendor, and reserves the right to cancel any existing contract, if the vendor or Contractor has not met or complied with the requirements of s.77.66, Wis. Stats., and related statutes regarding certification for collection of sales and use tax.

## Timeline of Events

June XX, 2018 Bid available to Vendors

June XX, 2018 Questions Due from Vendors

June XX, 2018 Answers posted to E-Supplier

June XX, 2018 Bid Responses Due

STATE OF WISCONSIN

DOA-3477 (R05/98)

**ATTACHMENT A**

**VENDOR INFORMATION**

1. BIDDING COMPANY NAME:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| FEIN (Federal Employer ID Number) OR  Social Security # (if Sole Proprietorship) | | | | |  | | | | | | |
|  | | | | | | | | | | | |
| Phone | | ( ) |  |  | | | Toll Free Phone | | | ( ) | |
|  | | | | | | | | | | | |
| Fax | | ( ) |  |  | | | Email Address | | |  | |
|  | | | | | | | | | | | |
| Address: | |  | | | | | | | | | |
|  |  | | | | | | | | | | |
| City |  | | | | | State | |  | Zip + 4 | |  |
|  |  | | | | |  | |  |  | |  |

1. Name the person to contact for questions concerning this bid.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name | |  | | |  | | | Title | |  | | | |
|  | | | | | | | | | | | | | |
| Phone | | | ( ) |  | | | Toll Free Phone | | | | | ( ) | |
|  | | | | | | | | | | | | | |
| Fax | | | ( ) |  | | | Email Address | | | | |  | |
|  | | | | | | | | | | | | | |
| Address: | | |  | | | | | | | | | | |
|  |  | | | | | | | | | | | | |
| City |  | | | | | State | | |  | | Zip + 4 | |  |
|  |  | | | | |  | | |  | |  | |  |

1. Any vendor awarded over $25,000 on this contract must submit affirmative action information to the Department. Please name the Personnel/Human Resource and Development or other person responsible for affirmative action in the company to contact about this plan.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name | |  | | |  | | | Title | |  | | | |
|  | | | | | | | | | | | | | |
| Phone | | | ( ) |  | | | Toll Free Phone | | | | | ( ) | |
|  | | | | | | | | | | | | | |
| Fax | | | ( ) |  | | | Email Address | | | | |  | |
|  | | | | | | | | | | | | | |
| Address: | | |  | | | | | | | | | | |
|  |  | | | | | | | | | | | | |
| City |  | | | | | State | | |  | | Zip + 4 | |  |
|  |  | | | | |  | | |  | |  | |  |

1. Mailing address to which state purchase orders are mailed and person the Department may contact concerning orders and billings.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name | |  | | |  | | | Title | |  | | | |
|  | | | | | | | | | | | | | |
| Phone | | | ( ) |  | | | Toll Free Phone | | | | | ( ) | |
|  | | | | | | | | | | | | | |
| Fax | | | ( ) |  | | | Email Address | | | | |  | |
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| City |  | | | | | State | | |  | | Zip + 4 | |  |
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**ATTACHMENT B**

**REFERENCES**

|  |  |
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| Vendor |  |

Provide company name, address, contact person, telephone number, and appropriate information on the product(s) and/or service(s) provided to customers similar to those requested in this solicitation document. Potential subcontractors cannot be references. Any subcontractor arrangement for the completion of this work shall be listed on a separate id page.

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| Company Name | | | |  | | | | | | | | |
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| Address: | |  | | | | | | | | | | |
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| City |  | | | | | State | | |  | Zip + 4 | |  |
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| Contact Person: | | | |  | | | | | | | | |
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| Phone | | ( ) | | |  | | |  | | |  | |
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| Email Address | | |  | | | | | | | | | |
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| Product(s) Used and/or Service(s) Provided: | | | | | | |  | | | | | |

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| Contact Person: | | | |  | | | | | | | | |
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| Product(s) Used and/or Service(s) Provided: | | | | | | |  | | | | | |

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| Email Address | | |  | | | | | | | | | |
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| Product(s) Used and/or Service(s) Provided: | | | | | | |  | | | | | |

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| Company Name | | | |  | | | | | | | | |
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| Address: | |  | | | | | | | | | | |
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| City |  | | | | | State | | |  | Zip + 4 | |  |
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| Contact Person: | | | |  | | | | | | | | |
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| Phone | | ( ) | | |  | | |  | | |  | |
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| Email Address | | |  | | | | | | | | | |
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| Product(s) Used and/or Service(s) Provided: | | | | | | |  | | | | | |

**ATTACHMENT C**

**WisDOT MINORITY BUSINESS ENTERPRISE (MBE) PROGRAM**

**AWARENESS, COMPLIANCE & ACTION PLAN**

As a matter of sound business practice, the Wisconsin Department of Transportation is committed to “supply diversity” by promoting the use of minority business and disabled veteran-owned business whenever and wherever possible. Additionally, as an agency of the State of Wisconsin, WisDOT shares in the state goal of placing five (5) percent of its total annual purchasing dollars with state-certified minority and disabled veteran-owned businesses.

State of Wisconsin procurement policy provides that Minority Business Enterprises (MBE) and Disabled Veteran-owned Businesses (DVB) certified by the Wisconsin Department of Administration should have the maximum opportunity to participate in the performance of its contracts/projects.

You, as a contractor, are strongly urged to use due diligence to further this policy by awarding subcontracts to MBEs and DVBs by using such enterprises to provide goods and services incidental to this agreement (second-tier suppliers), with a goal of awarding 5% of the contract cost to such enterprises.

**Authority for these programs is found in Wisconsin Statutes 15.107(2), 16.283(3), 16.75(3m), 16.755 and 560.036(2), and details about the program can be found at:** <http://www.doa.state.wi.us/category.asp?linkcatid=677&linkid=113&locid=0>

Monthly reports are requested to be submitted to the Department of Transportation Purchasing Unit, itemizing the costs of services and goods provided by certified firms. Reports should state the costs for the previous contract/project month.

**Your complete response on the following form must address the following components of your company’s/organization’s commitment/action plan:**

1. Indication that you understand the **WisDOT’s goal,**
2. Listing of any MBE/DVB vendors with which you intend to subcontract,
3. Description of the various **second tier MBE/DVB expenses** (goods and services procured that are incidental to the contract/project; *examples are*: specific office supplies to perform the contract, percentage of cost for uniforms for contract staff, travel to perform the contract/project, percentage of facility maintenance services for your facility used directly by your staff during the contract/project period) your company/organization will be able to report that are in direct connection with the administration of this contract,
4. **Statement expressing your commitment** to complete the required monthly reports that will reflect your subcontracts and second-tier expenditures for the period.

For information on certified State of Wisconsin Minority Business Enterprises, please contact:

June Robinson

MBE Program Coordinator

WisDOT Division of Business Management

4802 Sheboygan Avenue, Room 751

Madison, WI 53705

Phone: 608-267-2886

Fax: 608-267-3609

[www.dot.wisconsin.gov/business/mbe](http://www.dot.wisconsin.gov/business/mbe/index.htm)

[june.robinson@dot.wi.gov](mailto:june.robinson@dot.wi.gov)

A complete listing of certified minority businesses, as well as the services and commodities they provide, is available on the web at: [www.doa.wi.gov/mbe](http://www.doa.wi.gov/mbe) and Information regarding certification of minority businesses is available at: <http://commerce.wi.gov/BD/BD-MBD-Index.html>

**ATTACHMENT C**

**WisDOT MINORITY BUSINESS ENTERPRISE (MBE) PROGRAM**

**DISABLED VETERAN-OWNED BUSINESS (DVB) PROGRAM**

**AWARENESS, COMPLIANCE & ACTION PLAN**

Complete, sign, and include in your bid response.

Failure to complete this form as a component of your bid may result in rejection of your bid.

|  |  |  |
| --- | --- | --- |
| Our company/organization is a Wisconsin-certified Minority Business Enterprise (MBE) | ⬜ Yes | ⬜ No |
|  | | |
| Our company/organization is a Wisconsin-certified Disabled Veteran-owned Business (DVB) | ⬜ Yes | ⬜ No |
|  |  |  |
| Our company/organization is a minority business but has not yet received Wisconsin certification (please provide details): | ⬜ Yes | ⬜ No |
|  | | |
| Our company/organization is a disabled veteran-owned business but has not yet received Wisconsin certification (please provide details): | ⬜ Yes | ⬜ No |
|  |  |  |
| We are aware of the WisDOT’s goal to spend at least 5% of their total annual purchasing dollars with state-certified MBE /DVB firms. | ⬜ Yes | ⬜ No |
|  | | |
| We are aware that if awarded this contract/project our company/organization will provide monthly or quarterly reports to WisDOT reporting all expenditure activity directed to MBE/DVB subcontractors or second-tier MBE/DVB suppliers that directly relate to this contract. (Any non-certified minority or non-certified disabled veteran-owned businesses could be a potential subcontractor/second-tier supplier--indicate these on your plan. WisDOT will work with those businesses for possible certification.) | ⬜ Yes | ⬜ No |
|  |  |  |
| Subcontractors: Our company/organization intends to subcontract at least 5% dollar volume with certified MBE/DVB firms listed below (names, addresses, telephone numbers): | ⬜ Yes | ⬜ No |
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Second-tier Suppliers: In addition to direct subcontracting efforts, your company/organization can help WisDOT achieve the 5% goal by managing your second-tier MBE/DVB purchases. Second-tier business refers to incidental business expenses your company may spend with Wisconsin-certified MBE/DVB firms as it pursues the normal course of business supplying the WisDOT-contracted products or services. Here are some *examples*:

* Percentage of your office supplies specifically used during the course of this contract/project.
* Percentage of uniform costs for staff performing this contract/project.
* If you travel to perform this contract/project, you could use a state-certified MBE travel agency and report that expense.
* Percentage of facilities maintenance services for facility(ies) directly used by your staff during the course of this contract/project.

These second-tier expenses can only be reported to the extent that they directly relate to your business with WisDOT. The percentage of the expense you can report is determined by the amount of your WisDOT sales as it relates to your total sales volume. Per the terms of your contract, you should actively pursue directing business towards these types of companies, and report your efforts in this regard on a monthly basis.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

In paragraph form, describe your company/organization’s commitment/action plan with regard to the planned use of state-certified MBE/DVB businesses in subcontracting efforts, as well as developing MBE/DVB second-tier suppliers. Please list your specific commitments (attach sheet, if necessary).

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| SIGNATURE: | |  | | | | | |
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| Company: | | |  | | | | |
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| Date: |  | | | |  | Phone | ( ) |
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| Email Address | | | |  | | | |

**ATTACHMENT D**

**MINORITY BUSINESS**

**DISABLED VETERAN-OWNED BUSINESS**

**PARTICIPATION REPORT**

Wisconsin Department of Transportation

DT1230 8/2006 s.16.75 (3m) Wis. Stats.

Instructions: Complete and submit to Wisconsin Department of Transportation by the 20th of each month.

|  |  |
| --- | --- |
| Return via FAX to:  OR | 608-267-3609, ATTN: Purchasing Minority Business Coordinator |
| Return via e-mail to: | [DOTTIPSCOrrespond@dot.wi.gov](mailto:DOTTIPSCOrrespond@dot.wi.gov) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Report Date | Contract / Purchase Order # | Time Period Covered by Report | | | |  |
|  |  | Monthly: | |  | through |  |
|  |  |  | |  |  |  |
| Project Name / Contract Title | | | | | | | |
| Prime Vendor / Contractor Name | | | Federal Employer Identification Number – FEIN | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Contractor Name, Address and Telephone Number  Indicate if MBE or DVB | Product / Service  Purchased | Subcontract  $ Amount | Second Tier  $ Amount |
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If no business was awarded to Minority Business Enterprises (MBE) or Disabled Veteran-owned Business (DVB) for this period, please describe the efforts made to encourage their business participation. If you have questions, please call the WisDOT Minority Business Program Specialist, 608-267-2886.

I certify that the information contained on this report is true and correct.

I also certify that I am an authorized representative of the above-identified Prime Vendor / Contractor.

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  | (Prime Vendor/Contractor Authorized Representative Name) |
|  |  | (Title) |

**Attachment E**

Numbering will change with each final version

**BIDDER RESPONSE SHEET**

NOTE: THIS FORM SHOULD BE RETURNED WITH YOUR BID RESPONSE SECTION NUMBERS IDENTIFIED CORRESPOND TO THOSE SHOWN IN THE SPECIAL CONDITIONS OF BID.

|  |  |  |
| --- | --- | --- |
|  | YES | NO |
| Bidder has provided references as required. |  |  |
| Bidder has been in this business the required term. |  |  |
| Bidder will honor manufacturer’s warranty. |  |  |
| Bidder will provide Certificate of Insurance if awarded the contract. |  |  |
| Bidder will comply with terms on subcontracting. |  |  |
| Bidder understands and agrees to the confidentiality clauses. |  |  |
| Bidder agrees to terms regarding liquidated damages. |  |  |
| Bidder will hold pricing firm the required term. |  |  |
| Bidder understands invoice requirements. |  |  |
| Bidder agrees to terms regarding audit requirements. |  |  |
| Bidder has completed and returned all forms required. |  |  |
| Bidder agrees to terms regarding contract cancellation. |  |  |
| Bidder must provide proof of, and will maintain current certificates, permits, and licenses. |  |  |

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| --- | --- | --- |
|  |  |  |
| Company Name (print or type) |  | Bidder's name & title (print or type) |
|  |  |  |
|  |  |  |
| Bidder’s Signature |  | Date |
|  |  |  |
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