SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by digital signature and electronic submission via Bid Express of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.	**1**	DATED	**3/16/2016**	ADDENDUM NO.	**3**	DATED	**3/17/2016**
ADDENDUM NO	**2**	DATED	**3/16/2016**	ADDENDUM NO.		DATED	

Number	Description
1	Revised Table of Contents; Revised NTB Nos. 6028, 6031, & 6047; Add NTB No. 6224; Revised Bid Items; Added or Revised Plan Sheet Nos. 2, 10-11, 16, 24, 30, 32, 36, 39, 43, 59, 2002, 8001, & 8192; Amendment EBS Download Required.
2	Revised Table of Contents; Add NTB Nos.6225, & 6226; Replace SP No. 907-604-6 with SP No. 907-604-7 with Supplement; Revised Bid Items; Amendment EBS Download Required.
3	Revised Table of Contents; SP No. 907-688-8 replaces SP No. 907-687-16; Revised Bid Items; Amendment EBS Download Required.

TOTAL ADDENDA: **3**
(Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

_____
Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President	Address
Secretary	Address
Treasurer	Address

The following is my (our) itemized proposal.

IM-0055-02(246)/106023309

Hinds County(ies)

Revised 01/26/2016

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
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OF SECTION 905 AS ADDENDA)

03/17/2016 05:36 PM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-688-8 **CODE: (SP)**

DATE: 03/17/2016

SUBJECT: Traffic Recorder Weigh-In-Motion (WIM) System

PROJECT: IM-0055-02(246) / 106023309 – Hinds County

Section 907-688, Traffic Recorder WIM System, is hereby added to and made a part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-688 – TRAFFIC RECORDER WIM SYSTEM

907-688.01--Description. This work consists of furnishing Traffic Recorder WIM Systems of the types specified which includes assembling, constructing, erecting, and installing a new complete system in conformity with these specifications to insure properly operating units in accordance with the designs and at the locations shown on the plans, or as directed. This axle detector system should classify and weigh vehicles in all lanes. Submittals shall be sent directly to the Planning Analysis section of the Planning Division with a copy of the cover letter sent to the Project Engineer. The submittals will be returned within a seven (7) business day period from when they are received.

The Contractor shall include all hardware and software necessary to operate the field station unattended. The station is to operate continuously without human intervention.

The system may be a Traffic Recorder WIM Kistler System (907-688-A) or a Traffic Recorder WIM Brass Linguini (BL) Piezo System (907-688-B). The type of system shall be defined in the plans or contract documents.

The Traffic Recorder WIM Kistler System shall utilize two (2) Kistler quartz sensor strips as utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT and one (1) loop per lane in all lanes as recommended by the manufacturer.

The Traffic Recorder WIM Brass Linguini (BL) Piezo System shall utilize two (2) Class 1 BL Piezo strips as utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT and one (1) loop per lane in all lanes as recommended by the manufacturer.

The person(s) performing the installation of the Mikros RAKTEL Piezo Classification System must be certified by Mikros or an authorized Mikros representative in the installation procedures of the Mikros RAKTEL Piezo Classification System and must be on the job site at each installation when the Mikros RAKTEL Systems are being installed. Certification can be acquired from Mikros or an authorized Mikros representative as long as a certified Mikros representative is on site to assist during the installation. Details regarding Mikros certification can be acquired through direct communication with Mikros or an authorized Mikros

representative. Any delays in the construction due to the certification process will not be grounds for an extension of the completion date.

A multiplexer shall be required for sites utilizing two (2) Mikros RAKTEL Systems in order for both systems to have access to one phone line.

The Contractor shall provide three (3) copies of all manuals on Installation, Operating, Schematics, and Maintenance for the entire System.

The sensors, equipment cabinet, inductive loops, cables, leads, and electronic hardware and software will be furnished, installed, tested, calibrated and made operational by the Contractor. The Contractor shall provide all services required for construction, tests, the satisfactory performance period(s), and miscellaneous usage on this project until the site inspection of the project. Deposits, customer charges, connection cost, etc., associated with the System up to and including the date of the site inspection (Subsection 907-688.03.18.1--Site Inspection) of the System shall be the responsibility of the Contractor. At least five (5) business days prior to starting work, the Contractor shall provide notice to the MDOT Planning Division and the MDOT Project Office so that a representative of the Planning Division can be on site while the work is being performed.

907-688.02--Materials. The materials used in the traffic recorder WIM system shall conform with the requirements of these specifications as set out herein. Prior to the scheduled start of work, the Contractor shall provide the Engineer with submittals on the following items and shall obtain the Engineer's approval before starting affected work. The Contractor shall use new materials and equipment. Any existing traffic counting equipment at the site is the sole property of the MDOT and shall not be removed by the Contractor.

907-688.02.1--Sensors. For Traffic Recorder WIM BL Piezo Systems, vehicle axle detectors shall utilize piezoelectric cable in a sensor assembly and be of a type that has been shown to be successful for vehicle classification in both asphaltic and portland cement concrete pavements. BL Piezo sensor length shall be eleven (11) feet minimum. Sensors as delivered from manufacturer shall include a shielded transmission cable of sufficient length for a continuous run to the equipment cabinet without splicing. Piezoelectric Cable/Sensors shall be as those utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT. Sensitivity dispersion shall be Class 1, ±5%.

For Traffic Recorder WIM Kistler Systems, the Kistler Quartz Cable/Sensors shall be utilized and be of a type that has been shown to be successful on other MDOT projects for weigh-in-motion in both asphaltic and portland cement concrete pavements. Kistler Quartz sensor length shall be six (6) feet minimum. Sensors as delivered from manufacturer shall include a shielded transmission cable of sufficient length for a continuous run to the equipment cabinet without splicing. All Kistler Quartz Sensors shall be grounded using AWG # 8 stranded copper, green jacketed ground wire. The ground wire shall be of sufficient length for a continuous run from the sensor to the equipment cabinet without splicing. Kistler Quartz Cable/Sensors shall be as those utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT.

907-688-02.2--Shielded Transmission Cable. Coaxial cable type RG58 C/U shall conform to IMSA 50-2 for polyethylene insulated, polyethylene jacketed cable, AWG #14. Cable shall meet the requirements of Section 636 for the Standard Specifications.

907-688.02.3--Conduit and Pull Boxes. Conduit and pull boxes shall meet the requirements of Sections 647 & 668 of the Standard Specifications.

907-688.02.3.1--Under Roadways. Conduit under the roadway shall be Schedule 80 PVC or coated rigid galvanized steel.

907-688.02.3.2--Other Conduit. Other conduit shall be Schedule 40 PVC, direct buried conduit unless noted otherwise.

907-688.02.3.3--Pull Boxes. Pull boxes shall be size Type 2 and the cover does not require words inscribed on the top.

907-688.02.4--Loop Wire. Loop wire, IMSA 51-3, AWG #14 stranded copper, shall meet the requirements of Subsection 722.03 of the Standard Specifications.

907-688.02.5--Loop Sealant. Loop sealant shall be "Traffic Loop Sealant" as manufactured by 3M Corporation, or approved equal.

907-688.02.6--Sensor Cement. The sensor assembly shall be cemented into the pavement with sand – epoxy grouting of a type recommended by the sensor manufacturer for Traffic Recorder WIM Kistler Systems and with epoxy resin of a type recommended by the sensor manufacturer for Traffic Recorder WIM BL Piezo Systems.

907-688.02.7--Equipment Cabinet. The installation and setup of the equipment cabinet and all its applications must comply with all requirements of the plans. The Contractor will install the equipment cabinet along the highway right of way at a location approved by the Engineer. The equipment cabinet shall utilize a locking door. The housing shall be positioned so that the data collector will be approximately four (4) feet above the ground and mounted on a timber pole meeting the requirements of Subsection 723.08.6 unless an equivalent pole is specified and depicted in the plans. Lightning protection shall be provided for each installation. A 5/8-inch by 12-foot ground rod shall be used with AWG #6 copper conductors. Class B concrete shall be used for equipment cabinet footings and 4'x6'x4" concrete work pad as described in the plans.

907-688.03--Construction Requirements. The general layout of the work shall conform to the detail shown on the typical installation plans and shall be verified at each location with the Project Engineer. No hazards, such as open holes on site during construction, shall be left overnight.

All traffic control shall meet the requirements as defined in the most updated Manual on Uniform Traffic Control Devices.

907-688.03.1--Manufacturer's Recommendations. Sensors must be installed in accordance with the approved procedures and specifications provided by the sensor manufacturer. All

sensors and connecting cables shall be positioned and installed to assure compatibility with the inductive loops to provide electrical signals for vehicle classification.

907-688.03.2--Conflicts. Conflicts between any piece of equipment, which if installed as shown in relation to any previously installed equipment that may impair the proper operation of that equipment, shall be resolved by the Contractor as approved by the Engineer.

907-688.03.3--Conduit Runs. The number of conductors, conduits and fittings necessary to produce an operative system as specified herein shall be provided by the contractor. All joints, connections, etc. shall be completely water and moisture tight. Shielded transmission cable and wire leads shall be installed in conduit from paved shoulders to pull boxes.

907-688.03.4--Slots in Pavement. All slots required in pavement and paved shoulders shall be saw cut with diamond blade power saw. Edges shall be straight, smooth and true. Depth shall be uniform.

907-688.03.4.1--Loop Slots. Slots for loop wire shall be ¼-inch minimum width. Slot depth shall be 2½ inches in asphalt and 1½ inches in concrete. Diagonal slots shall be cut at corners by overlapping cuts so that the entire slot intended for wire has full depth. There shall be no jagged edges or protrusions which may damage wire. When the top lift of asphalt is an Open Graded Friction Course, the loops shall be cut in the top immediate lift beneath the open graded friction course.

907-688.03.4.2--Cable Slots. Slots for cable shall be protected by a foam tube layer below the bitumen protective layer and be 0.32-inch width (± 1/16") and 3.15-inch depth for Traffic Recorder WIM Kistler Systems and 3/8-inch width (±1/16") and 2¼-inch depth for Traffic Recorder WIM BL Piezo Systems. To ensure that the slots are full depth, all turns and overlay cuts shall not exceed 45 degrees. There shall be no jagged edges or protrusions which may damage cable. Cable leads from each sensor shall be run in individual saw cut slots at a minimum spacing of 12 inches.

907-688.03.4.3--Sensors Slots. Slots for sensors shall be of the width and depth specified by the sensor manufacturer. Cavity of sensor slots may be made with chisel between saw cut sides, but the bottom shall be smooth and level without protrusions. In overlays of four inches (4") or less, the slot shall extend to the top of the course below the overlay. Before placing sensor, the slot shall be cleaned with compressed air.

907-688.03.5--Loop Assemblies. Inductive loop assemblies shall meet the requirements of Section 635 of the Standard Specifications.

907-688.03.6--Inspection. Pavement slots shall be inspected at time of sensor and cable installation. Surfaces shall be clean and dry, free of all dust, grit, moisture and other contaminants that might affect sealant or cement bond.

907-688.03.6.1--Sensor Check. Prior to final installation, sensor assembly shall be placed in position in slot and inspected for compliance with manufacturer's requirements as to clearance, surface alignment, etc. Sensor output shall be checked using an oscilloscope or other test

equipment recommended by the sensor manufacturer. For Kistler sensors, a Kistler test kit must also be used to ensure each sensor output is within acceptable range per manufacturer recommendation before use.

907-688.03.6.2--Cable Inspection. The cable shall not have any cuts, nicks, abrasions or breaks in the insulation at the time of filling slot with sealant. Any sensor having defects in the shielded transmission cable shall be replaced.

907-688.03.6.3--Loop Inspection. The loop wire shall not have any cuts, nicks, abrasions or breaks in the insulation before or after installation in the slot. Loop inductance shall be 124 microhenries.

907-688.03.7--Sensor Installation. For Traffic Recorder WIM Kistler Systems, approved sand/epoxy grouting shall completely fill the cavity spaces and surround all three sides of the sensor assembly. To insure that there are no voids under the sensor assembly the sensor shall first be removed after installation inspection, the slot partially filled with epoxy, then the sensor pressed into position and the side cavities filled to the pavement surface before the bottom epoxy has hardened. Sensor installation shall be protected from traffic until sand/epoxy grouting is sufficiently cured. The person(s) performing the installation of the Kistler quartz sensors must be certified by Kistler in the installation procedures of Kistler quartz sensors and must be on the job site at each installation when the quartz sensors are being installed. Certification can be acquired from Kistler as long as a certified Kistler representative is on site to assist during the installation. Details regarding Kistler certification can be acquired through direct communication with Kistler. Any delays in the construction due to the certification process will not be grounds for an extension of the completion date.

For Traffic Recorder WIM BL Piezo Systems, approved epoxy cement shall completely fill the cavity spaces and surround all four sides of the sensor assembly. All excess encapsulate shall be removed from pavement surface and sensor to conduit to prevent damage during installation. Sensor installation shall be protected from traffic until epoxy cement is sufficiently cured.

907-688.03.8--Sleeves. Flexible sleeve or other protection shall be provided for shielded cable at sensor ends to prevent damage. The Contractor shall take care to insure that the sleeve is not filled with epoxy cement. In addition, the Contractor shall provide flexible sleeve, approximately 12 inches long, at pavement construction joints including joints between lanes and between pavement and paved shoulder.

907-688.03.9--Cable and Wire Installation. The cable or lead wires shall be placed in the bottom of the slot so that there are no kinks, curls, straining or stretching of the insulation. The two loop lead wires shall be twisted two to five turns per foot before placement in the slot. Special care shall be taken in seating the cable and wire so that the insulation will not be broken or abraded. No sharp tools such as screwdriver or metal object shall be used for this operation.

907-688.03.9.1--Conditions. The Contractor shall install the sealant in strict adherence to the manufacturer's recommendation and these specifications. No sealant shall be installed during inclement weather or under any condition which might introduce moisture into the pavement slots.

907-688.03.9.2--Sealant. The viscosity of the sealant shall be such that it can be readily placed in the slot, completely surround the wires, displace all air and fill the slot so that the sealant is flush with the roadway surface. The finished installation shall be waterproof and present a neat workmanlike appearance. Minimum required clearance shall be maintained to cable and wire.

907-688.03.9.3--Protection. The sealant shall be sufficiently hardened before opening to traffic.

907-688.03.10--Cleaning. All excess encapsulate and sealant shall be removed from pavement surface, inductive loop, and sensor after installation. A hand grinder shall be used to smooth out rough or high areas that might affect sensor operation.

907-688.03.11--Tags. Each shielded transmission cable and pair of lead wires shall be uniquely identified by an insulated, waterproof tag in every pull box.

907-688.03.12--Trenching and Backfilling. All trenching shall be done by mechanical means and all sides shall be straight and vertical. Width of trenches shall not exceed eight (8) inches on either side of placed conduits. All backfill shall be made with a friable material, which has been approved by the Engineer. Material shall be placed in compacted lifts as approved by the Engineer. The site, including shoulders and grassing, shall be returned to its original condition.

907-688.03.13--Jacking or Boring. Approved jacking or boring methods shall be used where a conduit must be placed under an existing roadway. Jacking/boring pits shall be kept a minimum of five (5) feet from the edge of shoulder, and care shall be taken not to disturb existing pavement. Excessive use of water or other methods which could undermine pavements shall not be permitted. The jacking/boring site must be returned to its undisturbed state upon completion of the operation. Only experienced labor shall be used for jacking/boring work. Conduit shall be not less than 36 inches below pavement surface.

907-688.03.14--Pull Boxes. The location of the pull boxes must be approved by the Project Engineer. Pull boxes shall be set on 12-inch minimum thickness washed gravel. Holes for drainage shall be provided in bottom of pull box. Conduit entering pull box shall be located so as to leave the major portion of the box clear.

907-688.03.15--Conduit. Conduit shall be laid to a depth of not less than 36 inches below the finished grade, except at conduit ends. All conduits shall be run at least 10 feet outside shoulder unless otherwise approved. One size of conduit shall be used for each run; no reducing couplings will be permitted.

907-688.03.16--Conductor Installation. Before placing shielded cable or wire leads in conduit, the conduit shall be cleaned with compressed air and rigid metal conduit shall be cleaned with a mandrel. Only approved lubricants which will not injure conductor insulation while pulling cables shall be used.

907-688.03.17--System Acceptance. The Contractor shall be required to demonstrate to the Engineer the satisfactory operation of each device installed on this project.

Calibration. The Contractor shall be required to perform calibration on Traffic Recorder WIM Systems as to conform to the below Planning Division WIM calibration standards. The Contractor/Subcontractor must have a representative from the vendor or manufacturer who is knowledgeable of the system to make necessary adjustments to the system during calibration. The Contractor must provide an air ride suspension truck and air ride suspension flatbed trailer (18-wheeler weighing approximately 75,000 to 80,000 pounds) along with a driver who is an insured motor carrier for the calibration. Five (5) consecutive passes at the same consistent speed ranging between 50 mph to 60 mph over the sensors are required per lane to set the calibration factors of the sensors. Ten (10) consecutive passes at the same consistent speed ranging between 50 mph to 60 mph over the sensors without any adjustments to meet the tolerance level are required per lane. Each pass over the sensors must be at a constant speed without deceleration or acceleration. The tolerance level must meet 95% probability of conformity for the functional performance requirements for WIM systems for MDOT and be within ± 10% for the steering weight, ± 15% for the truck tandem, ± 15% for the trailer tandem, and ± 7 for the gross weight. An MDOT representative will be present during the calibration to determine if the tolerance level is met. Calibration shall take place one (1) week after the installation of the BL Piezo sensors and two (2) weeks after the installation of the Kistler sensors as recommended in the Kistler Installation Instructions Manual.

907-688.03.18--Material Warranty. The following warranty stipulations are in addition to those covered by Subsection 106.01 of the Standard Specifications.

907-688.03.18.1--Site Inspection. After meeting the consecutive polling requirement, a site inspection may be made upon completion of an individual site but must be made before the final inspection of the project.

The Contractor, with MDOT's representatives present to verify that the site is working properly, shall test all Traffic Recorder WIM Systems.

Sensors, loops and related components at all sites shall be operational at the final inspection of the project.

Consecutive Polling. All Traffic Recorder WIM Systems shall have polled without any problems for at least 10 consecutive days and data for each day must pass quality control and quality assurance checks prior to site inspection.

907-688.03.18.2--Guarantee. At each location, the Contractor shall warrant and guarantee all sensors, loops and related components for a period of 12 months, beginning at the date of release from maintenance, or partial release from maintenance, of the project.

907-688.03.18.3--Responsibility. It is the intent of the preceding paragraph to provide for equipment that performs as intended by the manufacturer. It is the further intent to obtain from the Contractor a level of workmanship that will assure the Department of an operation system devoid of Contractor laxities. Failure to perform as indicated shall require the Contractor to replace in kind or repair, at the Contractor's option, the equipment or workmanship in question.

All material and labor cost resulting from the replacement or repair of equipment or correction of poor workmanship shall be at no additional costs to the Department.

907-688.03.18.4--Repairs. The Department shall report any failures and outages to the Contractor. The Contractor will be required to make the necessary repairs within 10 business days of the report. The Contractor shall not be responsible for outages occurring during the 12-month warranty period due to vandalism, traffic accidents, or any problems not related to materials or workmanship. The Contractor will be required to make the necessary repairs for such outages and a reasonable cost for such repair(s) will be borne by the Department.

907-688.03.18.5--Manufacturer's Guarantees. All manufacturer's standard warranties or guarantees for all electrical and mechanical equipment which are provided as customary trade practice shall be made out to the Department and shall begin simultaneously with the commencement of the 12-month warranty period.

907-688.03.18.6--Guarantee of Repairs. This warrantee and guarantee on the fixed or replaced items shall be identical in scope to the warrantee and guarantee in Subsections 907-688.03.18.1 through 907-688.03.18.5.

907-688.04--Method of Measurement. Traffic Recorder WIM system of the type specified, complete in place and accepted, will be measured per each location.

907-688.05--Basis of Payment. Traffic Recorder WIM system, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing, installing, testing and guaranteeing all equipment, and for all materials, labor, equipment, operation, and other incidentals necessary to complete the work.

Payment will be made under:

907-688-A: Traffic Recorder WIM Kistler System, * - per each

907-688-B: Traffic Recorder WIM Brass Linguini (BL) Piezo System, * - per each

* Site No. or Location may be specified

Reconstruction of approximately 8 miles of I-55 from South of the Byram Interchange to North of McDowell Road (Phase 2) known as Federal Aid Project No. IM-0055-02(246) / 106023309 in Hinds County.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
			Roadway Items		
0010	201-A001		1	Lump Sum	Clearing and Grubbing
0020	202-B022		25,809	Linear Feet	Removal of Concrete Median Barrier
0030	202-B023		88,826	Linear Feet	Removal of Concrete Median Barrier, Precast
0040	202-B025		459	Square Yard	Removal of Concrete Paved Ditch
0050	202-B036		298	Square Yard	Removal of Concrete Slope Paving
0060	202-B042		19	Each	Removal of Flared End Section, All Sizes
0070	202-B057		95	Each	Removal of Inlets, All Sizes
0080	202-B063		2	Each	Removal of Overhead Sign Including Panels, Truss, Supports & Footing
0090	202-B064		3,049	Linear Feet	Removal of Pipe, 8" And Above
0100	202-B070		137	Each	Removal of Sign Including Post & Footing
0110	202-B072		1,000	Square Yard	Removal of Soil Cement Treated Base, All Depths
0120	202-B078		340,959	Square Yard	Removal of Pavement, All Types and Depths
0130	202-B102		2,942	Linear Feet	Removal of Guard Rail
0150	202-B142		7	Each	Removal of Junction Box
0160	202-B149		4	Mile	Removal of Traffic Stripe
0170	202-B189		17	Each	Removal of Impact Attenuator
0180	202-B196		5,000	Linear Feet	Removal of Debris and Sand From Pipe, All Sizes
0190	202-B247		2	Each	Removal of Pull Box
0200	202-B248		1	Each	Removal of Manhole
0210	202-B295		400	Linear Feet	Removal of Trench Drain, All Sizes, All Types
0220	202-B297		1	Each	Removal of Existing Demarcation Cabinet and Equipment
0230	203-A004	(E)	1,000	Cubic Yard	Unclassified Excavation, LVM, AH
0240	203-B004	(E)	1,000	Cubic Yard	Rock Excavation, LVM, AH
0250	203-EX035	(E)	500,065	Cubic Yard	Borrow Excavation, AH, FME, Class B9-6
0260	203-G003	(E)	419,997	Cubic Yard	Excess Excavation, FM, AH
0270	206-A001	(S)	8,502	Cubic Yard	Structure Excavation
0280	209-A004		89,643	Square Yard	Geotextile Stabilization, Type V, Non-Woven
0290	211-B001	(E)	33,680	Cubic Yard	Topsoil for Slope Treatment, Contractor Furnished
0300	213-C001		64	Ton	Superphosphate
0310	217-A001		3,306	Square Yard	Ditch Liner
0320	219-A001		186	Thousand Gallon	Watering [$20.00]
0330	220-A001		64	Acre	Insect Pest Control [$30.00]

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0340	221-A001	(S)	2,240	Cubic Yard	Portland Cement Concrete Paved Ditch
0350	223-A001		1,000	Acre	Mowing [$50.00]
0360	224-A001		2,680	Square Yard	Soil Reinforcing Mat
0370	234-A001		1,305	Linear Feet	Temporary Silt Fence
0380	239-A001		400	Linear Feet	Temporary Slope Drains
0390	423-A001		28	Mile	Rumble Strips, Ground In
0400	501-E001		288	Linear Feet	Expansion Joints, Without Dowels
0410	502-A001	(C)	298	Square Yard	Reinforced Cement Concrete Bridge End Pavement
0420	503-C007		75,080	Linear Feet	Saw Cut, Full Depth
0430	503-E002		16	Each	Tie Bars, No. 5 Deformed Drilled and Epoxied or Grouted
0440	602-A001	(S)	26,573	Pounds	Reinforcing Steel
0450	603-CA002	(S)	8,306	Linear Feet	18" Reinforced Concrete Pipe, Class III
0460	603-CA003	(S)	1,128	Linear Feet	24" Reinforced Concrete Pipe, Class III
0470	603-CA004	(S)	184	Linear Feet	30" Reinforced Concrete Pipe, Class III
0480	603-CA005	(S)	208	Linear Feet	36" Reinforced Concrete Pipe, Class III
0490	603-CA006	(S)	104	Linear Feet	42" Reinforced Concrete Pipe, Class III
0500	603-CA126	(S)	72	Linear Feet	18" Reinforced Concrete Pipe, Class V, Jacked or Bored
0510	603-CB001	(S)	9	Each	18" Reinforced Concrete End Section
0520	603-CB002	(S)	7	Each	24" Reinforced Concrete End Section
0530	603-CB003	(S)	2	Each	30" Reinforced Concrete End Section
0540	603-CB005	(S)	1	Each	42" Reinforced Concrete End Section
0550	603-CE001	(S)	848	Linear Feet	22" x 13" Concrete Arch Pipe, Class A III
0560	603-CE002	(S)	2,536	Linear Feet	29" x 18" Concrete Arch Pipe, Class A III
0570	603-CE003	(S)	248	Linear Feet	36" x 23" Concrete Arch Pipe, Class A III
0580	603-CE004	(S)	248	Linear Feet	44" x 27" Concrete Arch Pipe, Class A III
0590	603-CE006	(S)	240	Linear Feet	58" x 36" Concrete Arch Pipe, Class A III
0600	603-CF002	(S)	5	Each	29" x 18" Concrete Arch Pipe End Section
0610	603-CF004	(S)	1	Each	44" x 27" Concrete Arch Pipe End Section
0620	603-CF006	(S)	2	Each	58" x 36" Concrete Arch Pipe End Section
0630	603-SB003	(S)	6	Each	18" Branch Connections, Stub into Concrete Box Culvert
0640	603-SB020	(S)	1	Each	18" Branch Connections, Stub into Concrete Pipe
0650	604-A001		32,696	Pounds	Castings
0660	604-B001		31,329	Pounds	Gratings
0670	605-AA005	(S)	10,634	Square Yard	Geotextile for Subsurface Drainage, Type V, Non-Woven

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0680	605-W001	(GY)	1,094	Cubic Yard	Filter Material for Combination Storm Drain and/or Underdrains,Type A, FM
0690	605-W002	(GY)	7,635	Cubic Yard	Filter Material for Combination Storm Drain and/or Underdrains,Type B, FM
0700	605-Z002		19	Each	Underdrain Appurtenances, Small Animal Guard
0710	605-Z004		19	Each	Underdrain Appurtenances, Sign
0720	605-Z005		19	Each	Underdrain Appurtenances, Concrete Apron, Precast or Cast-In-Place
0730	606-B007		9,350	Linear Feet	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post
0740	606-D012		3	Each	Guard Rail, Bridge End Section, Type I
0750	606-E002		1	Each	Guard Rail, Terminal End Section, Flared
0760	606-E003		16	Each	Guard Rail, Terminal End Section, Non-Flared
0770	609-D002	(S)	455	Linear Feet	Combination Concrete Curb and Gutter Type 2
0780	613-D004		5	Each	Adjustment of Inlet
0790	615-A012	(S)	26,628	Linear Feet	Concrete Type IV Modified, 42" Height, Cast-in-Place Median Barrier
0800	615-A015	(S)	20	Linear Feet	Concrete Bridge End Barrier, 32"
0810	615-A020	(S)	38,579	Linear Feet	Concrete Type III Modified Cast-in-Place Median Barrier, 42" High
0820	616-A001	(S)	120	Square Yard	Concrete Median and/or Island Pavement, 4-inch
0830	616-A003	(S)	32	Square Yard	Concrete Median and/or Island Pavement, 10-inch
0840	619-A1002		71	Mile	Temporary Traffic Stripe, Continuous White
0850	619-A2002		60	Mile	Temporary Traffic Stripe, Continuous Yellow
0860	619-A3006		63	Mile	Temporary Traffic Stripe, Skip White
0870	619-A4006		9	Mile	Temporary Traffic Stripe, Skip Yellow
0880	619-A5001		107,133	Linear Feet	Temporary Traffic Stripe, Detail
0890	619-A6001		7,721	Linear Feet	Temporary Traffic Stripe, Legend
0900	619-A6002		4,018	Square Feet	Temporary Traffic Stripe, Legend
0910	619-C6001		3,420	Each	Red-Clear Reflective High Performance Raised Marker
0920	619-D1001		73	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0930	619-D2001		605	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0940	619-D4001		126	Square Feet	Directional Signs
0950	619-F1001		2,500	Linear Feet	Concrete Median Barrier, Precast
0960	619-F2001		24,580	Linear Feet	Remove and Reset Concrete Median Barrier, Precast
0970	619-G4005		612	Linear Feet	Barricades, Type III, Double Faced
0980	619-G5001		1,479	Each	Free Standing Plastic Drums
0990	619-J1003		17	Unit	Impact Attenuator, 60 MPH
1000	619-J2002		5	Unit	Impact Attenuator, 60 MPH, Replacement Package

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
1010	620-A001		1	Lump Sum	Mobilization
1020	627-K001		5,912	Each	Red-Clear Reflective High Performance Raised Markers
1030	627-L001		2,554	Each	Two-Way Yellow Reflective High Performance Raised Markers
1040	629-A003		15	Each	Vehicular Impact Attenuator, 70 MPH
1050	630-A001		199	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
1060	630-A002		1,469	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
1070	630-B001		330	Square Feet	Interstate Directional Signs, Bolted Extruded Aluminum Panels, Ground Mounted
1080	630-B002		3,611	Square Feet	Interstate Directional Signs, Bolted Extruded Aluminum Panels, Overhead Mounted
1090	630-C001		52	Linear Feet	Steel U-Section Posts, 2.0 lb/ft
1100	630-C004		908	Linear Feet	Steel U-Section Posts, 3.0 to 3.5 lb/ft
1110	630-D002		131	Linear Feet	Structural Steel Beams, S4 x 7.7
1120	630-D003		170	Linear Feet	Structural Steel Beams, W6 x 9
1130	630-E001		199	Pounds	Structural Steel Angles & Bars, 3" x 3" x 1/4" Angles
1140	630-E004		1,135	Pounds	Structural Steel Angles & Bars, 7/16" x 2 1/2" Flat Bar
1150	630-F001		269	Each	Delineators, Guard Rail, White
1160	630-F002		28	Each	Delineators, Guard Rail, Yellow
1170	630-F006		86	Each	Delineators, Post Mounted, Single White
1180	630-F007		33	Each	Delineators, Post Mounted, Single Yellow
1190	630-F008		94	Each	Delineators, Post Mounted, Double White
1200	630-F009		7	Each	Delineators, Post Mounted, Double Yellow
1210	630-G006		6	Each	Type 3 Object Markers, OM-3R or OM-3L
1220	630-K001		99	Linear Feet	Welded & Seamless Steel Pipe Posts, 3"
1230	630-K002		324	Linear Feet	Welded & Seamless Steel Pipe Posts, 3 1/2"
1240	630-K003		393	Linear Feet	Welded & Seamless Steel Pipe Posts, 4"
1250	630-K004		143	Linear Feet	Welded & Seamless Steel Pipe Posts, 5"
1260	635-A001		1,488	Linear Feet	Vehicle Loop Assemblies
1270	636-A001		1,610	Linear Feet	Shielded Cable, AWG #18, 4 Conductor
1280	638-A005		5	Each	Loop Detector Amplifier, Card Rack Mounted, 4 Channel
1290	640-A016		12	Each	Traffic Signal Heads, Type 1 LED
1300	640-A018		2	Each	Traffic Signal Heads, Type 3 LED
1310	640-A056		6	Each	Traffic Signal Heads, Type 2 FYA LED
1314	646-A001		1	Lump Sum	Removal of Existing Traffic Signal Equipment
1340	647-A002		1	Each	Pullbox, Type 3

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
1350	647-A003		13	Each	Pullbox, Type 4
1360	647-A004		7	Each	Pullbox, Type 5
1370	647-A005		34	Each	Pullbox, Type 2
1380	653-B001		54	Square Feet	Street Name Sign, Encapsulated Lens
1390	666-B015		475	Linear Feet	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 5 Conductor
1400	666-B023		55	Linear Feet	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 8, 3 Conductor
1410	666-B028		1,700	Linear Feet	Electric Cable, Underground in Conduit, THHN, AWG #6, 3 Conductor
1420	666-B038		5,260	Linear Feet	Electric Cable, Underground in Conduit, THHN, AWG #4, 3 Conductor
1430	666-B040		3,695	Linear Feet	Electric Cable, Underground in Conduit, THHN, AWG #8, 3 Conductor
1440	666-B043		340	Linear Feet	Electric Cable, Underground in Conduit, THHN, AWG #2, 4 Conductor
1450	666-B054		1,475	Linear Feet	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 8 Conductor
1460	666-B055		290	Linear Feet	Electric Cable, Underground in Conduit, THHN, AWG #3/0, 3 Conductor
1470	666-C006		170	Linear Feet	Electric Cable, Aerial Supported, IMSA 20-1, AWG 14, 5 Conductor
1480	666-C017		297	Linear Feet	Electric Cable, Aerial Supported, IMSA 20-1, AWG 14, 8 Conductor
1490	668-A018		825	Linear Feet	Traffic Signal Conduit, Underground, Type 4, 2"
1500	668-A020		95	Linear Feet	Traffic Signal Conduit, Underground, Type 4, 3"
1510	668-A029		4,845	Linear Feet	Traffic Signal Conduit, Underground, Rolled Pipe, 2"
1520	668-B024		1,280	Linear Feet	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 2"
1530	668-B025		665	Linear Feet	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3"
1540	682-A001		1,150	Linear Feet	Underground Branch Circuit, AWG 1, 3 Conductor
1550	682-A004		125	Linear Feet	Underground Branch Circuit, AWG 1/0, 3 Conductor
1560	682-A015		21,495	Linear Feet	Underground Branch Circuit, AWG 2, 3 Conductor
1570	682-A020		100	Linear Feet	Underground Branch Circuit, AWG 2/0, 3 Conductor
1580	682-A025		2,620	Linear Feet	Underground Branch Circuit, AWG 4, 3 Conductor
1590	682-A031		8,920	Linear Feet	Underground Branch Circuit, AWG 6, 3 Conductor
1600	682-A036		330	Linear Feet	Underground Branch Circuit, AWG 8, 3 Conductor
1610	682-B002		100	Linear Feet	Underground Branch Circuit, Jacked or Bored, AWG 1, 3 Conductor
1620	682-B005		65	Linear Feet	Underground Branch Circuit, Jacked or Bored, AWG 1/0, 3 Conductor
1630	682-B016		1,145	Linear Feet	Underground Branch Circuit, Jacked or Bored, AWG 2, 3 Conductor
1640	682-B021		100	Linear Feet	Underground Branch Circuit, Jacked or Bored, AWG 2/0, 3 Conductor
1650	682-B025		150	Linear Feet	Underground Branch Circuit, Jacked or Bored, AWG 4, 3 Conductor
1660	682-B031		100	Linear Feet	Underground Branch Circuit, Jacked or Bored, AWG 6, 3 Conductor
1670	682-B036		100	Linear Feet	Underground Branch Circuit, Jacked or Bored, AWG 8, 3 Conductor
1680	682-D001		6	Each	Underground Pull Box

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
1690	682-D003		4	Each	Structure Mounted Pull Box
1700	683-B108		146	Each	Lighting Assembly, Low Mast, Type 50-1-0-400
1710	684-A003		205	Cubic Yard	Pole Foundation, 24" Diameter
1720	684-B003		16	Linear Feet	Slip Casing, 24" Diameter
1730	815-A009	(S)	451	Ton	Loose Riprap, Size 300
1740	815-D001	(S)	8	Cubic Yard	Concrete Slope Paving
1750	815-E001	(S)	705	Square Yard	Geotextile under Riprap
1760	907-216-A001		9,317	Square Yard	Solid Sodding
1770	907-225-A001		127	Acre	Grassing
1780	907-225-B001		64	Ton	Agricultural Limestone
1790	907-225-C001		253	Ton	Mulch, Vegetative Mulch
1800	907-226-A001		127	Acre	Temporary Grassing
1810	907-234-D001		44	Each	Inlet Siltation Guard
1820	907-234-E001		5	Each	Reset Inlet Siltation Guard
1830	907-237-A003		4,000	Linear Feet	Wattles, 20"
1840	907-245-A001		1,305	Linear Feet	Triangular Silt Dike
1850	907-246-B002		4,738	Each	Rockbags
1860	907-249-A001		470	Ton	Riprap for Erosion Control
1870	907-251-A001		1	Lump Sum	Maintenance of Existing Erosion Control Devices
1880	907-270-A001		1	Lump Sum	Temporary Site Drainage
1890	907-304-B005	(GT)	124,950	Ton	Granular Material, Class 9, Group C
1900	907-304-B007	(GT)	20,160	Ton	Granular Material, Class 5, Group E
1910	907-304-D003	(GT)	1,769	Ton	Granular Material, Size 57
1920	907-307-C003	(M)	177,271	Square Yard	6" Soil-Lime-Water Mixing, Class C
1930	907-307-D001		2,394	Ton	Lime
1940	907-307-PP001	(M)	354,541	Square Yard	12" Soil-Lime-Water Mixing, Class C
1950	907-307-S001	(A3)	44,319	Gallon	Bituminous Curing Seal
1960	907-402-A004	(BA1)	21,926	Ton	Open Graded Friction Course, 9.5-mm Mixture
1970	907-402-B001	(A3)	39,864	Gallon	Bituminous Tack Coat
1980	907-403-A017	(BA1)	8,577	Ton	9.5-mm, ST, Asphalt Pavement
1990	907-403-A018	(BA1)	5,695	Ton	12.5-mm, ST, Asphalt Pavement
2000	907-403-A019	(BA1)	66,048	Ton	19-mm, ST, Asphalt Pavement
2010	907-403-A027	(BA1)	17,915	Ton	9.5-mm, HT, Asphalt Pavement

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
2020	907-403-A028	(BA1)	375	Ton	12.5-mm, HT, Asphalt Pavement
2030	907-403-A029	(BA1)	152,570	Ton	19-mm, HT, Asphalt Pavement
2040	907-403-AA001	(BA1)	42,078	Ton	Stone Matrix Asphalt, 9.5 mm Mixture
2050	907-403-AA002	(BA1)	34,577	Ton	Stone Matrix Asphalt, 12.5 mm Mixture
2060	907-403-B021	(BA1)	4,100	Ton	12.5-mm, HT, Asphalt Pavement, Leveling
2070	907-403-S004		77	Mile	Joint Sealant
2080	907-406-D001		58,155	Square Yard	Fine Milling of Bituminous Pavement, All Depths
2090	907-407-A001	(A2)	95,368	Gallon	Asphalt for Tack Coat
2100	907-413-E001		706	Linear Feet	Sawing and Sealing Transverse Joints in Asphalt Pavement
2110	907-503-M001		86,500	Square Yard	Repair of Failed Areas in Asphalt and/or Concrete Pavement
2120	907-601-A001	(S)	7	Cubic Yard	Class "B" Structural Concrete
2130	907-601-B003	(S)	274	Cubic Yard	Class "B" Structural Concrete, Minor Structures
2140	907-603-ALT01	(S)	144	Linear Feet	18" Type A Alternate Pipe
2150	907-604-A001	(S)	1,389	Linear Feet	8" Trench Drain
2160	907-605-O001	(S)	12,330	Linear Feet	6" Perforated Sewer Pipe for Underdrains, SDR 23.5
2170	907-605-P001	(S)	900	Linear Feet	6" Non-perforated Sewer Pipe for Underdrains, SDR 23.5
2180	907-606-G001		2,240	Linear Feet	Cable Barrier
2190	907-606-H001		2	Each	Cable Barrier Terminal Section
2200	907-618-1M001		1	Lump Sum	Service Patrol
2210	907-618-A001		1	Lump Sum	Maintenance of Traffic
2220	907-619-E3001		7	Each	Changeable Message Sign
2230	907-619-J3001		13	Each	Remove and Reset Impact Attenuator
2240	907-619-P1001		45,000	Linear Feet	Glare Paddles
2250	907-622-A002		1	Each	Engineer's Field Office Building, Type 3
2260	907-626-A005		32	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip White
2270	907-626-B005		4,419	Linear Feet	6" Thermoplastic Double Drop Traffic Stripe, Continuous White
2280	907-626-C003		50	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White
2290	907-626-D006		9	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
2300	907-626-E006		23	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
2310	907-626-F003		18	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow
2320	907-626-G006		43,095	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
2330	907-626-G007		12,725	Linear Feet	Thermoplastic Double Drop Detail Stripe, Yellow
2340	907-626-H005		144	Square Feet	Thermoplastic Legend, White
2350	907-626-H009		4,973	Linear Feet	Thermoplastic Double Drop Legend, White

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
2360	907-626-H010		2,203	Square Feet	Thermoplastic Double Drop Legend, White
2370	907-626-U004		16	Mile	6" Thermoplastic Traffic Stripe, Skip White, 40-mil min.
2380	907-626-V004		19	Mile	6" Thermoplastic Traffic Stripe, Continuous White, 40-mil min.
2390	907-626-X004		18	Mile	6" Thermoplastic Traffic Stripe, Continuous Yellow, 40-mil min.
2400	907-626-Y002		21,096	Linear Feet	Thermoplastic Detail Traffic Stripe, White, 6" Equivalent Length, 40-mil. min.
2410	907-630-I001		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 1, Contractor Designed
2420	907-630-I002		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 2, Contractor Designed
2430	907-630-I003		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 3, Contractor Designed
2440	907-630-I004		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 4, Contractor Designed
2450	907-630-I005		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 5, Contractor Designed
2460	907-630-I006		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 6, Contractor Designed
2470	907-630-I007		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 7, Contractor Designed
2480	907-630-I008		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 8, Contractor Designed
2490	907-630-I009		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 9, Contractor Designed
2500	907-630-I010		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 10, Contractor Designed
2510	907-630-I012		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 11, Contractor Designed
2520	907-630-I013		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 12, Contractor Designed
2530	907-630-I014		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 13, Contractor Designed
2540	907-630-I015		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 14, Contractor Designed
2550	907-630-I016		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 15, Contractor Designed
2560	907-630-I017		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 16, Contractor Designed
2570	907-630-I018		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 17, Contractor Designed
2580	907-630-I019		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 18, Contractor Designed
2590	907-630-I020		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 19, Contractor Designed
2600	907-630-I021		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 20, Contractor Designed
2610	907-630-I022		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 21, Contractor Designed
2620	907-630-I023		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 22, Contractor Designed
2630	907-631-A001		1,350	Cubic Yard	Flowable Fill, Excavatable
2640	907-631-B001		95	Cubic Yard	Flowable Fill, Non-Excavatable
2650	907-637-A001		8	Each	Equipment Cabinet, Type B
2660	907-639-A002		2	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 50' Arm
2670	907-639-A006		1	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 30' Arm
2680	907-639-A007		1	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 40' Arm

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
2690	907-639-A009		1	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 60' Arm
2700	907-639-A115		1	Each	Traffic Signal Equipment Pole, Type III, 17' Shaft, 45' & 45' Arms
2710	907-639-C002		3	Cubic Yard	Pole Foundations, 36" Diameter
2720	907-639-C004		9	Cubic Yard	Pole Foundations, 30" Diameter
2730	907-639-E001		3	Each	Camera Pole with Foundation, 50' Pole
2740	907-639-F001		4	Each	Detector Pole with Foundation, 35' Pole
2750	907-642-A003		2	Each	Solid State Traffic Actuated Controllers, Type 8A
2758	907-644-A001		5	Each	Optical Detector
2760	907-644-B001		1,110	Linear Feet	Optical Detector Cable
2762	907-644-C002		4	Each	Phase Selector, 4 Channel
2770	907-649-A004		3	Each	Video Detection System, 1 Sensor, Type 2
2780	907-649-D002		3	Each	Multi-Sensor Detection System, 1 Sensor
2790	907-650-A003		14	Each	On Street Video Equipment, PTZ Type
2800	907-656-A001		2	Each	Dynamic Message Sign, Type 1
2810	907-656-B001		1	Lump Sum	Dynamic Message Sign Training
2820	907-657-A001		39,675	Linear Feet	Fiber Optic Cable, 72 SM
2830	907-657-B001		4,185	Linear Feet	Fiber Optic Drop Cable, 12 SM
2840	907-658-A005		21	Each	Network Switch, Type A
2850	907-658-A007		1	Each	Network Switch, Type C
2860	907-659-A001		1	Lump Sum	Traffic Management Center Modifications
2870	907-659-C001		1	Lump Sum	Traffic Management Center Modifications - Training
2880	907-660-A001		1	Each	OTN Node
2890	907-660-C001		1	Lump Sum	OTN Node Training
2900	907-660-PP001		1	Lump Sum	Communications Hut Modification, Per Plans
2910	907-668-E002		150	Linear Feet	Traffic Signal Conduit Bank, Underground, Rolled Pipe, 2 @ 2"
2920	907-670-A001		8	Each	ITS Radar Detection System
2930	907-681-A1002		19	Each	Wire Testing
2940	907-681-B1001		121	Each	Conduit Testing
2950	907-682-A1001		100	Linear Feet	Branch Circuit Wire, AWG #1, 3 Conductor
2960	907-682-A1002		1,950	Linear Feet	Branch Circuit Wire, AWG #1/0, 3 Conductor
2970	907-682-A1004		2,420	Linear Feet	Branch Circuit Wire, AWG #2, 3 Conductor
2980	907-682-A1007		1,200	Linear Feet	Branch Circuit Wire, AWG #4, 3 Conductor
2990	907-682-A1011		670	Linear Feet	Branch Circuit Wire, AWG #6, 3 Conductor
3000	907-682-A1013		660	Linear Feet	Branch Circuit Wire, AWG #8, 3 Conductor

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
3010	907-682-A1031		100	Linear Feet	Branch Circuit Wire, AWG #2/0, 3 Conductor
3022	907-688-B002		1	Each	Traffic Recorder WIM BL Piezo System
3030	907-699-A002		1	Lump Sum	Roadway Construction Stakes
3040	907-906001		2,080	Hours	Trainees [$5.00]
			ALTERNATE GROUP AA NUMBER 1		
3050	907-304-F002	(GT)	116,588	Ton	Size 610 Crushed Stone Base
			ALTERNATE GROUP AA NUMBER 2		
3060	907-304-F003	(GT)	116,588	Ton	3/4" and Down Crushed Stone Base
			ALTERNATE GROUP AA NUMBER 3		
3070	907-304-F004	(GT)	116,588	Ton	Size 825B Crushed Stone Base
			ALTERNATE GROUP BB NUMBER 1		
3080	907-308-A001		1,596	Ton	Portland Cement
3090	907-308-B002	(M)	177,271	Square Yard	Soil-Cement-Water Mixing, Optional Mixers, Design Soil
3100	907-308-S001	(A3)	44,319	Gallon	Bituminous Curing Seal
			ALTERNATE GROUP BB NUMBER 2		
3110	907-311-A003	(M)	177,271	Square Yard	Processing Lime and Fly Ash Treated Course, 6" Thick
3120	907-311-B001		1,197	Ton	Lime
3130	907-311-C001		4,787	Ton	Fly Ash, Class C
3140	907-311-S001	(A3)	44,319	Gallon	Bituminous Curing Seal
			ALTERNATE GROUP CC NUMBER 1		
3150	907-308-A001		4,388	Ton	Portland Cement
3160	907-308-B001	(M)	354,541	Square Yard	Soil-Cement-Water Mixing, Optional Mixers, Base
3170	907-308-S001	(A3)	88,636	Gallon	Bituminous Curing Seal
			ALTERNATE GROUP CC NUMBER 2		
3180	907-311-A003	(M)	354,541	Square Yard	Processing Lime and Fly Ash Treated Course, 6" Thick
3190	907-311-B001		2,394	Ton	Lime
3200	907-311-C001		9,573	Ton	Fly Ash, Class C
3210	907-311-S001	(A3)	88,636	Gallon	Bituminous Curing Seal
			Bridge Items		
3220	206-A001	(S)	1,038	Cubic Yard	Structure Excavation
3230	802-A001	(S)	5,000	Square Feet	Permanent Steel Sheet Piling
3240	803-C002	(S)	23,540	Linear Feet	14" x 14" Prestressed Concrete Piling
3250	803-D007	(S)	11,460	Linear Feet	HP 14 x 89 Steel Piling
3260	803-I001	(S)	3	Each	PDA Test Pile
3270	805-A001	(S)	427,669	Pounds	Reinforcement

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
3280	813-E009	(S)	343	Linear Feet	42" Concrete Bridge Median Barrier Railing
3290	907-804-A014	(S)	5,772	Cubic Yard	Bridge Concrete, Class B
3300	907-823-A002		287	Linear Feet	Preformed Joint Seal, Type II
3310	907-824-PP097		80	Linear Feet	Bridge Repair, End Wall Repair, Per Plans
3320	907-824-PP098		160	Square Feet	Bridge Repair, Remove & Replace Bridge Deck, Per Plans
3330	907-825-A001	(S)	1,252	Square Feet	Soil Nail Retaining Walls
3340	907-825-B001	(S)	5	Each	Soil Nail Verification Tests